

I Know How it Feels: A Voice-hearing Simulation to Enhance Nursing Students' Empathy and Self-efficacy

Fiona Orr

RN, BHSc, MLitt

This thesis is submitted in fulfilment of the requirements for the degree of Doctor of
Philosophy (PhD)

The University of Technology Sydney

November 2017

CERTIFICATE OF ORIGINAL AUTHORSHIP

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as part of the collaborative doctoral degree and/or fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Signature of Student:

Production Note:
Signature removed prior to publication.

Date: 17.11.17

This research is supported by an Australian Government Research Training Program Scholarship.

ACKNOWLEDGEMENTS

Undertaking a PhD is hard work, and I gratefully acknowledge the expertise and guidance of my supervisors, Professor Jane Stein-Parbury and Associate Professor Michael Roche. Throughout the research process and during the preparation of this thesis, each offered valuable and complementary advice, and their commitment to my development as a researcher and to the completion of the study was highly motivating. For all of this, I thank you.

I also acknowledge the collaboration over ten years, of two colleagues, Mr Arana Pearson and Mr Douglas Holmes. I am immensely grateful for their expertise and training in the use of voice-hearing simulation and the hearing voices approach.

This study would not have been possible without the participation of the nursing students, and I thank them all for their valuable and generous contributions. I would like to also thank the mental health nursing academics who facilitated each of the tutorial classes in which the simulation workshops were conducted.

I also acknowledge the expertise of Dr Seong Leang Cheah, who assisted me with quantitative data entry, the use of SPSS for statistical analysis, and answering my long list of questions.

I am appreciative of the support shown by many of my academic colleagues whom offered me useful tips, coffee and other beverages as necessary, and reassurance that it was only a matter of time until completion and a celebration.

The talent and assistance of Ms Priya Nair is also gratefully acknowledged, particularly her expertise with the final formatting of this thesis.

Finally, I thank my partner, Stephen and our two daughters, Bella and Ally, for their support, encouragement, and acceptance of my time spent away from them, during the years in which this study was undertaken. We can now look forward to some fun.

TABLE OF CONTENTS

Certificate of Original Authorship.....	i
Acknowledgements	ii
Table of Contents	iii
List of Figures.....	viii
List of Tables	viii
Abstract.....	x
Introduction.....	x
Aims	x
Method	x
Results	x
Discussion and Conclusion.....	xi
Chapter One: Introduction	1
Developing the Research Idea	1
The Phenomenon of Voice-hearing	2
Subjective Experiences of Voice-hearing	3
Voice-hearing Simulation	4
Empathy.....	5
Self-efficacy to Communicate.....	6
Originality of Research	6
Summary.....	7
Organisation of the Thesis	7
Key Terms.....	9
Chapter Two: Review of the Literature.....	10
Introduction	10
Literature Search Method.....	10
The Prevalence of Voice-Hearing.....	12

General Populations	12
Clinical Populations	13
Approaches to Voice-hearing	14
Traditional Psychiatric Approach.....	14
An Alternative Approach	15
Hearing Voices Movement.....	21
Therapeutic Engagement with Consumers' Voice-Hearing Experiences	22
Engaging with Families.....	25
Mental Health Nursing Approaches to Voice-Hearing.....	26
Adopting a Hearing Voices Approach	29
Nursing Students' Understandings of Mental Disorder and Voice-Hearing	30
Changing Mental Health Nursing Practice.....	31
Developing Self-efficacy to Communicate.....	32
Developing Empathy.....	33
Educational Preparation of Nurses	37
Voice-hearing Simulations to Increase Awareness and Understanding.....	37
Voice-hearing Simulations to Enhance Empathy	38
Voice-hearing Simulations to Increase Self-efficacy to Communicate.....	40
Summary.....	40
Chapter Three: Methodology and Methods	45
Introduction	45
Aims of the Study.....	45
Research Design.....	46
Philosophical Foundation.....	48
Setting.....	48
Participants	48
Procedure	49
Intervention	50
The Voice Hearing Simulation Workshop.....	50

An Experiential Learning Cycle.....	52
Data Collection.....	53
Survey Data.....	53
Focus Groups.....	54
Instruments.....	54
Jefferson Scale of Empathy.....	54
Self-Efficacy Scale.....	56
Student Questionnaire.....	57
Focus Group.....	57
Data Analysis.....	59
Survey Data.....	59
Focus Group Interview Data.....	61
Reflexivity.....	62
Ethical Considerations.....	62
Consent.....	63
Risks and their Management.....	63
Data Management.....	64
Summary.....	65
Chapter Four: Results.....	66
Introduction.....	66
Survey Participants.....	66
Self-Efficacy to Communicate (SEC).....	68
Self-Efficacy to Communicate and Gender.....	69
Self-Efficacy to Communicate and English Language.....	70
Self-Efficacy to Communicate and Nursing Qualification.....	71
Self-Efficacy to Communicate and Highest Educational Qualification other than Nursing.....	72
Self-Efficacy to Communicate and Family Member's Experience of Mental Illness and of Hearing Voices.....	73

Empathy.....	75
Empathy and Gender.....	76
Empathy and English Language.....	77
Empathy and Nursing Qualification.....	78
Empathy and Highest Educational Qualification other than Nursing.....	79
Empathy, Family Member Experience of Mental Illness, and Voice-hearing.....	80
Talking to Consumers Who Hear Voices.....	82
Developing Awareness and Understanding of Voice-hearing: <i>'I did not think it would feel so real'</i>	83
Developing Empathy for Consumers Who Hear Voices: <i>'I now know how they feel'</i>	87
Developing Confidence to Talk with Consumers about Voice-hearing: <i>'You've got to take the first step and then it gets easier'</i>	88
Responding Therapeutically: <i>'It's like opening a Pandora's Box'</i>	91
Fearing Aggression Related to Voice-hearing: <i>'You do not know what the patients' voices are telling them'</i>	97
Preparation for Practice: <i>'I think more of the coursework could be devoted to actually communicating with individuals who hear voices'</i>	99
Summary.....	102
Chapter Five: Discussion and Conclusion	104
Experiential Knowledge and Learning	104
Experts by Experience.....	105
The Experiential Learning Cycle of the VHS.....	106
reported that the voices were consuming and required the use of considerable amounts of their mental energy.....	109
Developing Nursing Students' Confidence to Talk about Voice-hearing	113
Self-efficacy to Communicate	113
Increasing Awareness and Decreasing Fears and Concerns.....	116
Increasing Therapeutic Engagement.....	116
Developing Nursing Students' Empathy for Consumers who Hear Voices.....	117

Educational Approaches	117
Characteristics of Nursing Students	120
Limitations of the Study	126
Recommendations	128
Educational Preparation for Confident and Empathic practice	128
Future Directions for Research	130
Conclusion	130
Appendices	132
Appendix A: Participant Information Sheet	132
Appendix B: Participant Consent Form.....	135
Appendix C: Survey Instruments	137
Appendix D: Approval to Use Jefferson Scale of Empathy: Health Professions Students Version (JSE – HPS version)	150
Appendix E: Participant Consent Form - Focus group	151
Appendix F: Focus Group Schedule.....	153
Appendix G: Ethics Approval.....	154
Appendix H: Participant Demographics	156
Bibliography.....	157

LIST OF FIGURES

Figure 2-1: PRISMA Flowchart of Database Search Outcomes	11
Figure 3-1: Model of the Research Study Design.....	47
Figure 4-1: Self-efficacy to Communicate & 95% CI, by Study Stage.....	69
Figure 5-1: Experiential Learning Cycle in Relation to the VHS.....	107

LIST OF TABLES

Table 1: Participant Profile, by Gender	66
Table 2: Nursing Qualifications and Experience, by Gender	67
Table 3: Non-nursing Qualifications, by Gender.....	67
Table 4: Family Member Mental Illness and Voice-Hearing, by Gender	68
Table 5: Self-Efficacy to Communicate, by Stage	68
Table 6: Self-Efficacy to Communicate, Mean Scores, by Stage.....	68
Table 7: Self-Efficacy to Communicate, by Stage, Post hoc Tests	69
Table 8: Self-Efficacy to Communicate, Mean Scores by Gender, by Stage	70
Table 9: Self-Efficacy to Communicate by Gender, by Stage, Post hoc Tests.....	70
Table 10: Self-Efficacy to Communicate Mean Scores, by English Language, by Stage	71
Table 11: Self-Efficacy to Communicate by English Language, by Stage, Post hoc Tests.....	71
Table 12: Self-Efficacy to Communicate Mean Scores, by Nursing Qualification, by Stage.....	71
Table 13: Self-Efficacy to Communicate by Nursing Qualification, by Stage, Post hoc Tests.....	72
Table 14: Self-Efficacy to Communicate Mean Scores, by Qualification Other than Nursing, by Stage	72
Table 15: Self-Efficacy to Communicate by Qualification Other than Nursing, by Stage, Post hoc Tests	73
Table 16: Self-Efficacy to Communicate Mean Scores, by Family Member Mental Illness, by Stage	73
Table 17: Self-Efficacy to Communicate by Family Member Mental Illness, by Stage, Post hoc Tests	74

Table 18: Self-Efficacy to Communicate Mean Scores, by Family Member Hears Voices, by Stage.....	74
Table 19: Self-Efficacy to Communicate, by Family Member Hears Voices, by Stage, Post hoc Tests.....	75
Table 20: Empathy, by Stage.....	75
Table 21: Empathy Mean Scores, by Stage.....	75
Table 22: Empathy, Post hoc Tests.....	76
Table 23: Empathy Mean Scores by Gender, by Stage.....	76
Table 24: Empathy by Gender, by Stage, Post hoc Tests.....	77
Table 25: Empathy Mean Scores, by English Language, by Stage.....	77
Table 26: Empathy by English Language, by Stage, Post hoc Tests.....	78
Table 27: Empathy Mean Scores, by Nursing Qualification, by Stage.....	78
Table 28: Empathy, by Nursing Qualification, by Stage, Post hoc Tests.....	79
Table 29: Empathy Mean Scores, by Qualification other than Nursing, by Stage.....	79
Table 30: Empathy, by Qualification Other than Nursing, by Stage, Post hoc Tests....	80
Table 31: Empathy Mean Scores, by Family Member Mental Illness, by Stage.....	80
Table 32: Empathy, by Family Member Mental Illness, by Stage, Post hoc Tests.....	81
Table 33: Empathy Mean Scores, by Family Member Mental Illness, Hears Voices, by Stage.....	81
Table 34: Empathy, by Family Member Mental Illness, Hears Voices, by Stage, Post hoc Tests.....	82

ABSTRACT

Introduction

There is evidence that nurses do not routinely discuss voice-hearing experiences with mental health care consumers despite its importance for recovery-focused nursing practice. One way to address this shortcoming is the use of an experiential voice-hearing simulation workshop (VHS).

Aims

The aims of the study were to: determine whether an experiential VHS increased nursing students' empathy and self-efficacy to discuss consumers' experiences of voice-hearing immediately after the VHS and at six-month follow-up, and identify concerns students had about talking with consumers about their voice-hearing experiences.

Method

A concurrent mixed methods study was undertaken with 370 final year nursing students who participated in a VHS workshop. Quantitative and qualitative data were collected from participants using a survey before and after the VHS, and at six-month follow-up. The survey instrument comprised demographic and other questions, a measure of empathy, a measure of self-efficacy to communicate, and open-ended questions related to the VHS experience. Additional qualitative data were collected via focus group three months post the VHS.

Results

Analysis of the quantitative data revealed that nursing students' confidence to talk about voice-hearing experiences increased significantly after participation in the VHS and at six-month follow-up, with empathy significantly increased at follow-up for: females, those in whom English was an additional language, for those whom had no prior nursing or other tertiary education qualification, and those whose family members did not have a mental illness. Prior to the VHS the participants expressed concerns

about interacting with consumers who hear voices. After the VHS they reported increased awareness of the effects of voice-hearing, less concerns about consumers who hear voices, and increased feelings of empathy for them. Further, the students expressed increased confidence to talk with consumers about their voice-hearing experiences, with many practicing this during their mental health clinical placements.

Discussion and Conclusion

The use of experiential learning principles contributed to development of the participants' understanding of voice-hearing and its effects on consumers. The level of realism of the simulation experience aroused emotions in the participants and contributed to their development of empathy and confidence when interacting with consumers who hear voices. This study identified the need for the further development of communication skills, specifically addressing consumers' voice-hearing experiences. This study highlights the utility of VHS to increase and sustain nursing students' empathy for, and confidence to communicate with, consumers who hear voices, and it is recommended for the educational preparation of all health professions students.

CHAPTER ONE: INTRODUCTION

Developing the Research Idea

The idea for and interest in the current study was piqued as a result of another study I led on the initial development of a Voice Hearing Simulation workshop (VHS) as a teaching and learning strategy for nursing students (Orr et al. 2013). This was a collaboration between experts by experience who hear voices, trained in the hearing voices approach and use of the VHS (Deegan 2006), and two mental health nursing academics. The experts provided training for the academics in the use of the voice-hearing simulation, and its impact was profound: feelings of fear, irritability, self-consciousness, and distraction were some of our responses to the simulated voices and sounds. It convinced me that this was a unique learning experience that should be available to nursing students who would, after all, soon be graduates working in the healthcare system with individuals who hear voices.

This small study involved an evaluation of the impact of the VHS by 75 final year nursing students in an elective mental health nursing subject. The following quotes are from participants in that study (Orr et al. 2013).

‘It has changed my thinking and created awareness. I felt I was in their shoes’ (p. 533).

I think this experience...has given me insight that I would not have gained reading a book. The way I learn best is by experience because personal experience stays with you (p. 532).

I would be more patient and really try to engage in the situation. Empathy is a wonderful thing (p. 533).

These quotes encapsulate the crux of the VHS experience that engendered unique insights about voice-hearing and increased understanding of its impacts beyond what can be gleaned from a theoretical perspective alone. The VHS was positively evaluated because of its experiential learning nature, the feelings aroused, the thoughts and behaviours induced, and the empathy it engenders for those who hear voices.

Developing understanding and expressing empathy, being patient and speaking clearly, along with a willingness to talk with health care consumers who hear voices were identified as central learning outcomes by many of the participants; however, empathy and the confidence to engage in conversations with consumers about their actual voice-hearing experiences were not measured in that study. Additionally, of interest to me was whether the potential benefits of the VHS experiences could be maintained over time. These factors motivated me to develop the key research question for this study: *Could the VHS increase and sustain nursing students' empathy for and self-efficacy to communicate with consumers who hear voices?*

The Phenomenon of Voice-hearing

Voice-hearing is experienced by many people, throughout their lives. It can include hearing the voice or voices of others, hearing non-human voices, or hearing sounds and music that others cannot hear. These experiences may be considered beneficial and wanted, distressing and unwanted, or as a mixture of both. Watkins (2008) in his work, *Hearing Voices a Common Human Experience*, refers to it as 'hearing voices speaking when there is no one there,' (p. 5), and he outlines the diversity of this experience through the consideration of numerous studies addressing voice-hearing. Furthermore, his research indicates voice-hearing to be a common experience, with a majority of people having the experience at least once in their lives, if not more often. The variety of contexts in which voice-hearing may occur and the possible contributors to these experiences include: hearing one's name called aloud when nobody is present, hearing voices associated with falling to, and waking from, sleep, hearing the voice of a deceased person, or as a result of illness, including mental disorders, severe social isolation, trauma and stress, or as an effect of prescription and non-prescription drugs (Watkins 2008).

Although voice-hearing experiences can be associated with various mental illnesses, longitudinal studies highlight that they are not necessarily indicative of disorder (Beavan & Read 2010; Beavan, Read & Cartwright 2011; de Leede-Smith & Barkus 2013; Johns & van Os 2001; Kompus et al. 2015; Krakvik et al. 2015; McCarthy-Jones et al. 2015; Ohayon 2000; Romme & Escher 1989; Romme, Honig, Noorthoorn & Escher 1992; Taylor & Murray 2012; Tien 1991; van Os et al. 2000; Verdoux & van Os 2002; Woods et al. 2015). The prevalence of voice-hearing in the general population is estimated to be between 2.5% -15%, and the experience is considered to occur on a

continuum, including people who do not have a diagnosed mental disorder (Beavan, Read & Cartwright 2011; Krakvik et al. 2015; McGrath et al. 2015).

The term 'auditory hallucination' is used in psychiatry to refer to voice-hearing. It is considered to be a perceptual disturbance, associated with mental disorder, including personality disorders, mood disorders, and psychotic disorders (APA 2013). In populations diagnosed with schizophrenia, the one-year prevalence of auditory hallucinations is higher, estimated at 74.8% (Bauer et al. 2011), with a lifetime prevalence of between 64-80% (McCarthy-Jones et al. 2017). In psychiatric settings, voices are regarded as a symptom of illness, without meaning, and requiring medical treatment (Fenekou & Georgaca 2010).

When voice-hearing experiences cause distress and negatively impact on a person's functioning, contact with mental health services is likely to occur (Beavan & Read 2010; de Leede-Smith & Barkus 2013; Morgan et al. 2011; Taylor & Murray 2012). In mental health services, medical treatments for distressing voices are most commonly instituted, such as antipsychotic medications. Yet there is evidence that non-medical interventions, such as cognitive-behavioural therapies (de Leede-Smith & Barkus 2013; Kay, Kendall & Dark 2017; National Collaborating Centre for Mental Health 2009; van der Gaag, Valmaggia, & Smit 2014), and alternative approaches such as those identified by the hearing voices movement (Romme 1998; Romme & Escher 1989; Romme et al. 1992), including supportive, hearing voices groups (Corstens et al. 2014; de Jager et al. 2016; Escher & Romme 2012; Kay, Kelly & Dark 2017; Sapey & Bullimore 2013), are also useful for recovery from distressing voices.

Subjective Experiences of Voice-hearing

The pioneering work of psychiatrist, Marius Romme, and colleagues, in the 1980s and 1990s, sought to understand the subjective experiences of people living with voice-hearing. They viewed voices as real and meaningful experiences, rather than as symptoms of disorder, and highlighted that how an individual understands and copes with their voices is a better indicator of mental health than the mere presence of voices (Romme 1998; Romme & Escher 1989; Romme et al. 1992). A detailed examination of Romme's work is presented in chapter two of this study, as it was instrumental in the development of non-traditional psychiatric approaches to voice-hearing and for the rise of the now, worldwide Hearing Voices Movement (HVM), led by experts with experiences of voice-hearing.

Regardless of whether voices are related to a diagnosis of mental disorder, what is important is how the hearing of voices affects individuals, including: their reactions to them and the ways in which they live with them (de Leede-Smith & Barkus 2013; McCarthy-Jones et al. 2015; Romme & Escher 1989; Romme et al. 1992; Taylor & Murray 2012; Woods et al. 2015). There is evidence that validating voice-hearing experiences, considering voices as meaningful, and engaging with consumers' experiences of living with voices is therapeutic (Beavan 2007; Beavan & Read 2010; Coffey & Hewitt 2008; de Jager et al. 2016; de Leede-Smith & Barkus 2013; Fenekou and Georgaca 2010; Jenner et al. 2008; Jones & Coffey 2012; Jones & Shattell 2016; Kalthovde, Elstad & Talseth 2013; McCarthy-Jones et al. 2015; Place, Foxcroft & Shaw 2011; Romme 1998; Romme & Escher 1989; Romme, Honig, Noorthoorn & Escher 1992; Romme & Morris 2007; Schnackenberg & Martin 2014) and contributes to recovery from voices (de Jager et al. 2016; Holt & Tickle 2014; Johns et al. 2014; Romme et al. 2009; Watkins 2008).

Voice-hearing Simulation

Mental health nurses have not routinely discussed voice-hearing experiences with consumers, and this could be due to a number of factors, such as a limited knowledge and fear of voice-hearing, reliance on traditional psychiatric approaches for the treatment of voices, lack of requisite therapeutic communication skills, and insufficient confidence to do so (Coffey & Hewitt 2008; Coffey, Higgon & Kinnear 2004; England 2005; England 2007; Jones & Coffey 2012; Jones & Shattell 2013; Kameg et al. 2009; Romme & Morris 2007).

An emerging approach to the development of nurses' understandings of voice-hearing and their practice with those who hear voices is through the use of simulation. The experiential *Hearing Voices that are Distressing* simulation workshop (VHS) is an educational technique to raise awareness of voice-hearing and its effects. It was developed by Patricia Deegan (2006), an academic who hears voices and is a leader in the mental health recovery movement. Experts with experiences of voice-hearing recorded the simulated voices and sounds, and the simulation component is accompanied by activities that replicate some of the experiences of living with voices.

VHS is reported to increase nursing students' understandings of voice-hearing experiences and their impact on those who hear them (Dearing & Steadman 2008; Hamilton Wilson 2009; Kelly et al. 2016; Kepler et al. 2016; Kidd et al. 2015; Orr et al. 2013; Sideras et al. 2015). Further, empathy for consumers who hear voices is not necessarily well-developed in nurses, and participation in the VHS is associated with enhancing students' empathy for consumers (Chaffin & Adams 2013; Dearing & Steadman 2008; Dearing & Steadman 2009; Hamilton-Wilson et al. 2009; Kidd et al. 2015; Orr et al. 2013) and increasing their willingness to talk with consumers about voice-hearing experiences (Orr et al. 2013).

Empathy

In clinical settings, empathy refers to the ability of a health professional to gain an understanding of another's experience and imagine being that other person; getting in the mindset of the other (Rogers 1975). It involves perceiving the other's perspective of a situation and its effects, including their thoughts and feelings about it, and communicating that understanding back to the person (Rogers 1951).

Empathy is viewed as instrumental for effective therapeutic relationships (Austin et al. 2007; Hojat et al. 2001; McKenna et al. 2012; Mercer & Reynolds 2002; Morse et al. 2006; Neumann et al. 2009; Nunes et al. 2011; Ward et al. 2012; Williams et al. 2015) however, there is disagreement about what constitutes empathy. Clinical or therapeutic empathy comprises cognitive and behavioural aspects, such as the mental processes of reasoning and judgement and the behavioural responses involved in communicating. It is considered an objective response (Hojat 2007), comprising a repertoire of skills that can be taught and learnt (Hojat 2007; Moore et al. 2006). Conversely, emotional empathy comprises not only the cognitive and behavioural aspects, but also emotional aspects, such as engagement and connection (Halpern 2001; Halpern 2014; Mercer and Reynolds 2002; Morse et al. 1992; Morse et al. 2006; Neumann et al. 2009). Emotional empathy is learnt through affect-laden experiences (Halpern 2001; Morse et al. 2006). In this study, nursing students' empathy and its development is explored in relation to the VHS, with a particular focus on the emotional experiences associated with this educational technique.

Self-efficacy to Communicate

The ability of health professionals to communicate effectively relies on knowledge, therapeutic communication skills, and the confidence to do so. Self-efficacy is the self-appraisal of the ability and confidence to perform a task (Bandura 1977a), with performance accomplishments, vicarious experiences, verbal persuasion, and emotional arousal and physiological feedback the sources of self-efficacy expectations (Bandura 1977b).

Knowledge of voice-hearing and therapeutic communication skills alone will not necessarily translate into confident nursing practice with consumers who hear voices. The key to effective communication with consumers is self-efficacy (Ammentorp 2007; Ammentorp & Kofed 2010; Norgaard et al. 2012a). In this study, the development of nursing students' self-efficacy to communicate with consumers who hear voices and its relationship to the VHS is examined.

Originality of Research

There is evidence that consumers want to discuss their voice-hearing experiences with peers, family members and health professionals (Coffey & Hewitt 2008; Coffey et al. 2004; Corstens et al. 2014; Dillon & Hornstein 2013; Dos Santos & Beavan 2015; Jones, Marino & Hansen 2016; Jones & Shattell 2016; Longden, Read & Dillon 2017; Place et al. 2011; Sapey & Bullimore 2013). Nurses do not necessarily feel equipped to talk with consumers about voice-hearing, their effects, possible coping strategies, and the range of therapeutic approaches available, beyond pharmacological interventions (Coffey & Hewitt 2008; Coffey et al. 2004; England 2007; Higgon & Kinnear 2004; Jones & Coffey 2012; Romme & Morris 2007). Furthermore, nursing students report insufficient knowledge and understanding of mental illness and concerns about not knowing what to say when interacting with consumers, including about experiences of voice-hearing (Dearing & Steadman 2008; Evans et al. 2015; Fossen & Stoeckel, 2016; Kameg et al. 2010; McCann, Lu and Berrymann 2009; Orr et al. 2013).

VHS is an educational intervention that is linked to developing nursing students' awareness and understanding of voice-hearing and its impact, decreasing concerns and fears about consumers who hear voices, and enhancing empathy for them. Whilst nursing students report empathy for consumers who hear voices after participation in

VHS, what remains unknown is whether that empathy and confidence to communicate are maintained over time and translate to therapeutic interactions with consumers.

This mixed methods study addresses the gap in the literature regarding the utility of VHS to enhance and sustain nursing students' empathy for and self-efficacy to talk with consumers who hear voices, and determines whether this transfers to therapeutic interactions during clinical placement experiences.

Summary

Voice-hearing is a common human experience but for some people who have a mental disorder, voices can cause distress and difficulties with daily living. Engagement with consumers about their voice-hearing experiences can be therapeutic and lead to recovery from distressing voices. Therapeutic engagement with voices is underutilised in mental health nursing practice. VHS has been used to enhance nursing students' understanding of voice-hearing and empathy for those who hear voices. The doctoral research study presented in this thesis examined the relationship of an experiential VHS workshop to the development of empathy and self-efficacy to communicate with consumers who hear voices. This research specifically considered whether empathy and self-efficacy can be sustained over time and translated to nursing students' practice with consumers who hear voices.

Organisation of the Thesis

The chapters in this thesis are interrelated and presented in a logical sequence. In this chapter the background to and rationale for the research study is presented. The need to research the relationship between the use of an educational intervention, voice-hearing simulation, and development of empathy for, and self-efficacy to communicate with, consumers who hear voices, is established. An overview of the thesis is provided, and the key terms are defined.

Chapter 2: In chapter two, a thorough review of the literature underpinning the study is presented. The prevalence of voice-hearing is outlined. Traditional psychiatric approaches that view voices as symptoms, and the rise of the hearing voices movement with its emphasis on therapeutic engagement with voice-hearing experiences, are discussed. Current mental health nursing practice in relation to consumers' voice-hearing experiences is examined and deficits are identified. An

examination of the concepts of clinical and emotional empathy and self-efficacy are provided. This is followed by an exploration of the educational preparation of nursing students, with particular reference to the utility of voice-hearing simulation for empathic and confident consumer-centred practice.

Chapter 3: In this chapter, an examination of the methodology of the study is presented. A mixed-methods approach to this study was undertaken. The aims and design of the study are outlined as is the intervention and the learning cycle underpinning it. Details of the methods of data collection, including the survey instruments and the focus group structure, are provided. The methods used to analyse the quantitative and qualitative data are outlined, and the ethical considerations of the study, are presented.

Chapter 4: In this chapter the results of the study are reported. The quantitative findings of self-efficacy and empathy are reported in tables. This is followed by the qualitative findings that are reported as themes. The qualitative results expand on the quantitative results, and participants' quotes are used to describe and explain their views and experiences.

Chapter 5: A discussion of the results and a conclusion to the thesis are presented in this chapter. The findings of this study are interpreted in relation to current literature and contribute to increased knowledge about the usefulness of VHS for the development of empathy and self-efficacy to communicate with consumers who hear voices. As a result of this understanding, recommendations for nursing practice and research are proposed. The limitations of the study are outlined.

Following the discussion are the appendices. They include documents related to ethics approval, participant information and consent forms, approval to use the Jefferson Scale of Empathy Health Professions Students version (JSE-HPS version), survey instruments, and the focus group schedule. All of the in-text references are situated in a bibliography that adheres to the HARVARD (UTS) format.

Key Terms

Consumer: In this thesis, the term 'consumer' is used to refer to a person who has a diagnosis of mental illness (Grey & O'Hagan 2015) and used a mental health service. The term arose during the 1970s from the international rights movement for ex-psychiatric patients (Epstein 2013; McLean 1995). Whilst not all people with first-hand experience of a diagnosis of mental illness support the use of the term 'consumer', it is adopted in this thesis in recognition of their right to empowerment and quality mental health services and care.

HVM: Hearing Voices Movement. A world-wide approach to voice-hearing, developed in response to the limitations of traditional psychiatric approaches. Voices are viewed as real and meaningful, and the subjective experiences of living with voices are valued.

Voice-hearer: A person who hears voices and sounds that others do not hear.

VHS: Voice-hearing Simulation. This is an educational approach that uses recordings, made by consumers, of simulated voices and other sounds, whilst the listener undertakes scheduled activities.

CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

The following is a discussion of the literature related to mental health consumers' experiences of hearing voices, and consideration is given to how those experiences are integrated into current mental health care in general, and mental health nursing care, specifically. The discussion of the reviewed literature provides an understanding of voice-hearing, including its prevalence, traditional psychiatric understandings of voices as symptoms, the rise of alternative understandings that recognise the subjective experiences of voices, and the Hearing Voices Movement (HVM) that values also incorporating non-medical approaches to living with voices. The implications of adopting alternative approaches to voice-hearing for mental health nursing practice are examined, including the educational preparation of nurses. Particular attention is given to the use of voice-hearing simulation (VHS) with nursing students as an educational approach to develop their: understanding of voice-hearing and its impact, empathy for consumers who hear voices, and confidence to discuss voice-hearing experiences with consumers and their families.

Literature Search Method

To review the literature a comprehensive search of peer-reviewed articles from the following relevant databases was undertaken: CINAHL (EBSCO), MEDLINE (OVID), and PsychINFO (EBSCO). Google Scholar was also used to find sources that were difficult to locate. The key terms used were 'voice hearing', 'hearing voices', 'hearing voices movement', 'voice hearing simulation', 'nursing' and 'nursing students'. The search terms were combined to yield the articles for review. The search was limited to English language and restricted to the years 1989 to 2014, in order to identify contemporary literature and to include the seminal work on the hearing voices approach of Romme and Escher (1989) and Romme et al. (1992). The review primarily includes peer-reviewed literature from Australia, Canada, New Zealand, the United Kingdom, and the United States, as the setting for this study was located in Australia, an English speaking, developed country.

A total of 551 articles were identified. The titles and abstracts were then reviewed to meet the inclusion criteria which were based on the search terms and the aims of the project. Articles were included if they were relevant to voice-hearing, approaches to consumers who hear voices, including nursing approaches, and voice-hearing simulation. A total of 85 articles were considered appropriate for inclusion in the literature review. Details are reported in the PRISMA flowchart, Figure 2.1. In addition, further articles were identified from hand-searching the reference lists of the selected articles, and related books and reports were also included in the review.

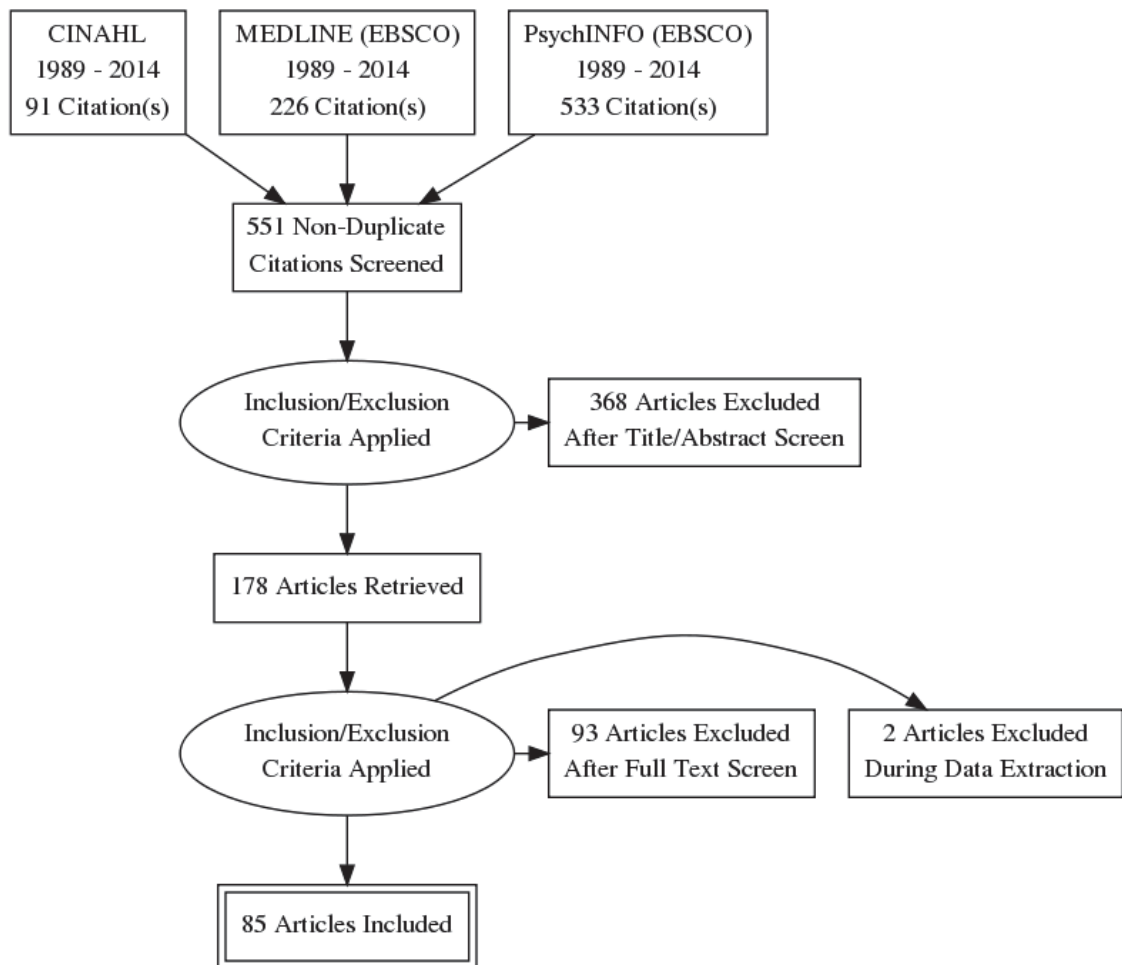


Figure 2-1: PRISMA Flowchart of Database Search Outcomes

The Prevalence of Voice-Hearing

General Populations

The increased interest in voice-hearing over the last 30 years has given rise to a number of studies estimating the prevalence of this experience in general populations. In 1991, a large study of adults (n= 15,258) in the United States of America revealed that auditory hallucinations occurred in about 10-15% of people who did not have a mental disorder, and more often they caused little distress to the person experiencing them (Tien 1991, p.290). Ohayon (2000) concluded that 'the prevalence of hallucinations in the general population is not negligible' (p. 163). In his study of hallucinatory experiences of a representative sample of the general population of the United Kingdom, Germany and Italy (n = 13, 057), Ohayon (2000) found that 38.7% of the participants had hallucinatory experiences, although these varied greatly in terms of frequency of the experience and type of hallucination, including gustatory, olfactory, and hypnogogic and hypnopompic hallucinations which are associated with going to, and waking from, sleep. 19.6% of the participants experienced hallucinations less than once a month, 6.4% experienced them monthly, 2.7% once a week and 2.4% more than once a week.

Johns and van Os (2001) highlighted that many people who experienced voice-hearing had never used mental health services, and they supported the notion of a continuum of hallucinatory experiences, from the non-pathological that occur without the presence of a psychotic disorder to the pathological. This is similar to Romme's (1998) findings however, he differentiated pathology not by the presence or absence of a psychosis but in relation to the voice-hearer's means and ability to cope with the experience (see the section on the rise of the hearing voices approach and the subjective experience of voice-hearing, later in this chapter). Beavan's (2007) study of people who hear voices, in the general adult population of New Zealand (n=154), revealed that just over half of the participants had previously used mental health services, and only one third of all participants had been diagnosed with a mental disorder; predominantly a schizophrenia spectrum disorder. More recently, Beavan, Read and Cartwright (2011) echoed the findings of Johns and van Os (2001), concluding that in general adult populations, voice-hearing occurs on a continuum, including those who do not have a mental disorder, and has a prevalence of 5-15%.

The findings of the recent study of psychotic experiences in general populations of eighteen countries, using WHO survey data, reveals slightly lower lifetime prevalence rates for voice-hearing: 5.2% for any hallucination, 3.8% for visual hallucinations and 2.5% for auditory hallucinations (McGrath et al. 2015). Whilst in general adolescent populations (16-19 years old), the prevalence for hearing a voice speaking thoughts aloud was 10.6%, with just over 5% of participants experiencing voices that were considered as troubling (Kompus et al. 2015).

Clinical Populations

Overall, hallucinations are experienced by people diagnosed with a mental disorder more often than those who do not have such a disorder (Ohayon 2000). Approximately 33% of people with a mental disorder had experienced some type of hallucination, albeit infrequently, and approximately 12% reported experiencing them at least weekly. With reference to auditory hallucinations, specifically, 0.6% of the participants reported that the experience occurred in the daytime, not associated with going to, or waking from, sleep. Fourteen of these participants reported having the experience at least once a week, and all had an associated medical condition, with psychoses, anxiety and sleep disorders being the most frequently experienced (Ohayon 2000).

In an Australian study, the most frequently experienced symptom of psychosis was hallucinations, defined by the authors as perceptual disturbances in the absence of stimuli (Morgan et al. 2011). The extent of these experiences is highlighted in the following findings whereby 37.5% of participants currently experienced hallucinations, and the majority had experienced hallucinations (78.9%) during their lifetime. However, the percentage who specifically experienced voice-hearing, auditory hallucinations, was not identified (Morgan et al. 2011). An international study of the one-year prevalence of hallucinations in 1080 people diagnosed with schizophrenia, from seven countries, revealed that auditory hallucinations had the highest prevalence at 74.8%, and people with an early onset of schizophrenia more often reported experiencing auditory hallucinations as opposed to other types (Bauer et al. 2011).

A review of studies of the experiences of auditory verbal hallucinations of clinical and non-clinical populations (no mental disorder), over a fifteen-year period, is illuminating (de Leede-Smith & Barkus 2013). Overall, in non-clinical populations, voice-hearing occurs less frequently, it is more likely after a stressful event, and causes less distress and life-disruption. Conversely, for clinical populations, voice-hearing occurs more frequently, the voices are often more distressing, the voice content more derogatory, resulting in less adaptive coping and more life-disruption, requiring mental health interventions. Given the findings that distressing voices result in reduced coping and mental health interventions, it is important that health professionals are knowledgeable of the range of approaches to minimise their negative effects and to assist people live with voices.

Approaches to Voice-hearing

Traditional Psychiatric Approach

In psychiatry, hearing voices that others do not hear is referred to as auditory hallucinations; these are considered to be distortions of perception and symptoms of mental disorders (American Psychiatric Association (APA) 2013; Morgan et al. 2011; Taylor & Murray 2012). This traditional approach, underpinned by a biomedical model, views voices as meaningless symptoms (Corstens, Longden & May 2012) and they are primarily treated with atypical antipsychotic medications (de Leede-Smith & Barkus 2013; Sadock, Sadock & Ruiz 2014). Auditory hallucinations are considered as pathological phenomena and the characteristic symptoms of schizophrenia, as outlined in various editions of the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* (APA 1987; APA 1994; APA 2000; APA 2013). The current edition of the *DSM* defines an hallucination as: a 'perception-like experience with the clarity and impact of a true perception but without the external stimulation of the relevant sensory organ' (APA 2013, p. 822). Perceptual experiences associated with dreaming, falling asleep or waking from sleep are not considered to be hallucinations (APA 2013). Hallucinations can involve any of the five senses and are categorised as auditory, visual, gustatory, olfactory and tactile, with auditory hallucinations defined as 'involving the perception of sound, most commonly of voice' (APA 2013, p. 822).

The biomedical model has dominated psychiatry for more than a century (Sapey & Bullimore 2013) and, in mental health services, the focus is on deficits, on what is wrong with people rather than what has occurred in their lives to account for their experiences, giving scant consideration of their strengths, capabilities and coping strategies (Hammersley et al. 2008). The dominant view is that hallucinations represent psychological abnormalities that require treatment (Copolov, MacKinnon & Trauer 2004); rather than a complex interplay of numerous biopsychosocial factors (Lonergan 2017). Health professionals have tended to approach those who hear voices with the purpose of eliminating the symptoms of psychosis, without consideration of their experiences of living with those voices, including those that are positive (de Jager et al. 2016; de Leede-Smith & Barkus 2013; Jones & Shattell 2013; Kalhovde Elstad & Talseth 2013). Discussing voice content is often viewed as encouraging unwanted symptoms (Leudar & Thomas 2000), by reinforcing the irrational (Place, Foxcroft & Shaw 2011), and pharmacological, rather than psychological treatments are more frequently utilised (de Leede-Smith & Barkus 2013; Lonergan 2017). This view prevents a full understanding of the subjective experiences of living with voice-hearing and has repercussions for those in whom pharmacological treatments have little therapeutic effect and can cause serious adverse responses. Given that psychotic disorders can cause significant burden and disability, and have an impact on the wider society (Access Economics 2009; Chisolm 2006; WHO 2013; WHO 2004), it is important that a range of therapeutic approaches are available to assist individuals who hear voices to achieve optimum health and wellbeing.

An Alternative Approach

An alternative to the traditional psychiatric approach was first highlighted in the seminal work of Romme and Escher (1989) and in their subsequent studies (Romme et al. 1992; Romme 1998). This approach focuses on the importance of understanding and valuing the subjective experiences of people who hear voices and their reactions to those experiences. Romme's work demonstrated a distinct paradigm shift from the traditional psychiatric approach to voice-hearing.

In 1987, Romme, a psychiatrist, interviewed one of his patients on a Dutch television program about her considerable voice-hearing experiences, encouraging viewers who heard voices to contact the program. Of the 700 people who made contact, and completed a questionnaire, 450 heard voices, 300 people had difficulties coping with

their voices, whilst 150 coped well (Romme & Escher 1989). Details of the questionnaire, and its validity or reliability, are not provided by the authors. However, as a result of the questionnaire, a congress for people who heard voices was organised to exchange views regarding voice-hearing. Twenty people who stated they coped with their voices were selected to discuss their experiences with those who identified as not coping well. Whilst the experiences of voice-hearing and coping with voices were varied, the authors categorised the participants' experiences into three sequential phases of coping: startling, organisation and stabilisation.

The startling phase represents the onset of voice-hearing experiences, and for many this was sudden and confronting. Ten percent of respondents reported that the voices first occurred between the ages of 10 and 20 years, whilst six percent, stated this was before the age of six, with one respondent stating, 'as long as I remember I have had one...My earliest memories about voices go back to kindergarten' (Romme & Escher 1989, p. 210). Furthermore, 70 percent of the respondents reported that their initial voice-hearing experience occurred after a trauma or other emotional event, such as a death, divorce, pregnancy or accident. The impacts of voices related to an emotional event were categorised as either, helpful, positive, and a part of the self, or hostile, negative and not part of the self.

The organisation phase comprises ways of communicating with the voices and initial attempts at coping, such as: expressing anger, ignoring voices that were negative (a successful strategy for only 33 percent of respondents), talking only to the positive voices, placing limits on voices, and accepting voices and their effects as one's own problems to overcome. However, one of the respondents noted that ignoring the voices and not accepting them as part of the self was counterproductive:

I decided to ignore the voices and asked them to leave me alone. In all my ignorance I handled this in a totally wrong way. You can't just put aside something that is existing in yourself and manifesting itself in such a strong way (Romme & Escher 1989, p. 211).

This respondent recounted how listening to the voices and attempting to understand the positive ones were beneficial strategies.

The above accounts of voice-hearing reveal the importance of its identification as a real experience, albeit with positive and negative effects for the hearer, and this is highlighted in the final stage, stabilisation. It involves acceptance of voices as a part of the self, development of longer term coping strategies, and taking control. It involves a balance between one's own ideas and those expressed by the voices, which is captured in the following respondent's account:

They show me the things I do wrong and teach me how to do them otherwise. But they leave the choice to me if I really want to change it or rather leave it as it was...but I have the final choice and the voices always resign to it (Romme & Escher 1989, p. 211).

The authors compared those who coped with their voices (33.8%) to those who did not (66.2%). Generally, those who coped experienced both positive and friendly voices whilst those who did not cope experienced more negative and hostile voices. Those who coped tended to view voices as a part of the self, saw themselves as stronger than the voices, were less likely to obey the voices, tended to select which voices with whom they would communicate and determined when to set limits. They learnt to cope with them by their own strength.

Furthermore, Romme and Escher (1989) noted that a frame of reference was necessary for voice-hearers to make sense of their experiences, and they differentiated the attribution of meaning respondents used to make sense of, and cope with, voices as either arising from within the self, and psychological, or externally to the self, and non-psychological. Moreover, they asserted that the frame of reference adopted must be congruent with mastery of one's voices, and they questioned the usefulness of a biological explanation of voice-hearing in the development of coping strategies, as it 'places the phenomenon beyond one's grasp' (Romme & Escher 1989, p. 215). This is similar to Beavan's (2007) findings whereby, some participants who heard negative or distressing voices had biological understandings of the experience, resulting in more contact with mental health services as compared to those participants who had spiritual understandings.

However, in contrast to Romme and Escher's (1989) view, for some people who hear voices, a biological understanding could assist them to cope with the experience, particularly if it is viewed as a part of a disorder with prescribed treatments that are effective in decreasing their voice-hearing experiences. What is more important is whether health professionals, in the first instance, ask consumers about their beliefs and understandings related to their voice-hearing experiences, and incorporate those beliefs within their therapeutic practice. As the authors contend, this process involves accepting consumers' experiences of voices, and attempting to understand their frame of reference and the language used to describe it. A number of strategies to assist people to increase their coping ability were identified, including communicating with the voices, differentiating the positive from the negative voices, and encouraging communication with others who have similar experiences to reduce social isolation (Romme & Escher 1989).

Subsequent reporting of Romme and Escher's (1989) initial study of voice-hearing experiences, reveals a more detailed analysis of the method, results and limitations (Romme et al. 1992). A thirty-item questionnaire, predominantly open-ended, was posted to the 450 people who heard voices and who responded to the television program on voice-hearing. There was a 56 percent response rate however, only 41 per cent (n=186) were completed adequately for analysis. Results of the survey indicated that seven per cent of respondents (n =13) experienced no social disruption as a result of their voices and no other psychiatric symptoms, with respondents describing their voices as a 'guide and tutor' (Romme et al. 1992, p. 99) and themselves as 'clairaudient': having the ability to hear sounds beyond the everyday experience. These participants were excluded from the study as they did not meet the definition of auditory hallucinations, defined by the authors as:

A disorder of perception which people describe as being located in the external world (ego dystonic) and which has the same qualities as normal perceptions, that is, vivid and solid, in the absence of any actual sensory stimulus (Romme et al. 1992, p. 100).

This definition is similar to the APA (2013) definition of auditory hallucinations (see definition, pages 13 of this chapter) in the following ways: the realism of the perception, and the absence of an external stimulus to account for the distortion of perception. After exclusions, a total of 173 people participated in the study and approximately two thirds were women, although not all respondents identified their gender. The majority were 30 years and older, and five percent did not have an occupation. Most respondents had heard voices for more than five years, with the peak onset between 15 and 30 years of age. The respondents were divided into two groups; 34 per cent reporting an ability to cope (n=58) and 66 per cent reporting an inability to cope (n=115), with little variation in the demographic data between the two groups (Romme et al. 1992).

The participants who coped with their voices felt they had more control over their lives, whilst those who did not cope as well felt less in control, experiencing more negative and commanding voices. The coping strategies used by individuals within each of the two groups differed. Distraction was used more often by those who reported an inability to cope, and few from this group used selective listening and setting limits as coping strategies. Those who coped more effectively used a variety of coping strategies, including selective listening to control the voices, and sought out less psychiatric intervention as compared to those who did not cope well (Romme et al. 1992).

Twenty people who were able to describe their coping strategies in detail were selected to participate in an interview, ten of whom had never received psychiatric care. Of these ten, two experienced voices after the death of a child, and three had heard voices since childhood. Of the ten who had received previous psychiatric care, four were diagnosed with schizophrenia and another four with a dissociative disorder. The four main types of coping described were distraction by physical means, such as exercising or more abstract means such as meditation, ignoring the voices, selective listening to positive voices only, and setting limits, such as arranging to speak with the voices at a pre-determined time (Romme et al. 1992).

A number of limitations were identified including: the use of a non-random, self-selected population, no assessment of the presence of mental disorder, and a questionnaire that was not tested for validity and reliability. The authors concluded that the study justified more formal research to gather epidemiological data on voice-hearing experiences in the wider population and to examine a broader range of coping strategies.

The Relationship of Voice-hearing and Mental Disorders

Subsequent research by Romme (1998) identified that voice-hearing experiences often occur in individuals before they experience any other phenomena that could be identified as a symptom of mental disorder, and that those subsequent symptoms might actually be responses to the initial voice-hearing experiences. In other words, beliefs that may be considered delusional, and behaviour that might be considered as withdrawn and socially isolative, may be attempts at controlling the voices, interrelated to voice-hearing, and not necessarily a result of disorder. Romme (1998) highlighted that the basis for understanding voice-hearing is 'the person's personality and experiences' (p. 41). In this study he compared three groups of people who heard voices; a group diagnosed with schizophrenia (n=18), a group diagnosed with dissociative disorder (n=15), and a group without any diagnosed mental disorder. He sought to compare the three groups of participants in relation to their history of the experiences and effects of voice-hearing. Results indicated that:

no distinctive features emerged among the three groups on any of the measures...In other words, psychiatric criteria were irrelevant in ascertaining who should be a patient (Romme 1998, p. 42).

Nonetheless, there were similarities between participants in all three groups, including hearing voices by their ears and within the head, with most people in each group experiencing voices as 'not me'. Communicating with voices by those with a dissociative disorder was found to differ from those in the other two groups however this difference was not elaborated by the author (Romme 1998). People with schizophrenia heard second-person voices as often as those in the other groups but heard more third- person voices, and the frequency of voices that made personal comments were the same in all groups.

The major difference between the groups of participants was that in those diagnosed with a mental disorder, the voices were experienced as negative, something to fear, and disturbed their daily lives. However, in all three groups there was a 'high coincidence between negatively experienced circumstances and the beginning of the voices' (Romme 1998, p. 43). There were however, differences in the ways an individual from any one of the groups coped with the impact of voice-hearing. Those diagnosed with a mental disorder tended to experience a long-term, negative impact as compared to those who were not diagnosed with a mental disorder. Romme (1998) concluded that 'auditory hallucinations' lie on a continuum of voice-hearing and that 'it is not the hearing of voices that indicates psychopathology, but the way a person copes with voices that creates it' (p. 43), thus highlighting the importance of assisting consumers who are voice-hearers to cope more effectively and minimise their negative impact. Further, this study highlights the importance for health professionals of examining the contribution of life events to the development of voices and the range of coping strategies currently used to gain a fuller understanding of each consumer's voice-hearing experiences.

Hearing Voices Movement

As a result of Romme and Escher's (1989) initial work in the Hearing Voices Approach, the Hearing Voices Movement (HVM) evolved and developed over 25 years. Today, it is a supportive network for people who hear voices, in well over twenty countries (Styron, Utter & Davidson 2017). The HVM views voice-hearing as a real and meaningful human experience, whereby the experiences are normalised and viewed as occurring on a continuum, including distressing and affirming voices (Corstens et al. 2014; Escher & Romme 2012; Intervoice 2017; Kay, Kendall & Dark 2017; Romme & Morris 2013).

The approaches generated by the HVM appear to offer an attractive alternative for voice-hearers who have not been fully helped by traditional approaches, who are searching for greater understanding and acceptance of their experiences, or who feel that their stories have not been heard or acknowledged (Corstens et al. 2014, p. S285).

Integral to the HVM are peer-led Hearing Voices groups (HVG), for people who hear voices (Dillon & Hornstein 2013; Hearing Voices Network 2017). Peer support is central to the groups, as is the acceptance of voice-hearing as a universal human experience. This enables members to examine the relationships they have with their voices in a safe setting, appraise their beliefs about them, determine effective ways of living with them, and lead their recovery (Beavan, de Jager, & Dos Santos 2017; Corstens et al. 2014; Dillon & Hornstein 2013; Dos Santos & Beavan 2015; Escher & Romme 2012; Jones, Marino & Hansen 2016; Kay, Kendall & Dark 2017; Longden, Read & Dillon 2017; Sapey & Bullimore 2013). Whilst several studies have evaluated the impact of HVG (Beavan, de Jager, & Dos Santos 2017; Dos Santos & Beavan 2015; Jones, Marino & Hansen 2016), a recent study, and one of the few using quantitative data to assess their effectiveness, found that support not available elsewhere, feeling less distress about their voices, and assistance with recovery from mental health problems, were major benefits for the one hundred participants surveyed. This was the case even though a third of the participants experienced the discussion of voice-hearing as distressing, some of the time (Longden, Read & Dillon 2017).

Additionally, HVGs promote collaboration between experts by experience, including those who hear voices and their families/carers, and experts by profession, including health professionals and academics. Such collaborations are vital for developing understandings of voice-hearing and recovery practices, promoting research endeavours (Corstens et al. 2014; Dillon & Hornstein 2013; Jones, Marino & Hansen 2016; Longden, Read & Dillon 2017), and enhancing health professionals' confidence to assist and support consumers who hear voices (Jones, Marino & Hansen 2016).

Therapeutic Engagement with Consumers' Voice-Hearing Experiences

Building upon Romme and colleagues' work on the value of acknowledging and examining the subjective experiences of voice-hearing, more recent research has focused on therapeutic practice that incorporates a hearing voices approach. A number of studies identify the benefits of engaging with consumers' voice-hearing experiences and supporting the development of effective coping strategies (Beavan 2007; Copolov, MacKinnon & Trauer 2004; de Jager et al. 2016; de Leede-Smith & Barkus 2013; Fenekou & Georgaca 2010; Jenner et al. 2008; Kalhovde, Elstad & Talseth 2013; McCarthy-Jones et al. 2015; Romme 1998; Romme & Escher 1989; Romme et al.

1992; Romme & Morris 2013), whilst others demonstrate that such approaches are linked to the potential for recovery from voices that are distressing (de Jager et al. 2016; Holt & Tickle 2014; Johns et al. 2014; Romme et al. 2009; Romme & Morris 2013; Watkins 2008).

Voices that are ignored, temporarily suppressed, or feared to the point that both clients and clinicians are unwilling to engage with them, often persist indefinitely, remaining abusive, distressing, and inaccessible, their “messages” unheard (Jones & Shatell 2013, p. 562).

Copolov, MacKinnon and Trauer’s (2004) study of the emotional impact of auditory hallucinations on 199 participants diagnosed with a mental disorder reveals that the ways in which consumers evaluate their voices may change over time. They contend that at least two dimensions of voices, their content and whether they are considered positive or negative, should be analysed to obtain a fuller picture of the experiences of voice-hearing and the psychological therapies that might be useful, and could result in greater empathy for the consumer. In a study by England (2005) of 337 people diagnosed with a schizophrenia-spectrum disorder, voice experiences, self-esteem, and health-related quality of life were examined. Overall, those who had positive views of their voices were more likely to rate both their self-esteem and health-related quality of life as higher. The findings highlighted the importance of mental health nurses using cognitive interventions to assist consumers to examine how their voice-hearing experiences and the meanings ascribed, affect their self-esteem and quality of life. Similarly, negative voice content was found to be a significant predictor of emotional distress and contact with mental health services, with participants identifying that acknowledgement of their experiences and validation of their views by health professionals were important for the development rapport (Beavan & Read 2010).

The importance of engagement with voice-hearers is echoed in Taylor and Murray’s (2012) study of people who considered themselves clairaudient, hearing the voice of a spirit. The participants in this study identified ways to make sense of their experiences that enabled them to cope and reduce anxiety, leading the authors to conclude that approaches by health professionals that actively engage consumers’ understanding of, and meanings attributed to, voice-hearing, that do not impose other explanations for their experiences, could have ‘clinical utility’ (p. 387). Kalhovde, Elstad and Talseth

(2013) also urge health professionals to engage in conversations with consumers about their everyday experiences of voice-hearing as:

voice experiences are woven into the fabric of the participants' unfolding lives and represent potentially valuable sources of insight for the voice hearer and others (p. 1478).

A major finding of a qualitative study of voice-hearing was that the meanings ascribed to voices related to the coping strategies utilised (Fenekou & Georgaca 2010). Some of the participants had heard voices over many years and adopted consistent approaches to coping. They were keen to discuss their voices, and most of the participants 'noted they had never spoken to anyone about their voices so extensively before' (Fenekou & Georgaca, 2010, p. 140). However, despite the participants' enthusiasm to discuss their voice-hearing experiences, the authors noted that this was not routine clinical practice because the experience is viewed by mainstream psychiatry as a 'psychiatric symptom devoid of meaning' (p. 140). A study of the prevalence and attributions of positive and useful voices revealed that such voices were wanted as they offered protection, reassurance, and advice to the voice-hearer. Further, they could be controlled, leading the authors to conclude that these approaches could be used by others as methods for coping with their voices (Jenner et al. 2008).

Holt and Tickle's (2014) review of the qualitative research literature on first person experiences of hearing voices reiterates the importance of health professionals focusing on the content and meaning of voices to increase the likelihood of establishing effective and consumer-centred interventions. This is supported by de Leede-Smith and Barkus (2013) who advocate interventions that help improve individuals' coping and lessen the distress of interactions with their voices. Further, mental health professionals can be instrumental in advancing women's experiences of voice-hearing, particularly the relationship of voices to past trauma, such as sexual abuse, which has not been a traditional psychiatric approach to voice-hearing (McCarthy-Jones et al. 2015).

Recently, de Jager et al.'s (2016) study of recovery experiences for eleven people who heard distressing voices, revealed the importance of health professionals and consumers working together to develop ways of dealing with voices. Further, for the six

participants who actively engaged with their voices, pivotal to their recovery was the normalisation of voice-hearing; a 'coming to understand themselves and their voices, integrating them into their lives and developing voice-specific skills' (p. 419). Whilst not all of the participants actively engaged with their voices and a number viewed medication important to their recovery, the authors contend that regardless of the recovery approach taken by consumers, mental health service providers need to be sensitive and responsive to each person's recovery style and their readiness for change.

For this to occur, health professionals must be willing to validate and incorporate consumers' understandings of voice-hearing and their views of recovery within their clinical practice. However, as Sapey and Bullimore (2013) highlight:

viewing the experience of voice hearing as real rather than as a hallucination caused by an illness... provides a significant challenge to medical practice and to other occupational groups which work within the mental health system' (p. 617).

Engaging with Families

Not only is it important for health professionals to engage with consumers who hear voices, it is also necessary to include their families and carers in discussions about their experiences and the range of ways in which to cope. The early work of Romme et al. (1992) identified the benefits of providing families with information about their family member's voice-hearing experiences to increase their understandings of the strategies for coping with voices and to enhance communications between families and health professionals. Yet more recent studies have highlighted that this is still an underdeveloped area of professional practice. Participants in Beavan's (2007) study highlighted that a model of intervention that not only accepted individuals' voice-hearing experiences as real, but also included voice-hearers, their families and the wider public in normalising those experiences, was needed. This is congruent with findings that voice-hearing is rarely discussed with the voice-hearer's family members nor members of the wider society (Fenekou and Georgaca's 2010), despite the benefits for consumers and their families (Kalhovde, Elstad and Talseth 2013).

Mental Health Nursing Approaches to Voice-Hearing

The confidence to discuss voice-hearing experiences with consumers, including the content, the meanings they make of the experiences, coping strategies used, and the difficulties they experience is essential for all health professionals who work with people who hear voices. This is especially pertinent for mental health nurses who comprise the largest group of health care professionals. Yet, mental health nursing has adopted a biomedical approach to voice-hearing, in parallel with the traditional psychiatric approach discussed earlier in this chapter.

Whilst numerous studies outline the importance of acknowledging the subjective experience of voice-hearing and the strategies individuals use to cope with their voices (Beavan 2007; Beavan & Read 2010; Copolov et al. 2004; Corstens et al. 2014; de Jager et al. 2016; Fenekou and Georgaca 2010; Kalhovde, Elstad & Talseth 2013; McCarthy-Jones et al. 2015; Romme 1998; Romme & Escher 1989; Romme et al. 1992), there is evidence that mental health nurses do not practise in this way; they do not readily initiate conversations about voice-hearing experiences, and nor do they incorporate these experiences within their interactions with consumers who hear voices (Coffey & Hewitt 2008; Coffey et al. 2004; England 2005; England 2007; Higgon & Kinnear 2004; Jones & Coffey 2012; Romme & Morris 2007).

Coffey et al. (2004) contend that many nurses are not taught to discuss voice-hearing experiences with consumers but are taught to reinforce external reality. Their responses to voice-hearing are generally related to encouraging adherence to prescribed medication. In their study of 20 consumers' views of community mental health nurses' responses to voice-hearing, participants indicated that the nurses' responses to voice-hearing were limited, yet they valued their relationships with the nurses and wanted to discuss their voice-hearing experiences with them.

Furthermore, a number of studies indicate the incongruence between consumers' and nurses' understandings of voice-hearing experiences resulting in a disconnect between what consumers want and how nurses actually respond (Coffey & Hewitt 2008; Coffey et al. 2004; England 2007; Romme & Morris 2007). England (2007) highlights this in a study of 115 psychiatric nurses that examined the degree to which their assessments

of voice-hearing and other psychiatric symptoms matched those of a consumer, a 49-year-old man who had experienced a mental disorder and voices since his adolescence. The consumers' experiences were video-recorded in an assessment interview with an experienced mental health nurse. 79 percent of the nurse participants had a bachelor's degree, 67.8 percent had graduate education in psychiatric nursing, and the majority had more than fifteen years of clinical experience.

The results of this study revealed that many nurses did not achieve 'consensus' regarding the voices and other symptoms experienced by the consumer, related to 'insufficient expertise or experience making judgements about voice hearing' (England 2007, p. 138). However, nurses who had a graduate education and were employed in case manager and clinical nurse specialist roles tended to rate more consistently with each other and with the consumer, particularly regarding voices and psychiatric symptoms. England (2007) concluded that nurses require extensive education about, and clinical experience of, working with consumers who hear voices if they are to develop the necessary knowledge and understanding of the subjective experiences of voice hearing.

Similarly, Coffey and Hewitt's (2008) study explored Welsh community mental health nurses' experiences of working with consumers who hear voices, comparing their perspectives of voice-hearing with a group of twenty consumers. Participants were interviewed and the findings revealed that whilst the consumer participants viewed their nursing care as 'limited to reviews of medication, access to the psychiatrist and nondirective counselling' (Coffey and Hewitt 2008, p. 1591), they wanted to discuss their experiences of voice-hearing with nurses whom they trusted. Conversely, despite the nurse participants having an average of eighteen years nursing experience, they were not confident to respond therapeutically to consumers' voice-hearing experiences, with the authors contending that:

helping people cope with their experiences of voice hearing requires a mental health nursing response, which focuses on the expressed needs of service users rather than the biomedical edicts of psychiatry (p. 1599).

Romme and Morris (2007) identified the need for mental health nurses to be cognisant that hearing voices is not the issue per se, rather, it is how one reacts to and copes with voices, and this can only be identified by discussing those experiences. Similarly,

to Coffey and Hewitt (2008), Romme and Morris (2007) contend that mental health nursing has been largely about safety, re-assurance and dispensing medication, and nurses have been 'actively discouraged' in engaging in discussions about psychotic experiences with consumers (p. 12)., with nurses in a powerful position to change their practice, urging that 'when you are with people who are 'psychotic', start listening to their experiences and ask them to explain to you what they experience' (p. 12). It is echoed by Jones and Shattell (2013) who remind clinicians, including nurses, of the importance of everyday conversations with consumers about voice-hearing:

Even without formal training, an important first step is simply starting to talk with service users and voice hearers about the history and content of their voices and unusual beliefs, just as we would other meaningful, important aspects of human experience (p. 563).

More recently, Jones and Shattell (2016) argue that experiences of psychosis, including voice-hearing, have been over-simplified and not well understood by health professionals, including nurses. Related to inadequacies within health professionals' education and clinical training, the resultant lack of confidence to engage in deep conversations about psychosis and its personal effects leads to therapeutic disengagement by consumers.

These studies highlight that practising nurses are not confident or well equipped to speak with consumers about their voice-hearing experiences, despite the consumers' requests for such interactions, and that years of clinical nursing experience alone do not guarantee such an approach. Nursing practice that is informed by a narrow view of voice-hearing that avoids in-depth discussions of consumers' experiences, and relies predominantly on pharmacological treatments, limits opportunities for therapeutic engagement with consumers, which is central to the development of a therapeutic relationship, inherent in consumer-centred mental health nursing practice. Moreover, these studies illustrate the importance of preparation of nurses for the specific demands of therapeutic practice with consumers who hear voices.

Adopting a Hearing Voices Approach

Providing opportunities for consumers to discuss their voice-hearing experiences with mental health nurses and active engagement with consumers' about those experiences are central recommendations by a number of authors (Coffey & Hewitt 2008; Jones & Coffey 2012; Jones & Shattell 2013; Jones & Shattell 2016; Place, Foxcroft & Shaw 2011; Romme & Morris 2007; Schnackenberg & Martin 2014), and this is what consumers want (Coffey & Hewitt 2008; Coffey et al. 2004; Place et al. 2011; Jones & Shattell 2016). A potential consequence of nurses adopting a singular approach to people who hear voices, such as the traditional psychiatric approach that does not focus on understanding voice-hearing experiences, is that therapeutic partnerships may not fully develop (Jones & Coffey 2012; Jones & Shattell 2016). 'Engagement with the person based on making a connection with that individual's experiences' (Jones & Coffey 2012, p. 57) is what mental health nurses can do to assist the consumers with whom they work, and knowledge of consumers' experiences develops mental health nurses' practice (Stennhouse 2011). Mental health nursing, 'rather than doing things "to" or "for" people, must begin to work more democratically "with" them' (Gray 2008, p. 1007), and this reflects a paradigm shift in nurses' practice.

A study conducted in the United Kingdom, involving 25 consumers who heard voices, illustrates the positive benefits of mental health nurses engaging with consumers' accounts of their experiences (Place et al. 2011). The study, conducted on an acute care ward, involved supporting nurses to encourage consumers to relate stories of their voice-hearing, without interpreting their meaning. Results indicated that nurses developed confidence to work therapeutically, and strong relationships developed between the nurses and consumers (Place et al. 2011). Further, Schnackenberg and Martin (2014), a social worker and mental health nurse respectively, urge professionals to adopt an experience-focused counselling approach whereby, the expertise of the consumer who hears voices is situated within the person's life context, promoting 'a way to live with and not just manage the voices' (p. 398). They conclude that this approach utilises the traditions of mental health nursing and social work, including 'a strengths focus, active listening, coping strategies, empowerment and advocacy' (p. 398).

Recovery from distressing voices is achievable in part through the acceptance of voice-hearing experiences, what they might mean, and the development of skills to cope and to live with them (Corstens, Longden & May 2012; de Jager et al. 2016; Place et al. 2011; Romme et al. 2009; Watkins 2008); the importance of this for nurses' and other health professionals' practice cannot be overstated. Jones and Shattell (2016) demand:

that clinicians, researchers and community members start listening much more carefully to what it is that persons labeled with psychosis are actually experiencing, to the impact of these experiences on them...and to the importance of a process of personal meaning-making that goes well beyond the conventional ethos of illness self-management (p. 772).

'Accepting voices as a human variation promotes the therapeutic relationship' (Romme & Morris 2013, p. 267). It is this relationship that enables nurses to engage with consumers' experiences of voice-hearing, and should be integral to every health professional's practice. This will, however, require a concerted effort by those responsible for the development of educational programs for health professionals, including mental health nursing academics and educators.

Nursing Students' Understandings of Mental Disorder and Voice-Hearing

A number of studies have identified that nursing students have an insufficient knowledge base for understanding mental disorders (Dearing & Steadman 2008; Kameg et al. 2010; McCann, Lu and Berrymann 2009). For example, McCann et al. (2009) contended that Australian nursing students had very poor mental health literacy on completion of their Bachelor of Nursing courses. In their longitudinal study of first, second and third year nursing students that measured attitudes and beliefs about mental health problems, these authors concluded that mental health nursing should be included in the early stages of curricula and 'incrementally increased' throughout the three years of study, as students were inadequately prepared to manage the mental health issues that may arise in their practice as new graduates (McCann et al. 2009, p. 66).

Effective communication is necessary for the development of therapeutic relationships yet nursing students are often concerned that they do not know what to say in their interactions with mental health consumers (Kameg et al. 2010). Moreover, nursing students have a limited understanding of those who experience voices (Coffey & Hewitt 2008; England 2007; Evans et al. 2015; Fossen & Stoeckel, 2016; Kameg et al. 2009; Martin 2000; Orr et al. 2013).

From their study of community mental health nurses, Coffey and Hewitt (2008) concluded that the education of nursing students requires input from consumers of mental health services to 'assist nursing students to identify the help-seeking needs of people with serious mental illness' (p. 1599). Students often feel underprepared, anxious and uncertain about approaching, and communicating with, consumers who hear voices (Dearing & Steadman 2008; Kameg et al. 2009) 'which interfere[s] with their ability to respond with the care and empathy necessary to promote optimum health' (Dearing & Steadman 2008, p. 59). Limited experiences with those who hear voices and negative social stigma surrounding mental disorder have been attributed to this lack of confidence and awareness in nursing students (Dearing & Steadman 2008; Kameg et al. 2009).

These studies highlight the importance of sound educational preparation for all nurses as they will encounter individuals who experience mental disorders, regardless of their clinical area of practice. They require knowledge development regarding mental disorders and the effects of these disorders on consumers' lives, coupled with the need for development of effective communication skills to discuss consumers' experiences, including voice-hearing experiences and their impact. Furthermore, the above studies provide insight, in part, as to why registered nurses are not routinely and confidently discussing voice-hearing experiences with consumers.

Changing Mental Health Nursing Practice

Traditionally, the education and preparation of nurses for mental health practice has not focused on developing understanding of and confidence to discuss consumers' subjective experiences of mental illness, including voice-hearing experiences. Nurses require a greater awareness of consumers' voice-hearing experiences, the therapeutic communication skills to engage with those experiences, and the confidence to do so, in order to provide consumer-centred nursing practice.

Developing Self-efficacy to Communicate

Knowing what to say, and possessing the necessary communication skills are not enough for therapeutic nursing practice with consumers who hear voices. Nurses' self-efficacy or appraisal of their ability to communicate therapeutically are also necessary. Self-efficacy, described by Bandura (1977a), is a person's self-assessment of the capability to perform a task and the confidence to do so; personal decisions to participate in a situation are also dependent on this self-assessment (Bandura 1977a). The results of nine meta analyses of self-efficacy and functioning demonstrate that efficacy beliefs contribute significantly to motivation and performance (Bandura 2003).

Importantly, is that a high self-efficacy expectation equates to improved performance and self-efficacy acts independently of an individual's skills, knowledge and cognitive abilities; their 'level of motivation, affective states and actions are based more on what they believe than on what is objectively true' (Bandura 1997, p. 2). Self-efficacy in turn affects the duration and degree of effort individuals will exert to achieve a desired outcome. Tasks where self-efficacy is low tend to be avoided whilst tasks associated with high self-efficacy are more likely to be pursued (Bandura 1977b). Four sources that affect a person's self-efficacy expectations are performance accomplishments based on personal experiences, vicarious experiences such as seeing others' performances, verbal persuasion, and emotional arousal and physiological feedback (Bandura 1977b)

Self-efficacy has been studied in relation to improving health professionals' communication in a variety of clinical backgrounds, such as paediatrics, neonatology, oncology cardiology, primary health care, aged care and orthopaedics (Ammentorp et al. 2007; Ammentorp & Kofed 2010; Bosse et al. 2012; Doyle et al. 2011; Gulbrandsen et al. 2013; Hsu, Chang & Hsieh 2015; Hsu, Huang & Hsieh 2014; Norgaard et al. 2012a; Parle et al. 1997; Song et al. 2015), and improving nursing students' communication using simulation (Kameg et al. 2010). However, there are no reported studies of self-efficacy to communicate in mental health settings with consumers who hear voices.

Studies demonstrate increases in self-efficacy to communicate post communication training and at six month's follow-up (Ammentorp 2007; Ammentorp & Kofed 2010; Norgaard et al. 2012a). The study by Ammentorp et al. (2007) revealed that doctors' and nurses' self-efficacy to perform specific communication skills required of them in their daily practice improved with training as did their confidence to perform those skills; self-efficacy was the critical variable. Furthermore, Ammentorp et al. (2007) and Ammentorp and Kofed (2010) noted that increased self-efficacy to communicate does not necessarily translate to improved communications in clinical practice, urging further research on the relationship of health professionals' self-efficacy ratings to patients' experiences of therapeutic interactions. However, the study by Norgaard et al. (2012a) noted that patients were more satisfied with communication and care after the health professionals completed the communication training. In addition, increases in patient satisfaction with care led these authors to recommend that all health professionals who have contact with patients be trained in patient-centred communication and that training be extended to the entire organization (Norgaard et al. 2012b). In a subsequent study, health professionals' self-efficacy to communicate with patients and colleagues significantly increased and was sustained eighteen months after communication skills training. The authors attributed this result to the applicability of the communication skills to the specific clinical practice setting (Norgaard et al. 2013).

The confidence to talk about important experiences in consumers' lives, including their voice-hearing experiences, is a vital component of nurses' therapeutic interactions. If mental health nursing practice is to change and encompass discussions about voice-hearing experiences, nursing students require educational experiences that provide them with knowledge, skills and opportunities for the development of self-efficacy and confidence to communicate about all aspects of those experiences.

Developing Empathy

Engaging therapeutically with consumers' voice-hearing experiences requires nurses to empathise with those experiences, and there is much debate about what constitutes empathy. In the seminal work of humanistic psychologist, Carl Rogers, *Client-centred Therapy: Its Current Practice Implications and Theory*, in therapeutic settings, empathy is conveyed by adopting:

the internal frame of reference of the client, to perceive the world as the client sees it, to perceive the client himself as he is seen by himself...and to communicate something of this empathic understanding (Rogers 1951, p. 29).

Rogers was not suggesting that empathy requires the counsellor to experience the client's feeling, emotional identification, but that an empathic identification occurs when the counsellor perceives the feelings and mindset of the client. Rogers (1975) considered empathy as a complex but subtle process involving 'being with a person', which requires the setting aside of personal values and beliefs in order to enter the other's inner world, the sensing of another's meanings and feelings, communicating that understanding to check for accuracy, and guidance by the other's responses to that sensing (Rogers 1975, p. 4). It is different from sympathy whereby no attempt at understanding is required; rather, a sympathetic response requires feeling sorry for the person's situation. An earlier review of the psychology and nursing literature identified four components of empathy: emotional, the ability to subjectively experience another's emotions, moral, the driving force that motivates empathic reactions, cognitive, the intellectual ability to understand another's perspective and feelings, and behavioural, the ability to communicate this understanding (Morse et al. 1992, p. 274).

Empathy is acknowledged as a central component of effective therapeutic relationships and interactions between health care consumers and health care professionals, including nurses, doctors, occupational therapists and pharmacists (Austin et al. 2007; Hojat et al. 2001; McKenna et al. 2012; Mercer & Reynolds 2002; Morse et al. 2006; Neumann et al. 2009; Nunes et al. 2011; Ward et al. 2012; Williams et al. 2015). A purposeful engagement by nurses with health care consumers and expression of compassion and kindness are considered core components in the development of therapeutic relationships (Nursing and Midwifery Board of Australia 2016), and empathy is considered vital.

The benefits of empathy for consumers include accurate diagnoses (Halpern 2014), increased satisfaction (Mercer & Reynolds 2002; Ward et al. 2012), increased compliance with treatment (Halpern 2014; Ward et al. 2012), increased empowerment for self-care (Halpern 2014), positive mental health health outcomes (Kaite et al. 2015), and improved clinical outcomes (Hojat et al. 2011; Hojat et al. 2013; Mercer & Reynolds 2002; Neumann et al. 2009). Conversely, a lack of empathy by health professionals can impede therapeutic communication and result in consumer dissatisfaction (Brugel et al. 2015; Hojat et al. 2002a).

Clinical Empathy: Primarily Cognitive and Behavioural Processes

At the crux of empathy is understanding another; however, it is distinguished by the context in which it occurs. In patient care, empathy has been extensively researched and documented over a thirty-year period, by Hojat (2007), who defines it as:

A predominantly cognitive (rather than an emotional) attribute that involves an understanding (rather than feeling) of experiences, concerns and perspectives of the patient, combined with a capacity to communicate this understanding (p. 80).

Outside of clinical or therapeutic contexts, it is described as an involuntary response, comprising cognitive and affective components:

in reaction to the emotional signals of an interaction partner... it consists of a cognitive component, in which one mentally represents the situation of the other, and an affective component, in which one emotionally identifies with the other (Brugel, Postma-Nilsenova & Tates 2015, p. 126).

In much of the literature, clinical empathy, that which is expressed in patient care, is differentiated from empathy in every-day settings. It is defined as gaining an understanding of another's feelings and experiences, to know, which is then communicated back to the other, enabling that person to feel understood (Hojat et al. 2001; Hojat 2007; Brugel et al. 2015). Clinical empathy is considered as primarily involving mental processes, including reasoning, which are required for clinical judgement. Emotional responses are considered as subjective and inhibit objective, clinical reasoning and judgement (Hojat 2007). In addition to cognitive processes, clinical empathy involves behavioural components, such as the skills of effective communication of this understanding to the patient (Hojat 2007). Further, Hojat (2007) regards empathy as a group of skills that can be learnt and deliberately applied to interactions with patients because of its inherent benefits.

Emotional Empathy: More than Cognitive and Behavioural Processes

Yet, there is disagreement as to what constitutes empathy in clinical settings, with a number of authors challenging the notion of empathy as primarily involving cognitive and behavioural processes (Halpern 2001; Halpern 2014; Mercer and Reynolds 2002;

Morse et al. 1992; Morse et al. 2006; Neumann et al. 2009). Morse et al. (2006) contend that clinical empathy or therapeutic empathy is a learnt set of skills, that are primarily cognitive and behavioural, and that the role of emotional empathy, 'the caregiver's intuitive sensing and response to the other's plight', has been largely ignored in nurse-patient interactions (p. 76). These authors delineate a model of communication for nurses when caring for patients who are suffering in a clinical setting. At the essence of the model is the focus of the interaction: patient versus professional-focused and reflexive versus learnt responses. Emotional empathy, a first-level patient-focused response, occurs when there is emotive engagement with the patient, embodiment of the patient's experience (a subjective sensation in the nurse) or an identification with that experience, and spontaneous, reflexive responding, such as sympathy, pity, consolation and compassion. However, emotional empathy and the associated feelings aroused in the nurse are of less value to the patient than the nurse's verbal and non-verbal responses that result from those feelings. Morse et al. (2006) contend that emotional empathy is learnt by experience, whereas therapeutic empathy is learnt by rote. Further, reflexive responses are devalued in nursing; rather, nurses are required to demonstrate second-level patient-focused professional responses that are underpinned by an emotional detachment, a 'pseudo-engagement' with the patient, that are learnt, conscious and can protect the nurse from excessive suffering. Such responses include humour, learnt comforting, and informative reassurance (Morse et al. 2006). Thus, in nursing interactions, emotional empathy is often replaced by the more valued, therapeutic empathy, with less emphasis on emotional engagement and spontaneous expression of feelings, and more on the learnt cognitive and behavioural processes.

The work of Halpern (2001) is illuminating in its examination of the development of empathic understanding and it also supports the notion of emotional empathy as learnt by experience, similarly to the view of Morse et al. (2006). She asserts that empathy involves more than cognitive processes and is informed by accompanying emotional experiences in the empathizer, 'an experiential understanding of another person's distinct emotional perspective' (Halpern 2001, p. 68). Whilst she accepts that

knowledge of the emotional state of patients is gained through observation of others and examination of one's own emotional experiences, central to her argument that empathy is more than a cognitive process is the idea that professionals discern the patient's emotional experiences whilst actually experiencing 'emotional shifts' during the process (Halpern 2001, p. 72). It is the development of the emotional components of empathy that can positively assist consumers by validating their experiences and creating feelings of being understood and valued as an individual (Neumann et al. 2009).

The ability to empathise and engage emotionally, is necessary for therapeutic nursing interactions with consumers who hear voices. Educational programs for nurses must provide learning opportunities that develop the emotional, cognitive and behavioural components of empathy.

Educational Preparation of Nurses

One way to change traditional mental health nursing practice is through the education of nursing students. The introduction of learning opportunities that increase nursing students' understanding of the subjective experience of hearing voices, including the emotional aspects, and enhance empathy for consumers who hear voices, are key.

Voice-hearing Simulations to Increase Awareness and Understanding

Voice-hearing simulations (VHS) are proving to be a sound way to educate nurses and other health professionals about the experiences of voice-hearing and the impact of those experiences on everyday living. They have recently been used in the educational preparation of nursing, medical and pharmacy students (Brown 2015; Bunn & Terpstra 2009; Chaffin & Adams 2013; Dearing & Steadman 2008; Dearing & Steadman 2009; Evans et al. 2015; Hamilton Wilson et al. 2009; Kelly et al. 2016; Kepler et al. 2016; Kidd et al. 2015; Orr et al. 2013; Sideras et al. 2015; Skoy et al. 2016; Weiland, Levine & Smith 2014). Developed by those who hear voices themselves, the *Hearing Voices that are Distressing* simulation (Deegan 2006) increases awareness and understanding of voice-hearing and its impacts. For nursing students, the positive effects of VHS include the development of awareness of voice-hearing, greater understanding of the impact of those experiences, and the cultivation of positive attitudes towards

consumers who hear voices (Chaffin & Adams 2013; Dearing & Steadman 2008; Hamilton-Wilson et al. 2009; Kelly et al. 2016; Kepler et al. 2016; Orr et al. 2013; Sideras et al. 2015; Weiland, Levine & Smith 2014).

The principal researcher in the current study previously developed a VHS workshop for a small group of eighty nursing students (Orr et al. 2013). It was a collaboration with consumers who hear voices and who had been trained in the use of the simulation, by Deegan (2006). The VHS included a short presentation by a consumer who hears voices, the simulated voices experience and accompanying activities, and a forty-minute guided group processing post simulation. The authors not only demonstrated that final year nursing students increased their awareness of voice-hearing and its impact on daily living, but it also assisted students to identify a number of potential strategies to use when talking with consumers who hear voices, such as: being patient and understanding, developing a therapeutic connection, directly discussing voice-hearing experiences, discussing effective ways of coping with voices, including potential coping methods not previously used, and being empathic (Orr et al. 2013). The following student's comment reflects many of these findings:

I would be more patient and really try to engage in the situation. Empathy is a wonderful thing (Orr et al. 2013, p. 533).

Although all of reviewed studies used the voice-hearing simulation developed by Deegan, the need for a comprehensive and well-developed VHS workshop, in collaboration with experts by experience, is paramount to decrease stigma and highlight the reality of recovery, and this is reflected in the study by Orr et al. (2013).

Voice-hearing Simulations to Enhance Empathy

VHS is also linked to increased empathy in nursing and other health professions students (Bunn & Terpstra 2009; Chaffin & Adams 2013; Dearing & Steadman 2008; Dearing & Steadman 2009; Fossen & Stoeckel, 2016; Hamilton Wilson et al. 2009; Kidd et al. 2015; Orr et al. 2013; Skoy et al. 2016) and increased empathy and compassion by nursing students who participated in a brief VHS experience (Mawson 2013). In most of the studies of nursing students, participants reported increased empathy immediately after VHS (Chaffin & Adams 2013; Dearing & Steadman 2008; Dearing & Steadman 2009; Kidd et al. 2015; Mawson 2013; Orr et al. 2013; Weiland, Levine & Smith 2014). The benefits of enhanced empathy are linked to development of

therapeutic interactions with consumers, as 'developing a relationship with clients and entering their world requires that the nurse empathise with them' (Dearing & Steadman 2009, p. 180).

Two of the studies did not provide participants with the full forty-five minute simulated voices experience (Mawson 2013; Weiland, Levine & Smith 2014). Whilst Kidd et al. (2015) reported increased empathy, their study used the voice-hearing simulation as a stand-alone learning experience without any preparatory component. They caution that using a voice-hearing simulation as a sole strategy could contribute to stigma by nurses towards those who hear voices through the development of beliefs that recovery is unlikely:

The simulation may be perceived as a traumatic experience by some, with accompanying negative emotions and a desire for greater social distance from those who hear voices (Kidd et al. 2015, p. 116).

A range of empathy scales were used to measure empathy, and the Jefferson Scale of Empathy (JSE) (Hojat et al. 2001) was used in two of the reviewed studies (Bunn & Terpstra 2009; Sideras et al. 2015). Bunn and Terpstra (2009) found that medical students' empathy increased significantly post VHS as compared to a comparison group who did not participate in the simulation. As students gained insight into the everyday experiences of those who hear voices, the authors concluded that the VHS contributes to furthering understanding of the ways in which empathy can enhance the doctor-patient relationship; this is similar to the above findings by Dearing and Steadman (2009). More recently however, a study by Sideras et al. (2015) reported that whilst nursing students had a significant decrease in negative attitudes towards people with a diagnosis of schizophrenia and who hear voices, they did not demonstrate any significant difference in empathy after participation in the VHS as compared to a comparison group.

Voice-hearing Simulations to Increase Self-efficacy to Communicate

VHS is linked to increasing health professions students' awareness and understanding of voice-hearing and empathy for consumers who hear voices however, self-efficacy or confidence to talk with consumers about their voice-hearing experiences was not specifically addressed in most of the above studies.

Nursing students who attended a mental health clinical placement the week after participation in a VHS were observed to be more patient and kind towards the consumers and they practised therapeutic communication when talking with consumers who were hearing voices (Chaffin & Adams 2013). However, the students' self-efficacy to communicate was not measured at any point of time in this study. Whilst the study by Orr et al. (2013) highlighted the potential communication strategies nursing students identified they could use when engaging with consumers who hear voices, it did not measure their self-efficacy to do so. Likewise, although pharmacy students reported an increased ability to communicate with consumers after a VHS, self-efficacy was not measured (Skoy et al. 2016).

Only one study of VHS and self-efficacy to provide nursing care to consumers who hear voices is reported in literature. The findings highlight that whilst some of the students reported increased confidence to communicate, their self-efficacy to provide care did not change significantly post VHS (Kepler et al. 2016). The paucity of studies on VHS and self-efficacy to communicate with consumers who hear voices is a gap in the research literature. This is particularly so given that numerous studies have identified the therapeutic benefits of engaging with consumers and discussing their voice-hearing experiences, impacts, and their means of coping.

Summary

The literature reviewed reveals that voice-hearing is a common human experience, occurs on a continuum of positive and distressing experiences, and is not of itself indicative of mental disorder (Beavan, Read & Cartwright 2011; Krakvik et al. 2015; McGrath et al. 2015). For people diagnosed with a mental disorder and who hear voices, voice-hearing tends to cause them distress due to the frequency of the

experience, voice content that is often negative, and the disruptions to daily living that lead to interventions by mental health professionals (de Leede-Smith & Barkus 2013). The traditional psychiatric approach to voices situates them as symptoms of mental disorder, hallucinations, requiring treatment with antipsychotic medication (de Leede-Smith & Barkus 2013; Sadock, Sadock & Ruiz 2014). The emergence of the Hearing Voices Movement (HVM) over the last twenty-five years relates to consumers' dissatisfaction with psychiatric approaches to voice-hearing. Normalising voice-hearing, and the acceptance of the subjective experiences of voices and their impacts, rather than their suppression, are central tenets of the HVM for living well with voices (Corstens et al. 2014; Escher & Romme 2012; Intervoice 2017; Jones & Shattell 2013; Kay, Kendall & Dark 2017; Romme & Morris 2013).

The adoption of hearing voices approaches by mental health professionals that engage with consumers' subjective experiences of voice-hearing to support recovery, is considered therapeutic (de Jager et al. 2016; de Leede-Smith & Barkus 2013; Fenekou & Georgaca 2010; Kalhovde, Elstad & Talseth 2013; McCarthy-Jones et al. 2015; Romme 1998; Romme & Escher 1989; Romme et al. 1992; Romme & Morris 2013). Yet, there is evidence that mental health nurses do not readily engage with consumers to develop their understandings of voice-hearing experiences, nor support consumers to cope with the impacts of voice-hearing beyond traditional psychiatric approaches, such as medication administration and psychiatric referral (Coffey & Hewitt 2008; Coffey et al. 2004; England 2005; England 2007; Jones & Shattell 2013; Higgon & Kinnear 2004; Jones & Coffey 2012; Romme & Morris 2007).

A number of studies have highlighted the incongruence between consumers' and nurses' understandings of voice-hearing, utilising qualitative (Coffey & Hewitt 2008; Jones & Coffey 2012; Jones & Shattell 2016) and quantitative approaches (England 2005; England 2007). Despite the studies' methodological differences, they highlight nurses' lack of awareness and understanding of consumers' subjective experiences of voice-hearing, and subsequently the strategies that could assist consumers to cope; this is linked to inadequate educational preparation (Coffey & Hewitt 2008; England 2005; England 2007; Jones & Coffey 2012; Jones & Shattell 2016), nursing practice dominated by traditional psychiatric approaches to voice-hearing, and limited clinical practice experiences in which to develop alternative approaches (Romme & Morris 2007, England 2007; Jones & Shattell 2016).

Nursing students report feeling anxious and unsure of how to communicate with consumers of mental health services, including those who hear voices (Evans et al. 2015; Fossen & Stoeckel, 2016; Kameg et al. 2009; Martin 2000; Orr et al. 2013), and studies demonstrate that the use of VHS can contribute to enhancing health professions students' understandings of voice-hearing and empathy for consumers who hear voices (Bunn & Terpstra 2009; Chaffin & Adams 2013; Dearing & Steadman 2008; Dearing & Steadman 2009; Hamilton Wilson et al. 2009; Kidd et al. 2015; Orr et al. 2013; Skoy et al. 2016; Weiland, Levine & Smith 2014). Underpinning these studies are various methodologies and a range of data collection methods, including focus groups, interviews, narratives, and surveys incorporating open-ended questions and empathy scales.

None of the studies used a randomised design, several used a qualitative design (Dearing & Steadman 2009; Fossen & Stoeckel, 2016; Hamilton Wilson et al. 2009; Orr et al. 2013; Weiland, Levine & Smith 2014), three used a quantitative design (Bunn & Terpstra 2009; Mawson 2013; Sideras et al. 2015), and mixed methods approaches were utilised in five of the studies (Chaffin & Adams 2013; Dearing & Steadman 2008; Kepler et al. 2016; Kidd et al. 2015; Skoy et al. 2016). Only three studies used comparison groups (Bunn & Terpstra 2009; Dearing & Steadman 2008; Sideras et al. 2015), and the majority of studies used small samples of less than one hundred participants (Chaffin & Adams 2013; Dearing & Steadman 2008; Dearing & Steadman 2009; Hamilton Wilson et al. 2009; Kepler et al. 2016; Kidd et al. 2015; Orr et al. 2013; Skoy et al. 2016; Weiland, Levine & Smith 2014).

Also noteworthy are the considerable differences in the components of VHS utilised in the reviewed studies. The complete VHS training program, developed by Deegan (2006), comprises a sixty-minute preparation component, ten-minute orientation to the voice-hearing simulation, forty-five-minute voice-hearing simulation with accompanying activities, and a twenty-minute post simulation reflection. A number of studies did not include any preparation component (Bunn & Terpstra 2009; Chaffin & Adams 2013; Dearing & Steadman 2008; Dearing & Steadman 2009; Kepler et al. 2016; Kidd et al. 2015; Mawson 2013), one study exposed students to the voice-hearing simulation for five-minutes (Mawson 2013) and another for twenty minutes (Weiland, Levine & Smith 2014), and the following studies did not report inclusion of a reflection component after the simulation experience (Bunn & Terpstra 2009; Kepler et al. 2016; Mawson 2013).

The methodological limitations of the studies limit the generalisability of their findings and the conclusions that can be drawn. Whilst empathy was reported to have increased after participation in the VHS, it was not measured beyond the post VHS experience in any of the reviewed studies, and it is not known whether any increases in empathy were sustained over time. Consequently, it remains unclear whether the use of VHS can enhance nursing students' empathy for consumers who hear voices, beyond the VHS experience, and if so, to what extent.

There are some studies linking the use of VHS to increasing health professions students' ability to talk with consumers about their voice-hearing experiences (Chaffin & Adams 2013; Fossen & Stoeckel, 2016; Kepler et al. 2016; Orr et al. 2013; Skoy et al. 2016). However, there are currently no studies measuring self-efficacy to communicate. There is one mixed methods study that measured self-efficacy to provide nursing care to consumers who hear voices, utilizing a single-item scale (Kepler et al. 2016). This study demonstrated no significant change in the students' self-efficacy post VHS. The researchers noted that the inclusion of a component for reflection, post-VHS, in which to discuss and demonstrate the requisite communication skills, could potentially increase these nursing students' self-efficacy to provide care to consumers who hear voices.

To engage therapeutically with consumers' voice-hearing experiences, nurses require the confidence to talk with consumers about their experiences, including those that are distressing. However, it is unclear whether the use of a VHS can enhance nursing students' self-efficacy to communicate with voice-hearers about their voice-hearing experiences, and if it can be enhanced, to what extent.

The use and evaluation of voice-hearing simulation education is relatively new and is not based on nursing students' self-efficacy and confidence to communicate with people who are voice-hearers. Studies of voice-hearing simulations have used small samples making generalisability of the findings difficult. There is a need for future studies to ascertain the relationship between VHS and nursing students' empathy for and self-efficacy to communicate confidently with consumers who hear voices. Such

studies should include larger samples, a design that incorporates mixed methods approaches to ensure a range and depth of data for analysis, and examination of the extent to which empathy and self-efficacy to communicate can be sustained, over time, as this was not measured in any of the reviewed studies.

CHAPTER THREE: METHODOLOGY AND METHODS

Introduction

In this chapter, a discussion of the methodology and conduct of the research is presented. The aims and design of the study are clearly outlined. This is followed by an explanation of the procedures for the preparation and recruitment of participants, and the collection of data. The intervention is outlined, and a rationale for the use of the instruments and other means of data collection is provided. The analysis of the quantitative and qualitative data is explained, and the ethical considerations and their management are provided.

Aims of the Study

The aims of the study were to:

- a. determine whether the use of a Voice Hearing Simulation (VHS) increases nursing students' empathy for consumers who hear voices;
- b. determine nursing students' empathy for consumers who hear voices, six months after the VHS experience;
- c. determine whether the use of a VHS increases nursing students' self-efficacy in communicating with voice-hearers about their voice-hearing experiences;
- d. determine nursing students' self-efficacy to communicate with consumers about their voice-hearing experiences six months after the VHS experience;
- e. describe concerns nursing students have about talking to consumers who hear voices;
- f. describe nursing students' experiences of communicating with consumers who hear voices after completion of a VHS, followed by a two-week mental health nursing clinical placement;
- g. explain any changes in nursing students' empathy and self-efficacy after completion of a VHS and a two-week mental health clinical placement.

Research Design

In order to achieve the aims of the study, a concurrent mixed methods approach was chosen. A mixed methods approach is one which integrates different methods that when combined are beneficial to the overall research, and the results obtained from one component of the research can inform the other components or explain findings (Denscombe 2010). This mixed methods approach used quantitative and qualitative data collection and analysis methods as:

The limitations of one method can be offset by the strengths of the other method, and the combination of quantitative and qualitative data provide a more complete understanding of the research problem (Creswell & Plano Clark 2011, p. 8).

Whilst a quantitative approach provides explanations for the relationship between variables, a qualitative approach provides a more detailed understanding of the meaning of the statistical results (Creswell & Plano Clark 2011). That is, results are not simply what happened but there are data to support and explain why it happened. Another benefit of a mixed methods research design is the increase in the variety of information obtained from the research participants, providing a more complete picture of the research topic (Denscombe 2010; Topping 2010; Creswell & Plano Clark 2011). Furthermore, mixed methods research facilitates a greater understanding of the complexities of health and health care via the use of several knowledge sources, particularly due to the complementarity of the quantitative and qualitative methods (Simons & Lathlean 2010). A particular benefit of this design is its focus on the link between the different approaches used. This is referred to as methodological triangulation, or the viewing of things from a different perspective to make comparisons, including the use of different methods, data sources and analyses (Denscombe 2010). Complementarity refers to the utilization of data from one source to add meaning to the data from another source. For example, findings from interviews can explain and enhance the findings of surveys (Mark 2015). Comparisons between the various sources of data collected and analysed deepen the understanding of the research topic (Creswell 2003; Shensul 2012).

In this study a concurrent mixed methods approach with three-stage data collection was adopted (Figure 3.1), described as concurrent triangulation (Creswell 2003). Both quantitative and qualitative data were collected before (pre) and immediately after

(post) the intervention and six months later (follow-up). An additional, qualitative only, component was undertaken three months after the VHS and completion of the scheduled mental health nursing clinical placement experience. Findings from qualitative and quantitative data of students' empathy and self-efficacy to communicate were integrated with findings obtained using qualitative data of nursing students' experiences of communicating with consumers who heard voices during their scheduled mental health nursing clinical placements.

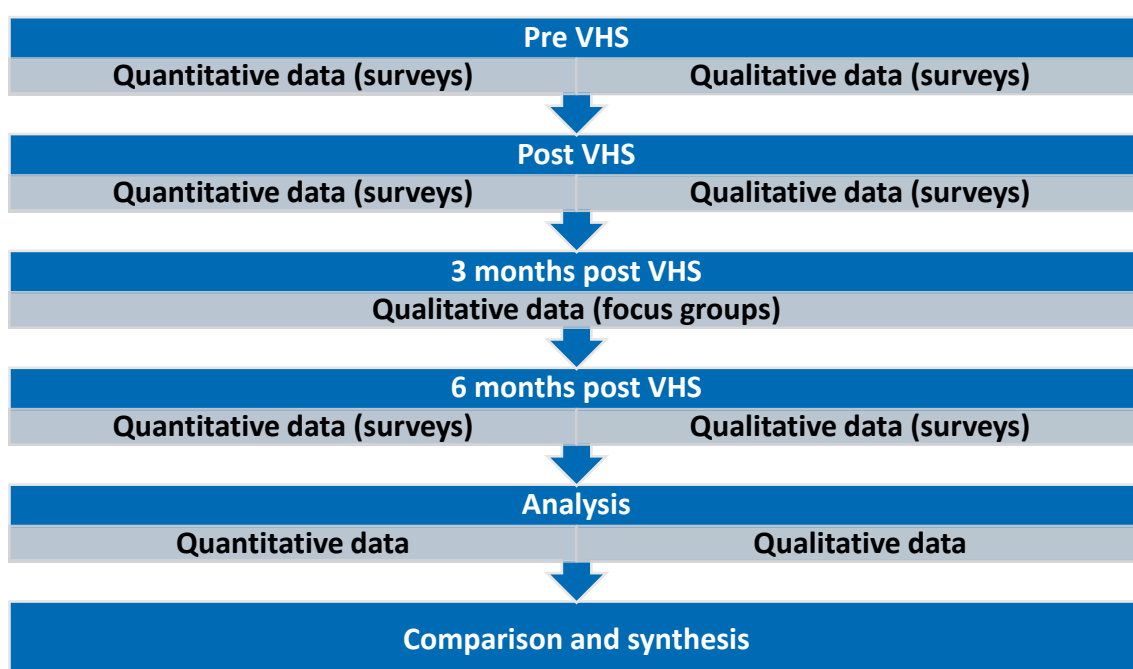


Figure 3-1: Model of the Research Study Design

As noted in the literature review, there is some research evidence that the VHS can positively influence empathy for the voice-hearing experience and simulation increases self-efficacy in therapeutic communication in general, although the explanation for such change has not been well established. The concurrent, pre-post-follow up design in this study permitted the measurement of change in important factors, such as empathy and self-efficacy, with the subsequent incorporation of nursing students' views about and experiences of communicating with people who hear voices, in order to determine some of the reasons behind any changes observed in their empathy and self-efficacy scores.

Philosophical Foundation

Underlying all research studies are beliefs and assumptions; a world view. The underlying world view that informs this mixed methods research is pragmatism (Johnson, Onwuegbuzie & Turner 2007). Pragmatism is concerned foremost with addressing the research question, is focussed on 'what works' in understanding research problems, and it uses multiple methods to collect, analyse and connect quantitative and qualitative data. A pragmatic world view values subjective and objective knowledge, and considers the practical consequences and application of the research to the real world (Creswell & Plano Clark 2011). It is not concerned with an absolute reality but rather multiple perspectives to knowledge and understanding (Creswell 2003). 'Pragmatism offers an epistemological justification...for mixing approaches and methods' (Johnson, Onwuegbuzie & Turner 2007, p.125).

A pragmatic world view was compatible with this study as the researcher drew upon both quantitative and qualitative assumptions, methods and approaches to address the research aims, establish well supported conclusions, and develop practice-orientated recommendations.

Setting

The study was undertaken in 2013 with undergraduate students enrolled in a Bachelor of Nursing three-year degree program at an Australian tertiary educational institution during their first semester of the third year of the degree. The VHS was conducted in small group tutorials that were part of a required subject in mental health nursing. Each tutorial was conducted by an academic who was an experienced mental health nurse. Two academic staff members facilitated each of the tutorials. All of the academic staff had previously undertaken the consumer-led VHS training and had experienced the simulated voices via the VHS. The consumer consultants who trained the academic staff in the use of the VHS were originally trained by Patricia Deegan, a voice-hearer and consumer who developed the *Hearing Voices that are Distressing* simulation (Deegan 2006).

Participants

There were 575 students enrolled in the subject in which the study was conducted. All students in the subject were invited to participate in the study and 370 students

consented to participate. A convenience sample of students, based on their interest and availability to participate, were invited to join a follow-up focus group.

Procedure

Recruitment and data collection was undertaken from February until December 2013. A briefing about the study for the teaching team in the required subject was held in early 2013. It included the aims and procedure of the study and it provided an opportunity to address their questions and concerns. The staff were given step-by-step procedures to follow in the week prior to, during, and immediately after, the VHS workshop.

Each member of the teaching team was given a set of [Appendix A: Participant Information Sheet](#), [Appendix B: Participant Consent Forms](#), and [Appendix C: Survey Instruments](#) for distribution within their tutorial classes, and separate envelopes for collection of the completed surveys and consent forms. Students were notified of the study via the University student email system, online subject announcements, and face-to-face by their tutorial teacher during the tutorial scheduled in the week prior to the VHS workshop. During these tutorials in the week before the scheduled VHS, and prior to the commencement of learning activities, the teaching team supported the principal researcher by informing the students about the study, distributing the participant information sheets, consent forms and the pre-surveys, collecting the completed forms and surveys, and placing them in sealed envelopes. During the tutorials in the week in which the VHS was conducted, the teaching team distributed and collected the post-surveys at the conclusion of the VHS workshop, and placed them in sealed envelopes. The envelopes were then personally returned to the principal researcher.

All participants in the study were given the opportunity to provide their contact details on the consent form of the study to indicate their willingness to participate in a focus group three months after the VHS. Students who had provided a university email address were contacted by the principal researcher regarding participation in a focus group following their mental health nursing clinical placement. Arrangements for the scheduling of the focus group was made and it was conducted in a private room on the University campus with a moderator and assistant present. The group was audio-recorded and notes were taken of the major issues raised.

Intervention

The Voice Hearing Simulation Workshop

A two-hour VHS workshop was conducted in the scheduled tutorials during one week of the semester. It was designed in collaboration with the researcher who is a mental health nurse academic, another mental health nurse academic, and two consumer consultants who had experiences of hearing voices.

As essential component of the VHS workshop, was the consumer presentation scheduled during the tutorials in the week before the simulation experience. The students viewed a 50-minute recorded consumer-led presentation, specifically developed by the two consumer consultants. It provided them with an insight into a range of voice-hearing experiences, socio-cultural understandings of voice-hearing, the effects of voice-hearing, and coping responses to voices. Whilst viewing the presentation, the students completed twenty questions related to the content and this was followed by a class discussion of the major concepts addressed in the presentation.

Each VHS workshop was facilitated by two mental health nursing academics who had previously participated in the consumer-led training in the use of the simulation, but who were not experts by experience. Training and preparation of the mental health nursing academics who facilitated the tutorials in which the VHS workshops were conducted, were led by the consumer consultants. This was a comprehensive, experiential, four-hour training session devised by the consultants. It included socio-cultural understandings of voice-hearing and knowledge of consumers' perspectives of living and coping with voice-hearing, prepared the academics to facilitate all aspects of the VHS workshop and to anticipate students' needs and concerns, and it provided them with a first-hand experience of the 45-minute voice simulation, the accompanying activities, and a guided reflection post simulation.

The VHS workshops were of a two-hour duration with a maximum of 30 students in each. At the commencement of the VHS workshop, the academic staff introduced its purpose and format and distributed the earpieces and the mp3 players with the recorded simulated voices. The students received instructions on how to start the player and adjust the volume so that the recorded voices were intrusive. The students

were encouraged to suspend their disbelief and imagine that they were in fact hearing voices. To facilitate this and to create as life-like an experience as was possible, they were asked not to discuss their experiences of the voices with others during the simulation and not to stop the recording unless they felt distressed and could not continue.

The simulated voices that the students heard were originally developed and recorded in the United States by consumers who were voice-hearers (Deegan 2006). The recordings included sounds, words and conversations with a variety of tones and volume and also periods of silence. The voices were predominantly distressing and included derogatory statements and expletives. Whilst listening to the 45-minute recordings of the voices, the students participated in a range of scheduled activities, in and outside of the classroom, so as to simulate the experiences of those who hear voices. In the classroom, the whole group undertook a timed reading and comprehension exercise. Following this, they were split into two groups of 15 students each and undertook the following two activities: (i) discussion in pairs of a book or film they had enjoyed, with each member of the pair then recounting the other's book/film to the whole group, and (ii) verbal interactions with others on the University campus, including making enquiries at the library and student centre, using a mobile phone to have a conversation with someone who did not know that they were participating in the simulation, and making purchases from a cafe. At the conclusion of the 45-minute simulation, the mp3 players were turned off and all the students returned to the classroom.

Finally, a guided reflection on the simulation experience was undertaken in the classroom with the entire tutorial group. It was conducted for 45 minutes and enabled each student the opportunity to discuss their experience of the VHS, including their feelings, behaviours, thoughts and physical sensations whilst undertaking the scheduled activities. Students were also asked to identify any coping strategies that they had used whilst listening to the voice simulation and to comment on their usefulness. They were then asked to consider their VHS experiences in relation to their future interactions with consumers who hear voices, during their scheduled mental health nursing clinical placements and in their practice as Registered Nurses.

An Experiential Learning Cycle

Many educational programs incorporate experiential learning whereby, students develop their understanding by actually experiencing what it might be like to be healthcare consumers, such as the elderly, those living with a disability, or those receiving health care in an emergency setting. The VHS in this study is informed by the seminal work of Kolb (1984) on experiential learning theory. In this work, 'learning is the process whereby knowledge is created through the transformation of experience', formed through experiences, rather than acquisition of an 'independent entity' (Kolb 1984, p. 38). Learning is understood as a continuous process whereby a learner's ideas are not fixed; rather, they are shaped and re-shaped, and all learning involves re-learning, as learners, regardless of the topic, present with initial ideas and experiences which are challenged and modified. Further each learning cycle, and the experiences gained, inform all subsequent cycles (Kolb 1984).

Within his theory, Kolb (1984) describes the four-stage, circular *Experiential Learning Cycle* (ELC) that encompasses four adaptive learning modes: concrete experience, reflective observation, abstract conceptualisation and active experimentation. In summary, concrete experience abilities allow the learner to immerse themselves in new experiences, reflective observation abilities allow the learner to reflect and view these experiences from a number of perspectives, abstract conceptualisation abilities enable the learner to develop concepts and incorporate their observed experiences into theories, and active experimentation enables the learner to use the developed theories for decision making and problem solving.

There were two dimensions inherent in the ELC (Kolb 1984): concrete experience/abstract conceptualisation, and active experimentation/reflective observation, that present the learner with 'abilities that are polar opposites' (p. 30), and each of which reflects 'dialectically opposed adaptive orientations' (p. 41). Kolb contends that learning occurs through the 'transactions among these four adaptive modes and the way in which the adaptive dialectics get resolved' (p. 41). In essence, conflicts experienced by the learner and their resolution are required for learning to occur. Moreover, experiential learning involves interactions between the learner and the environment, with experience referring to the subjective and personal (internal) as well as the objective and environmental (external) (Kolb 1984).

In a recent update of this work, Kolb (2015) refers to the ELC as a learning spiral, one of repeatedly experiencing, reflecting, thinking and acting: immediate or concrete experiences are the basis for observations and reflections. These reflections are assimilated and distilled into the abstract concepts from which new implications for action can be drawn. These implications can be actively tested and serve as guides in creating new experiences (Kolb 2015, p. 51). He emphasises that knowledge is the result of 'grasping and transforming experience': the taking in of, interpreting, and acting on, information. Concrete experience/abstract conceptualisation represent grasping experiences whereas active experimentation/reflective observation represent transforming experiences.

The VHS workshop includes three major components and relates to the four stages of Kolb's (1984) ELC: (i) concrete experience - a recorded presentation by the consumer consultants who hear voices and the Hearing Voices that are Distressing simulation with accompanying activities (ii) reflective observation and (iii) abstract conceptualisation – a post simulation process of guided reflection on the simulation and consideration of the implications for nursing practice, (iv) active experimentation - following the VHS, a two-week, mental health nursing clinical placement with consumers of a mental health service.

Data Collection

Survey Data

One week prior to participation in the VHS workshop, and during the scheduled tutorials, students who volunteered to participate in the study were given the participants' information sheet (*Appendix A*) and completed a consent form (*Appendix B*), including contact details if they wished to participate in the focus group after completion of the mental health nursing clinical placement. They were then given the paper-based pre-survey (*Appendix C*) comprising demographic details, a measure of empathy and self-efficacy, and one open-ended question related to any concerns they had about talking with people who hear voices. The following week, during the scheduled tutorials, the VHS was conducted and immediately after completion of the workshop, the recruited participants completed a paper-based post-survey of the same measures of empathy and self-efficacy, and responded to two open-ended questions. Participants later undertook a two-week mental health nursing clinical placement and,

six months after participating in the VHS, the participants completed either a paper-based or an electronic follow-up survey of the same measures of empathy and self-efficacy, and responded to two open-ended questions.

Focus Groups

Data were collected through focus group interviews with participants approximately three months after they had completed the VHS workshop and after undertaking a two-week clinical placement in a mental health service.

Instruments

Quantitative data was collected using a survey tool incorporating two existing instruments and demographic items. One is an empathy scale, the *Jefferson Scale of Empathy, Health Professions Student version (JSE-HPS)* (Jefferson Medical College (JMC) 2009) (*Appendix C: Survey Instruments*), a measure of empathy designed for use with health professions students. Permission was granted from the Centre for Research Medical Education and Health Care, Jefferson Medical College, Thomas Jefferson University to use the JSE-HPS scale (JMC 2009), the JSE-HPS Users' Guide (Hojat et al. 2009a) and the Scoring Algorithm for this unfunded, not-for-profit study ([Appendix D: Approval](#)). The other instrument is a communication self-efficacy scale, previously used with doctors and nurses (Ammentorp et al. 2007) (*Appendix C: Survey Instrument*). This scale was modified to address the self-efficacy of specific skills required when communicating with those who hear voices. Both of the scales are discussed below.

Jefferson Scale of Empathy

Participants' empathy was measured using the *Jefferson Scale of Empathy Health Professions Student version (JSE-HPS)*, a modified version of the *Jefferson Scale of Physician Empathy (JSPE)*. The JSPE provides a 'psychometrically sound instrument to measure empathy in health care professionals in specific patient care situations' (Hojat et al. 2001, p.352). It is a measure of clinical empathy, the cognitive and behavioural components, and empathy is defined by the authors as:

A cognitive attribute that involves an ability to understand the patient's inner experiences and perspective and a capability to communicate this understanding (Hojat et al. 2002, p. 1564).

Initially a 90-item scale developed from the empathy literature, the final version comprises 20 items to measure empathy with psychometric findings supporting construct validity, criterion-related validity and internal consistency reliability of the scale scores (p. 349). It is a brief self-report scale with each of the items answered on a 7-point Likert-type format.

The JSPE scale was previously used in studies to measure empathy in undergraduate nursing students because of its sound psychometric properties (Fields et al. 2004; McMillan & Shannon 2011 & Ouzouni & Nakakis 2012), and with medical students to measure empathy specifically related to a voice-hearing simulation (Bunn and Terpstra 2009). Further, Ward et al. (2009) examined the psychometric properties of a modified version of the JSPE scale to specifically measure undergraduate nursing students' empathy (the Jefferson Scale of Empathy for Nursing Students- JSE). Three constructs were identified from a factor analysis of the scale, and supported its construct validity. Internal consistency was also satisfactory with a Cronbach alpha of 0.77. The authors concluded that the modified empathy scale is a psychometrically sound instrument.

The authors of the JSPE adapted the scale for use with all health professions students other than medical students, developing the *Jefferson Scale of Empathy, Health Professions Student version* (JSE-HPS) (JMC 2009). It is a self-report measure with 20 items that are answered on a 7-point Likert-scale, where 1 = strongly disagree and 7 = strongly agree. It contains ten negatively worded items which are reversed scored. The total empathy score ranges from 20-140, with a higher score indicating more empathy. The measurement properties of the scale were examined in a study of empathy in 265 undergraduate nursing students (Fields et al. 2011). Descriptive statistics of the JSE-HPS were comparable to those reported in studies of medical students by Hojat et al. (2001). The median item-total score correlation was statistically significant at 0.42, the internal consistency of the scale had a Cronbach alpha of 0.78, and the test-retest reliability coefficient was 0.58 at 3-month interval and 0.69 at 6-month interval, with the authors concluding that the findings supported the measurement properties of the JSE-HPS (Fields et al. 2011). More recently, the JSE-HPS was used by Sideras et al. (2015) in their study of the impact of a VHS on undergraduate nursing students' empathy for people with a diagnosis of schizophrenia, demonstrating adequate

reliability at pre-post test, with a Cronbach alpha of 0.69-0.96. A Cronbach alpha is a commonly used measure of a scale's reliability, and the alpha reliability of the scale is within the acceptable range (Field 2013).

Self-Efficacy Scale

As Bandura (2006) highlights:

There is no all-purpose measure of perceived self-efficacy. The “one measure fits all” approach usually has limited explanatory and predictive value...efficacy must be tailored to the particular domain of functioning that is the object of interest (pp. 307-308).

A specific tool was not available for this study, and the self-efficacy scale developed by Ammentorp et al. (2007) was adapted to the present context. This instrument is a self-report measure originally developed from a 9-item scale used to measure the effects of communication training on doctors' and nurses' self-efficacy to communicate, based on Bandura's theory of self-efficacy (Parle, Maguire & Heaven 1997). It comprises 13 items to measure doctors' and nurses' self-efficacy to communicate with parents and children about a child's illness, and each item is answered on a 10-point numerical scale, where 1 = not at all confident and 10 = totally confident. The total self-efficacy score ranges from 13-130. This scale has also been used to measure health professionals' self-efficacy to communicate in orthopaedic and neonatal settings (Ammentorp & Kofoed 2010; Norgaard, Ammentorp, Kyvik & Kofoed 2012a; Norgaard, Ammentorp, & Kofoed 2013).

For the current study, the scale was modified to specifically measure nursing students' perceived self-efficacy to confidently talk with consumers who hear voices. The modified scale comprises 8 items on a 10-point numerical scale, where 1 = not at all confident and 10 = totally confident. The total self-efficacy score ranges from 8-80. The items address nursing students' self-efficacy to confidently communicate with consumers, including: talking about consumers' voice-hearing experiences, understanding consumers' experiences and feelings associated with voice-hearing, accepting those understandings, encouraging consumers to talk about their feelings related to voice-hearing, and supporting and empathising with consumers. Whilst Ammentorp et al. (2007) and Norgaard, Ammentorp, and Kofoed (2013) noted that the scale was previously validated by Parle, Maguire and Heaven (1997), specific

information on the psychometric properties of the instrument was not found in the literature, and the internal consistency was assessed *Post-hoc* in the current study.

Student Questionnaire

Demographic and other information was collected including: age, gender, English as first language, highest nursing qualification, highest non-nursing qualification, years of experience working as a nurse, years of experience working as a nurse in a mental health setting, experience working with people who hear voices, family member who has a mental illness, and family member who has a mental illness and hears voices (*Appendix C: Survey Instruments*). These factors were collected in the initial survey only, as the data were linked across periods and it reduced the number of survey questions in post and follow-up collections. They are important as they enabled comparisons to be made between groups of people and assisted in understanding differences in students' empathy for voice-hearers and their self-efficacy to communicate with them. For example, some studies of empathy have reported higher empathy scores in women as compared to men (Hojat et al. 2001; DiLalla, Hull & Dorsey 2004; Ward et al. 2009; Fields et al. 2011; Williams et al. 2015) whilst others report no differences (Bunn & Terpstra 2009), and higher scores in students with previous experiences of nursing (Ward et al. 2009). Further, whilst not identified in the literature, experience working with voice-hearers or of having a family member who hears voices could affect participants' empathy and self-efficacy scores. In addition to completing the above two scales and demographic questions in the pre-survey, qualitative data was also collected. Participants were asked one open-ended question related to any concerns they had about talking to mental health consumers who heard voices. After the VHS, the post-survey contained the above question and an additional open-ended question that asked participants to add any other comments they had regarding the voice-hearing simulation, empathy, or confidence to communicate with consumers who heard voices. The follow-up survey repeated these two open-ended questions.

Focus Group

Data collection in the three-month follow-up stage of the study was obtained through the use of focus group interviews, providing explanatory data. Focus groups are useful for an informal discussion of the views and experiences of a selected group of

participants, and they provide further understanding of an issue as the group members examine their perspectives (Silverman 2011; Goodman & Evans 2010). They provide a rich source of data through the inconsistencies and agreement that emerge in the group (Goodman & Evans 2010). The questions for discussion are drawn from the aims of the study and the related literature (Goodman & Evans 2010).

The purpose of the focus group in this study was twofold: to explore the students' experiences, whilst on a mental health nursing clinical placement, of communicating with consumers about their voice-hearing experiences and ways of coping, and to determine if the students were adequately prepared for practice with consumers who hear voices. A focus group of approximately 2-hours duration was conducted for 5 participants after completion of a two-week clinical placement in a mental health setting. The participants were a homogeneous group formed for the purpose of the study (Bazeley 2013). The group was conducted in a tutorial room at the University. Morning tea was provided for the participants prior to commencement of the group, and all members were introduced to each other and to the moderator and the assistant. Consent to participate in the group was obtained from each of the participants ([Appendix E: Participant Consent Form – Focus group](#)).

The group was led by a moderator whose role was to develop rapport with the group members, highlight the requirement of confidentiality within the group, focus the discussion, and facilitate the members' participation. The interviews were guided by a set interview schedule, and as it was a small group, there was time for every participant to respond to each of the questions. Additionally, the interviewer also explored other issues raised by the participants during the focus group ([Appendix F: Focus group Interview Schedule](#)).

An assistant observed the group and summarised the main issues addressed by the group members. The focus group discussion was audio-recorded and later transcribed. After completion of the focus group, the assistant reported the main issues raised by the group to confirm the accuracy of the information, and the group members were thanked for their participation in the study. One student who was unable to attend the scheduled group was interviewed by the researcher at a later date, about her experiences whilst on the mental health nursing clinical placement. This interview was also audio-recorded and transcribed prior to analysis.

Data Analysis

Survey Data

Quantitative Data

The Statistical Package for the Social Sciences (SPSS), version 22 (IBM 2013), was used to describe and analyse the survey data. Characteristics of the participants who responded to the pre-survey were also described. Listwise deletion of missing data was used where there was a missing value on any of the variables. Data were first assessed by examining central tendency, variation and dispersion to ascertain that they were suitable for ANOVA and other analyses. The assumptions considered were: linearity whereby the outcome variable is related to any predictors and can be depicted along a straight line; normal distribution, homogeneity of variance and independence (Field 2013). This involved the development of scatter plots to identify outliers, to assist in determination of normal distribution and evaluation of linearity. With large and unequal randomly distributed sample sizes between the three stages, the violation of normality was tolerated and univariate ANOVA by General Linear Model was used as meeting the normality criteria for data analysis.

Descriptive statistics were calculated for the dependent variables, empathy and self-efficacy to communicate, including mean, mode and standard deviation, as they are the building blocks on which inferential statistical methods are based (Brown 2010). Responses to the self-efficacy scale, (Ammentorp et al. 2007) and the JSE-HPS (JMC 2009) were examined for changes across data collection periods (pre, post and follow-up) using analysis of variance (ANOVA), a parametric test of difference, with statistical significance set at 0.05. ANOVA is a statistical test that is used to compare means on a continuous variable for two or more groups or conditions (Maciocha 2012; Field 2013; Pallant 2013) and where there are two variables: one continuous dependent variable and one or more categorical independent variables (Maciocha 2012). Normally distributed responses can be compared across categories of one or more factors and it identifies the contribution of individual factors in the total variability of the data (Wabed & Tang 2010). There were two of assumptions of ANOVA that were considered prior to analyzing the data. The homogeneity of variance assumption infers that if the sample sizes are equal, ANOVA is considered quite effective in relation to violations of the homogeneity of variance. Second, the normality of distribution assumption infers that

the samples are normally distributed dependent on the size of the sample. For samples larger than thirty, a normal distribution is assumed (Maciocha 2012).

ANOVA with repeated measures was used as the study had three collection periods and this allowed for comparisons of the mean scores on the dependent variables. ANOVA identified whether there were significant differences between the mean scores across the three time periods. Comparisons of different groups of participants including age, gender, highest nursing qualification, English as first language, having a family member with a mental illness and a family member who hears voices, were undertaken. The JSE (Hojat et al. 2001) has been used to compare groups such as: men and women (Hojat et al. 2001; Ward et al. 2009; Bunn & Terpstra 2009; Fields et al. 2011; Williams et al. 2015); those with experience in nursing practice (Ward et al. 2009); and those with a friend/family member who had a mental illness (Bunn & Terpstra 2009).

Whilst ANOVA highlights that differences of means exist between groups, it does not identify where that significant difference between the pairs of groups actually occurs (Pallant 2103). *Post hoc* tests compare the means of all combinations of pairs of groups and can indicate whether significant differences of means exist (Field 2013; Maciocha 2012). Consequently, following ANOVA, a number of analyses were undertaken to examine the differences between groups. *Post hoc* comparisons were made to ascertain which groups were different from each other, using Tukey's Honest Significant Difference Test (HSD). Tukey's HSD is considered a conservative test and is used to test differences between pairs of means while controlling for Type I errors (Lane 2010). It is considered an appropriate choice for analysis where there are a large number of means for comparison (Coolican 2014). ANOVA and Tukey's HSD were used only where data permitted it.

Qualitative Data

The participants' text responses to the open-ended questions in the survey instrument were entered into a spreadsheet across the collection times: pre, post and follow-up. An initial exploration of the data was undertaken by reading through the responses to each question in order to gain an overall understanding. Notes were kept from this first reading of the data, noting the major ideas that were identified in the participants' responses and the researcher's reactions to them.

An inductive, qualitative content analysis of the text responses was undertaken. This process involved a search for patterns in the data that are described in categories and/or themes (Graneheim, Lindgren & Lundman 2017). Coding is the central feature of content analysis and involves grouping of data into categories that are useful for the analysis (Creswell & Plano Clark 2011; Silverman 2011). The codes were developed from the text of the participants, known as in-vivo coding (Creswell & Plano Clark 2011) and also by the researcher. Codes were used to tag units of data that were linked to an idea, opinion, or feeling, and the codes were grouped into categories to enable identification of broad themes (Denscombe 2010). Some of the initial codes formulated were grouped together when they reflected a similar concept; a focused coding (Bazeley 2013). Repeated examination of the data, resulted in the development of a set of themes that accurately reflected the findings of the study. This was followed by a manifest content analysis of the data, which is a description of what the participants said; it describes what is obvious in the text responses (Bengtsson 2016). The exact words from the participants' responses were quoted in the presentation of this data, and no identifying information was recorded.

Focus Group Interview Data

The initial analysis of the interview data occurred at the end of the focus group when the assistant facilitator summarised the main issues raised for the group's confirmation and clarification. In this way, some preliminary themes were identified (Goodman & Evans 2010). Audio recordings of the focus group interviews were transcribed, and an initial reading of the transcripts was undertaken by the researcher and notes were made about the main ideas expressed. An inductive content analysis of the data was undertaken as described in Survey Data, Qualitative, above. The exact words of the participants were quoted in the presentation of the data. The data analysis provided insights into the actual clinical practice experiences of nursing students with consumers who hear voices.

The analyses of the quantitative and qualitative data were compared and synthesised. The qualitative findings were interrogated in relation to the quantitative results, and the qualitative analysis of the participants' experiences and perspectives provided a fuller understanding of the quantitative results. In this way, the quantitative and qualitative findings were integrated.

Reflexivity

Reflexivity refers to a process whereby the researcher is aware of, and accountable for, the assumptions made whilst undertaking research (Shaw 2016), and imperative is their acknowledgement that they, themselves, could influence the findings of their research (Sandelowski & Barrosa 2002). Reflexivity involves processes researchers undertake to reduce their influence including:

critical self-reflection on one's personal biases, preconceived notions, assumptions, theoretical predispositions, and ideological commitments (Powers & Knapp 2011, p. 155).

As the principal researcher, who had previously conducted research demonstrating that VHS was useful in increasing nursing students' awareness of voice-hearing and its impacts, I might have been inclined to confirm the findings of the previous study. Further, given my passion about the current research study and its utility for the education of nurses and the potential subsequent benefits for health care consumers, it was important to minimise my influence on the study through reflexivity, using a number of reflexive processes (Bazeley 2013; Creswell 2003; Cruz 2015; Rae & Green 2016). This included open discussions with my supervisors regarding my intentions for conducting the study, identification of and self-reflection on my own bias and its possible influence on the data collection, analysis and findings, conscious efforts to place bias aside, and consideration of the power difference between me and the student participants and its effects on the study. The use of journals throughout the entire study to document discussions with my supervisors and my self-reflections were useful in this process. To reduce the effects of researcher influence, a sound research design was utilised, and experienced academics supervised all aspects of this study.

Ethical Considerations

The overarching guiding principles for the conduct of this research study were respect for people, confidentiality, and integrity. The study was conducted in accordance with the *National Statement on Ethical Conduct in Human Research* (The National Health and Medical Research Council 2007). Ethics approval was granted by the UTS Human Research Ethics Committee (UTS HREC Approval Number: 2012 – 444A ([Appendix G: Ethics Approval](#))), including permission to include student participants in the study. Following Ethics approval, access to the nursing student participants was

granted by the relevant Faculty at UTS. All stages of the study were supervised by experienced academics. There were not any conflicts of interest.

Consent

Participation in this study was voluntary. Participants were informed their anonymity was assured and that they could withdraw from the study at any time, without providing a reason. A participant information sheet was given to all participants (*Appendix A: Participant Information Sheet*), and written consent was obtained from the participants prior to their participation in the study (*Appendix B: Participant Consent Form*).

As some of the participants in the study were students who were taught and assessed by the researcher, they were considered to be a vulnerable group, and so there were a number of concerns regarding consent, recruitment and participation. There was the potential that students could feel pressured to participate in the study or feel concerned that their results in the mental health nursing subject could be affected by their decision whether to participate. Participants were assured that their decision regarding participation in the study would not have any effect on their study of, or results in, the current or any future subject. No payment was offered to participants, there were not any incentives offered to influence their decision to participate, and there was no cost to the participants other than their time to complete the surveys and attend the focus group interviews.

Risks and their Management

There were a number of risks for participants associated with this study. However, the risks posed were alleviated by specific strategies to manage them. To address participants' concerns about their identity and decision to participate in the study, students were informed that qualitative data would be de-identified with the use of only the source of the data cited, that results of the survey would be presented as aggregated data with no individual results identifiable, and that only the candidate and her supervisors would have access to de-identified data. In order to meet these obligations and provide linkable data across the data collection periods, a cover sheet attached to the survey instrument included the student's identification number. On data entry, this identification number was converted to a random study code for analysis, with a master list of codes retained in a secure location accessible only to the

candidate and supervisors. Students were given the opportunity to view their empathy and self-efficacy scores if they chose to do so.

During the VHS workshop, all students were advised that if they had previously heard voices it was recommended by the consumer consultants that they not listen to the simulated voice recordings, but to protect their privacy, they were instructed to keep the earpiece in their ears throughout the simulation experience. Students were also advised that if they became distressed or felt unwell during the simulation component, they should stop the recording and discuss their experience with one of the two academic staff members present at each workshop. The academic staff members were all Registered Nurses, with considerable mental health nursing experience and sound interpersonal and communication skills, and they were prepared to alert the University's Counselling and Health Services, should it be necessary. No such instances occurred in any of the scheduled workshops.

Prior to focus group participation, all assessment items in the subject were completed and the grades submitted, and decisions to participate did not affect the students' assessment within, or completion of, the subject. However, participation in a focus group could have caused the participants embarrassment or concern, and they were reminded of the free counselling service that the University provides to its students. One of the academic supervisors of the study was present the entire time and acted as an assistant during the group. None of the participants demonstrated distress as a result of participating in the focus group. Each stage of the research process was supervised by experienced academics to ensure its ethical conduct.

Data Management

As noted above, procedures were used to ensure that the participants' identities were not known. All survey data was de-identified, a code replaced the student's identification number, only aggregated results were reported in the quantitative findings, and reporting of the qualitative findings obtained from the open-ended questions reported only the source (survey or focus group). The consent forms were the only records containing the participants' names but these were separate documents from the survey instruments used for data collection. Participants' names were not included in the transcribed audio recordings of the focus group, and they were not reported in the qualitative findings. The consent forms, list of codes, survey

instruments, and transcripts of the focus group interviews were stored in a locked filing cabinet, within a secure office at the University where the researcher works and undertook the study. All electronic files were stored securely on a password protected computer, and a backup USB containing the files was stored in the locked filing cabinet. The data will be kept in secure storage for seven years after publication of the results, then archived for further use, complying with national data management guidelines.

Summary

A concurrent mixed methods approach was used in this study. This design brought together all components: findings from qualitative and quantitative survey data were integrated with findings from focus group qualitative data. The participants were third year BN students at UTS, enrolled in a mandatory mental health nursing subject, and a convenience sample of those students participated in a focus group. The intervention was a VHS informed by Kolb's (1984) experiential learning cycle. Quantitative and qualitative survey data were collected via two instruments and other questions, pre and post the VHS and at six-month follow-up. The surveys measured nursing students' empathy and self-efficacy to communicate with consumers who hear voices. Three months after the VHS and on completion of a scheduled mental health nursing clinical placement, qualitative data were collected via focus group. The focus group explored the students' experiences of interacting with consumers who heard voices, during the clinical placements. Statistical analysis of the quantitative data, and a content analysis of the qualitative data, were undertaken and synthesised. Participation in the study was voluntary, the participants provided informed consent, data were de-identified, all risks associated with the study were identified and managed, and the study was supervised by experienced academics.

CHAPTER FOUR: RESULTS

Introduction

In the survey component of the study, quantitative and qualitative data were collected using two instruments, the Jefferson Scale of Empathy-Health Professions Students (JSE-HPS) (Jefferson Medical College 2009) and the Self-efficacy to Communicate scale (SEC) (adapted from Ammentorp et al. 2007), demographic and other items, and open-ended questions. Additional qualitative data were collected via focus group. In this chapter, a description of the characteristics of the participants in the study is provided followed by the findings from the analyses of these data.

Survey Participants

The participants were third year nursing students who undertook the VHS workshop in a mental health nursing subject. 370 students participated in the pre stage, 344 in the post stage, and 69 in the follow-up stage. A moderate drop-out rate was noted before and after the VHS, with a larger number choosing to not participate in the follow-up period. Both parametric and non-parametric tests indicated that there were no statistically significant differences in these characteristics across the data collection periods (*Appendix H: Participant Demographics*).

370 participants completed the pre-survey and identified their gender; and as expected from a sample of undergraduate nursing students, the majority were female. English was not the first language of the majority of participants, with over 60% of male participants speaking a first language other than English (Table 1).

Table 1: Participant Profile, by Gender

	Female	Male	Total
	Mean (SD)	Mean (SD)	Mean (SD)
Age (Years)	25.54 (6.54)	27.83 (7.16)	25.3 (7.69)
	n (%)	n (%)	n (%)
English as First Language	154 (49.7)	19 (35.2)	173 (46.7)
Total	316 (85.4)	54 (14.6)	370 (100)

Over half of all participants did not have any previous nursing qualification. For those who had a nursing qualification, the majority of females had attained an Assistant in Nursing certificate, and the majority of males had attained a Certificate in Enrolled Nursing. Overall, they had little experience working as a nurse (Table 2).

Table 2: Nursing Qualifications and Experience, by Gender

	Female	Male	Total
	n (%)	n (%)	n (%)
No nursing qualification	176 (56.2)	23 (42.6)	199 (54.1)
AIN Certificate	69 (22)	12 (22.2)	82 (22.30)
EN Certificate	45 (14.4)	15 (27.8)	60 (16.3)
RN Overseas trained	23 (7.3)	4 (7.40)	27 (7.3)
	Mean (SD)	Mean (SD)	Mean (SD)
Years working as a nurse	1.31 (2.33)	2.36 (4.04)	1.46 (2.67)

AIN=Assistant in Nursing; EN=Enrolled Nurse; RN=Registered Nurse

More than two thirds of participants had a tertiary educational qualification other than nursing, with the majority of females possessing a certificate and the majority of males a Bachelor degree (Table 3).

Table 3: Non-nursing Qualifications, by Gender

	Female	Male	Total
	n (%)	n (%)	n (%)
No qualification	100 (32.2)	14 (25.9)	114 (31.1)
Undergraduate			
Certificate	84 (27)	12 (22.2)	96 (26.2)
Diploma	64 (20.6)	9 (16.7)	73 (19.9)
Bachelor's Degree	46 (14.8)	14 (25.9)	61 (16.7)
Postgraduate			
Graduate Certificate	3 (1.0)	2 (3.7)	5 (1.4)
Graduate Diploma	7 (2.3)	1 (1.9)	8 (2.2)
Master's Degree	7 (2.3)	2 (3.7)	9 (2.5)

A third of participants had a family member who had experienced a mental illness, with females more likely to have a family member who had experienced a mental illness and who also heard voices (Table 4).

Table 4: Family Member Mental Illness and Voice-Hearing, by Gender

	Female	Male	Total
	n (%)	n (%)	n (%)
Family member has experienced a mental illness	110 (35.1)	15 (27.8)	125 (33.7)
Family member has a mental illness and hears voices	23 (7.3)	2 (3.7)	25 (6.75)

Self-Efficacy to Communicate (SEC)

Along with the questions regarding the participants' characteristics, the survey included the SEC, a measure of self-efficacy to communicate with consumers who hear voices. It was measured prior to the VHS (pre), immediately after (post), and six months later (follow-up). Score distributions and alphas for SEC by stage are presented in Table 5. There was a substantial decrease in the number of participants in the follow-up stage as compared to the pre and post-stage of the study and the alphas are within the acceptable range.

Table 5: Self-Efficacy to Communicate, by Stage

	Pre	Post	Follow-up
n	367	344	69
Range	8-79	15-80	33-80
Alpha	0.93	0.91	0.92

Note: Possible score range 8-80

Self-efficacy to communicate increased from baseline, and an analysis of variance (ANOVA) indicated that there were significant differences across the three stages of the study (Table 6). This is also represented in Figure 4.1.

Table 6: Self-Efficacy to Communicate, Mean Scores, by Stage

	Pre	Post	Follow-up	F (df)	p
SEC	46.7 (13.7)	61.8 (10.6)	63.1 (9.7)	156.29 (2,777)	<.05

Note: Mean (SD)

Post hoc tests revealed that SEC significantly increased between the pre and post-stage and the pre and follow-up stage, but it did not significantly increase between the post and follow-up stage (Table 7).

Table 7: Self-Efficacy to Communicate, by Stage, Post hoc Tests

Comparison	Mean Difference	Standard Error	95% CI		<i>p</i>
Pre to Post	15.10	.91	12.97	17.24	<.05
Post to Follow-up	1.31	1.60	-2.44	5.05	.691
Pre to Follow-up	16.41	1.59	12.68	20.14	<.05

Note: Comparisons using Tukey's HSD

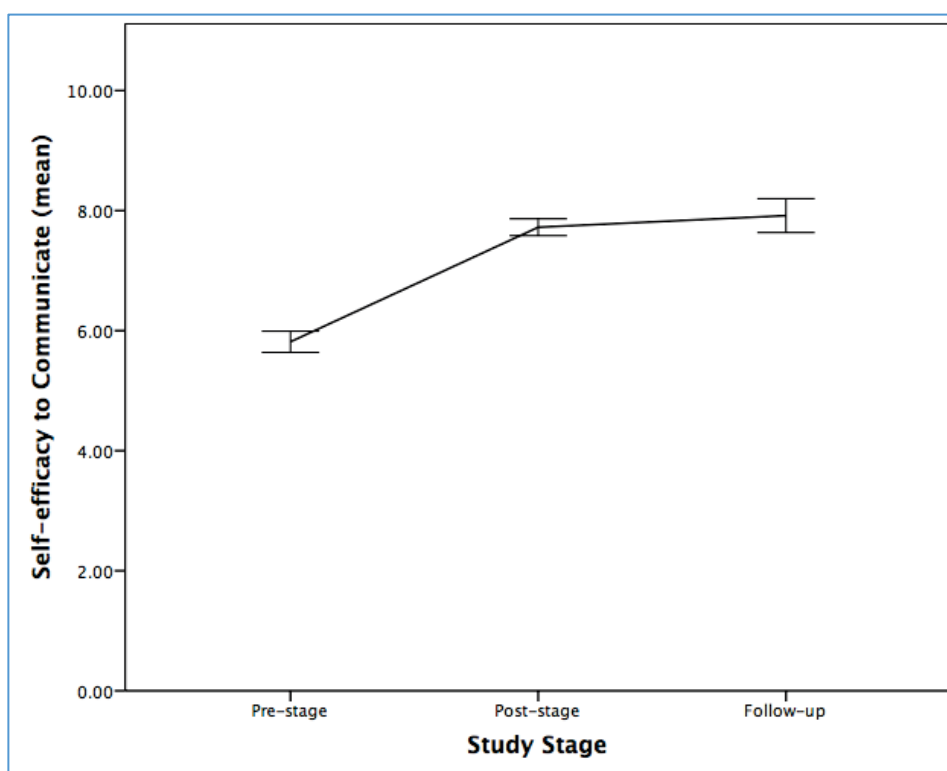


Figure 4-1: Self-efficacy to Communicate & 95% CI, by Study Stage

Self-Efficacy to Communicate and Gender

A number of independent variables and their effects on the dependent variable, SEC, were analysed. Regarding gender and its relationship to SEC, the ANOVA revealed that both females and males had significant increases in SEC (Table 8). However, in the post-stage, the gender of 80 participants was not reported, and in the follow-up

stage the total number of participants was small ($n = 69$) and the gender of 12 participants was not reported. Across all stages the number of male participants was less than females, which was expected within a sample of undergraduate nursing students; however, it was particularly small at follow-up ($n = 6$).

Table 8: Self-Efficacy to Communicate, Mean Scores by Gender, by Stage

	Pre	Post	Follow-up		
	Mean (SD)	Mean (SD)	Mean (SD)	<i>F(df)</i>	<i>p</i>
Female	45.9 (13.6)	62.7 (10.6)	63.8 (9.9)	140.204 (2,579)	<.05
Male	51.1 (13.9)	59.6 (11.1)	67 (13.1)	7.068 (2,98)	<.05

Post hoc tests were used to identify in which stages within the gender groups significant increases in SEC occurred. The mean difference was significant at the 0.05 level. Females and males had significant increases in SEC from pre to post and from pre to follow-up, but they did not have a significant increase from post to follow-up (Table 9).

Table 9: Self-Efficacy to Communicate by Gender, by Stage, Post hoc Tests

Gender	Mean Difference	Standard Error	95% CI	<i>p</i>
Females				
Pre to Post	16.78	1.07	14.26 19.31	<.05
Post to Follow-up	1.17	1.93	-3.36 5.7	.816
Pre to Follow-up	17.96	1.88	13.54 22.37	<.05
Males				
Pre to Post	8.52	2.61	2.31 14.72	<.05
Post to Follow-up	7.37	6.67	-8.5 23.24	.513
Pre to Follow-up	15.9	6.61	0.16 31.62	<.05

Note: Comparisons using Tukey's HSD

Self-Efficacy to Communicate and English Language

Regardless of whether English was the participants' first language, there were significant increases in SEC over time, with *p* significant at 0.05 level (Table 10). *Post hoc* tests revealed that across both groups of participants there were significant increases in SEC, from pre to post and pre to follow-up, but not from post to follow-up (Table 11).

Table 10: Self-Efficacy to Communicate Mean Scores, by English Language, by Stage

	Pre	Post	Follow-up		
English First Language	Mean (SD)	Mean (SD)	Mean (SD)	<i>F(df)</i>	<i>p</i>
Yes	46.5 (12.8)	61.3 (11.1)	64.3 (7.8)	65.563 (2,311)	<.05
No	46.9 (14.5)	62.9 (10.4)	63.9 (11.6)	72.029 (2,362)	<.05

Table 11: Self-Efficacy to Communicate by English Language, by Stage, Post hoc Tests

English First Language	Mean Difference	Standard Error	95% CI		<i>p</i>
Yes					
Pre to Post	14.87	1.42	11.51	18.22	<.05
Post to Follow-up	3.00	2.66	-3.28	9.27	.50
Pre to Follow-up	17.86	2.59	11.76	23.96	<.05
No					
Pre to Post	15.91	1.41	12.6	19.23	<.05
Post to Follow-up	1.00	2.60	-5.12	7.12	.922
Pre to Follow-up	16.91	2.55	10.91	22.91	<.05

Note: Comparisons using Tukey's HSD

Self-Efficacy to Communicate and Nursing Qualification

There was a significant increase in SEC from baseline regardless of whether participants had a nursing qualification (Table 12). *Post hoc* tests revealed that across both groups SEC significantly increased from pre to post and pre to follow-up, but not from post to follow-up (Table 13).

Table 12: Self-Efficacy to Communicate Mean Scores, by Nursing Qualification, by Stage

	Pre	Post	Follow-up		
Nursing Qualification	Mean (SD)	Mean (SD)	Mean (SD)	<i>F(df)</i>	<i>p</i>
Yes	47.4 (14.1)	62.9 (10.8)	64.8 (10.9)	57.631(2,300)	<.05
No	46.1 (13.4)	61.6 (10.6)	63.6 (9.5)	82.868 (2,378)	<.05

Table 13: Self-Efficacy to Communicate by Nursing Qualification, by Stage, Post hoc Tests

Nursing Qualification	Mean Difference	Standard Error	95% CI		<i>p</i>
Yes					
Pre to Post	15.52	1.55	11.86	19.18	<.05
Post to Follow-up	1.84	2.98	-5.17	8.85	.810
Pre to Follow-up	17.37	2.90	10.55	24.19	<.05
No					
Pre to Post	15.54	1.30	12.48	18.6	<.05
Post to Follow-up	1.98	2.38	-3.61	7.57	.683
Pre to Follow-up	17.52	2.33	12.04	23.00	<.05

Note: Comparisons using Tukey's HSD

Self-Efficacy to Communicate and Highest Educational Qualification other than Nursing

SEC significantly increased from baseline regardless of whether participants had an educational qualification (Table 14). The increase in SEC was significant from pre to post and pre to follow-up for those without a qualification and those with an undergraduate qualification. For those with a postgraduate qualification, SEC significantly increased from pre to post but not from pre to follow-up; however, the number of participants at follow-up who had a postgraduate qualification was small (*n*= 4) (Table 15).

Table 14: Self-Efficacy to Communicate Mean Scores, by Qualification Other than Nursing, by Stage

	Pre	Post	Follow-up		
Qualification other than nursing	Mean (SD)	Mean (SD)	Mean (SD)	<i>F</i> (<i>df</i>)	<i>p</i>
NQ	47.0 (13.4)	62.4 (9.2)	63.9 (10.9)	46.38 (2,208)	<.05
UG	46.2 (14.0)	61.8 (11.4)	63.9 (9.8)	83.38 (2,423)	<.05
PG	50.0 (12.7)	64.0 (10.5)	67.0 (11.3)	8.34 (2,41)	<.05

Note: NQ=No educational qualification; UG=Undergraduate; PG=Postgraduate

Table 15: Self-Efficacy to Communicate by Qualification Other than Nursing, by Stage, Post hoc Tests

Qualification	Mean Difference	Standard Error	95% CI		<i>p</i>
NQ					
Pre to Post	15.41	1.72	11.35	19.47	<.05
Post to Follow-up	1.44	3.15	-6.00	8.88	.890
Pre to Follow-up	16.85	3.06	9.62	24.09	<.05
UG					
Pre to Post	15.61	1.30	12.55	18.69	<.05
Post to Follow-up	2.09	2.43	-3.64	7.81	.667
Pre to Follow-up	17.70	2.37	12.12	23.29	<.05
PG					
Pre to Post	13.95	3.68	5.02	22.89	<.05
Post to Follow-up	3.00	7.29	-14.72	20.72	.911
Pre to Follow-up	16.95	7.22	0.60	34.51	.060

Note: Comparisons using Tukey's HSD. NQ=No educational qualification; UG=Undergraduate; PG=Postgraduate

Self-Efficacy to Communicate and Family Member's Experience of Mental Illness and of Hearing Voices

SEC significantly increased across stages for the entire sample, regardless of whether participants had a family member who had ever experienced a mental illness (Table 16), and it was most significant from pre to post and pre to follow-up (Table 17).

Table 16: Self-Efficacy to Communicate Mean Scores, by Family Member Mental Illness, by Stage

Family Member has Mental Illness	Pre	Post	Follow-up	<i>F(df)</i>	<i>p</i>
	Mean (SD)	Mean (SD)	Mean (SD)		
Yes	47.3 (13.6)	62.8 (11.1)	65.6 (6.7)	51.65 (2,233)	<.05
No	46.4 (13.8)	61.8 (10.5)	63.0 (11.9)	87.64 (2,445)	<.05

Table 17: Self-Efficacy to Communicate by Family Member Mental Illness, by Stage, Post hoc Tests

Family Member has Mental Illness	Mean Difference	Standard Error	95% CI		p
Yes					
Pre to Post	15.54	1.69	11.55	19.53	<.05
Post to Follow-up	2.80	2.90	-4.05	9.66	.559
Pre to Follow-up	18.35	2.82	11.69	25.00	<.05
No					
Pre to Post	15.47	1.24	12.56	18.38	<.05
Post to Follow-up	1.13	2.43	-4.58	6.85	.887
Pre to Follow-up	16.61	2.38	11.01	22.20	<.05

Note: Comparisons using Tukey's HSD

SEC increased over time, regardless of whether participants had a family member who had experienced mental illness and also heard voices. However, whilst it looks like a difference has occurred, at follow-up, the sample size of each of the groups was very small, n= 5 and 17, and did not permit testing (Tables 18 and 19).

Table 18: Self-Efficacy to Communicate Mean Scores, by Family Member Hears Voices, by Stage

	Pre	Post	Follow-up
Family Member Mental Illness and Hears Voices	Mean (SD)	Mean (SD)	Mean (SD)
Yes	52.5 (10.0)	64.4 (11.6)	67.8 (8.3)
No	46.0 (14.1)	62.4 (11.0)	65.0 (6.3)

Note: ANOVA not undertaken due to sample size

Table 19: Self-Efficacy to Communicate, by Family Member Hears Voices, by Stage, Post hoc Tests

Family Member Mental Illness and Hears Voices	Mean Difference	Standard Error	95% CI	
Yes				
Pre to Post	11.90	3.17	4.23	19.56
Post to Follow-up	3.45	5.28	-9.33	16.23
Pre to Follow-up	15.35	5.17	2.83	27.87
No				
Pre to Post	16.39	1.95	11.78	21.01
Post to Follow-up	2.61	3.38	-5.38	10.6
Pre to Follow-up	19.00	3.27	11.26	26.74

Note: Comparisons using Tukey's HSD not undertaken due to sample size

Empathy

The survey also included a measure of empathy, the JSE-HPS at each stage. Score distributions and descriptive statistics for the JSE-HPS are presented in Table 20. There was a decrease in the number of participants within the follow-up stage as compared to the pre and post-stages of the study, and the alphas are within the acceptable range.

Table 20: Empathy, by Stage

	Pre	Post	Follow-up
n	367	344	69
Range	39-133	73-134	45-139
Alpha	0.76	0.76	0.88

Note: Possible score range 20-140

Empathy increased across time; however, the ANOVA revealed no significant differences in empathy between the study stages (Table 21).

Table 21: Empathy Mean Scores, by Stage

	Pre	Post	Follow-up	F (df)	p
JSE	109.5 (11.8)	110.6 (12.4)	113.2 (16.3)	2.84 (2,778)	.059

Note: Mean (SD)

Post hoc tests revealed no significant differences in empathy between study stages. There were no significant differences between the pre and post and the post and follow-up stage; however, there was a trend from the pre to follow-up stage (Table 22).

Table 22: Empathy, Post hoc Tests

Empathy	Mean Difference	Standard Error	95% CI		<i>p</i>
Pre to Post	1.13	0.94	-1.07	3.34	.449
Post to Follow-up	2.65	1.65	-1.22	6.53	.242
Pre to Follow-up	3.79	1.64	-0.06	7.64	.055

Note: Comparisons using Tukey HSD

Empathy and Gender

The majority of participants were female and the ANOVA demonstrated that there were significant increases in empathy scores for female participants but not for male participants (Table 23). However, in the post-stage, the gender of 80 participants was unknown, the total number of participants at follow-up was small ($n = 69$), and the gender of 12 at follow-up was not reported. As expected with a sample of undergraduate nursing students, the number of male participants was small across all stages of the study, and this was particularly so at follow-up ($n=6$).

Table 23: Empathy Mean Scores by Gender, by Stage

	Pre	Post	Follow-up		
	Mean (SD)	Mean (SD)	Mean (SD)	<i>F(df)</i>	<i>p</i>
Female	109.9 (11.6)	111.3 (12.9)	114.9 (17.3)	3.621 (2,580)	<.05
Male	107.6 (12.3)	107.1 (12.10)	110.3 (14.9)	.121 (2,98)	.886

Post hoc tests across groups and between stages revealed a significant increase in empathy for females between the pre and follow-up stages only, with the mean difference significant at the 0.05 level. There were no significant differences in empathy for males at any of the study stages (Table 24).

Table 24: Empathy by Gender, by Stage, Post hoc Tests

Gender	Mean Difference	Standard Error	95% CI		p
Females					
Pre to Post	1.44	1.11	-1.18	4.05	.401
Post to Follow-up	3.62	2	-1.08	8.32	.167
Pre to Follow-up	5.06	1.95	0.49	9.63	<.05
Males					
Pre to Post	-0.46	2.51	-6.45	5.52	.982
Post to Follow-up	3.12	6.43	-12.18	18.43	.878
Pre to Follow-up	2.66	6.38	-12.51	17.83	.909

Note: Comparisons using Tukey's HSD

Empathy and English Language

Participants whose first language was not English had significant increases in empathy as compared to those whose first language was English (Table 25). Where English was not the first language, there were significant increases in empathy from the pre to follow-up stage. For those participants whose first language was English, their empathy was not significantly different at any stage of the study (Table 26).

Table 25: Empathy Mean Scores, by English Language, by Stage

	Pre	Post	Follow-up		
English First Language	Mean (SD)	Mean (SD)	Mean (SD)	F(df)	p
Yes	112.0 (10.5)	112.1 (12.8)	116.1 (19.3)	1.233 (2,311)	.293
No	107.1 (12.5)	109.5 (12.6)	113.3 (15.1)	3.573 (2,363)	<.05

Table 26: Empathy by English Language, by Stage, Post hoc Tests

English First Language	Mean Difference	Standard Error	95% CI		<i>p</i>
Yes					
Pre to Post	.08	1.46	-3.36	3.53	.998
Post to Follow-up	4.02	2.74	-2.43	10.47	.307
Pre to Follow-up	4.11	2.66	-2.16	10.38	.272
No					
Pre to Post	2.38	1.4	-0.92	5.68	.208
Post to Follow-up	3.74	2.59	-2.36	9.84	.321
Pre to Follow-up	6.12	2.54	.14	12.1	<.05

Note: Comparisons using Tukey's HSD

Empathy and Nursing Qualification

Participants who did not have a nursing qualification had significant increases in empathy (Table 27). *Post hoc* tests indicated that this group had significant increases from post to follow-up and pre to follow-up. Those who had a nursing qualification did not have significantly increased empathy at any stage of the study (Table 28).

Table 27: Empathy Mean Scores, by Nursing Qualification, by Stage

Nursing Qualification	Pre	Post	Follow-up	<i>F(df)</i>	<i>p</i>
	Mean (SD)	Mean (SD)	Mean (SD)		
Yes	109.1 (10.8)	110.2 (13.2)	108.3 (20.2)	.319 (2,301)	.727
No	109.7 (12.6)	110.9 (12.5)	119.0 (13.0)	7.182 (2,378)	<.05

Table 28: Empathy, by Nursing Qualification, by Stage, Post hoc Tests

Nursing Qualification	Mean Difference	Standard Error	95% CI		p
Yes					
Pre to Post	1.03	1.53	-2.57	4.63	.780
Post to Follow-up	1.82	2.93	-8.72	5.09	.810
Pre to Follow-up	-.79	2.85	-7.50	5.93	.959
No					
Pre to Post	1.21	1.36	-1.99	4.42	.647
Post to Follow-up	8.03	2.49	2.17	13.88	<.05
Pre to Follow-up	9.24	2.44	3.50	14.97	<.05

Note: Comparisons using Tukey's HSD

Empathy and Highest Educational Qualification other than Nursing

Participants without any prior educational qualification had significantly higher empathy, whilst those with an educational qualification other than nursing did not have significant increases in empathy (Table 29). *Post hoc* tests demonstrated that those without any educational qualification had significant increases in empathy from post to follow-up and pre to follow-up. Participants who had an educational qualification other than nursing did not have significantly increased mean scores at any stage of the study; however, the number of participants with a post graduate qualification was small at follow-up (n= 3) (Table 30).

Table 29: Empathy Mean Scores, by Qualification other than Nursing, by Stage

	Pre	Post	Follow-up		
Qualification other than nursing	Mean (SD)	Mean (SD)	Mean (SD)	F(df)	p
NQ	109.6 (13.7)	110.9 (14.3)	121.5 (12.3)	5.493 (2,208)	<.05
UG	109.4 (11.0)	110.4 (12.3)	112.4 (17.8)	1.022 (2,424)	.361
PG	108.6 (8.7)	110.9 (11.5)	99.0 (20.7)	1.579 (2,41)	.281

Note: NQ=No educational qualification; UG=Undergraduate; PG=Postgraduate

Table 30: Empathy, by Qualification Other than Nursing, by Stage, Post hoc Tests

Qualification	Mean Difference	Standard Error	95% CI		<i>p</i>
NQ					
Pre to Post	1.30	2.01	-3.46	6.05	.796
Post to Follow-up	10.6	3.70	1.89	19.31	<.05
Pre to Follow-up	11.9	3.60	3.42	20.38	<.05
UG					
Pre to Post	1.02	1.24	-1.90	3.94	.692
Post to Follow-up	1.99	2.32	-3.46	7.44	.667
Pre to Follow-up	3.00	2.26	-2.31	8.32	.380
PG					
Pre to Post	2.25	3.39	-5.98	10.49	.785
Post to Follow-up	-11.87	6.71	-28.21	4.47	.194
Pre to Follow-up	-9.61	6.66	-25.8	6.57	.328

Note: Comparisons using Tukey's HSD. NQ=No educational qualification; UG=Undergraduate; PG=Postgraduate

Empathy, Family Member Experience of Mental Illness, and Voice-hearing

For participants who did not have a family member who had experienced a mental illness their empathy increased significantly, whilst those participants who had a family member who had experienced a mental illness, did not have significantly increased empathy (Table 31). The increases in empathy were significant from post to follow-up and pre to follow-up for participants who did not have a family member who had experienced mental illness (Table 32).

Table 31: Empathy Mean Scores, by Family Member Mental Illness, by Stage

	Pre	Post	Follow-up		
Family Member has Mental Illness	Mean (SD)	Mean (SD)	Mean (SD)	<i>F(df)</i>	<i>p</i>
Yes	111.9 (9.6)	114.3 (10.6)	113.5 (19.2)	1.253 (2,233)	.288
No	108.1 (12.6)	108.7 (13.5)	115.3(15.7)	4.038 (2,446)	<.05

Table 32: Empathy, by Family Member Mental Illness, by Stage, Post hoc Tests

Family Member has Mental Illness	Mean Difference	Standard Error	95% CI		p
Yes					
Pre to Post	2.42	1.55	-1.23	6.06	.263
Post to Follow-up	-.83	2.65	-7.09	5.43	.948
Pre to Follow-up	1.59	2.58	-4.49	7.67	.811
No					
Pre to Post	.52	1.31	-2.55	3.59	.916
Post to Follow-up	6.60	2.57	-.56	12.64	<.05
Pre to Follow-up	7.12	2.51	-1.21	13.03	<.05

Note: Comparisons using Tukey's HSD

Having a family member who had a mental illness and heard voices did not increase the empathy of participants, whilst those participants who had a family member with a mental illness but did not hear voices did have increases in empathy. However, whilst it looks like a difference has occurred, at follow-up, the sample size of each of the groups was very small, n= 5 and 17, and did not permit additional testing (Tables 33 and 34).

Table 33: Empathy Mean Scores, by Family Member Mental Illness, Hears Voices, by Stage

	Pre	Post	Follow-up
Family Member has Mental Illness and Hears Voices	Mean (SD)	Mean (SD)	Mean (SD)
Yes	110.8 (12.0)	112.6 (12.7)	95.1 (33.5)
No	112.2 (8.9)	114.8 (9.9)	118.9 (8.0)

Note: ANOVA not undertaken due to sample size

Table 34: Empathy, by Family Member Mental Illness, Hears Voices, by Stage, Post hoc Tests

Family Member has Mental Illness and Hears Voices	Mean Difference	Standard Error	95% CI	
Yes				
Pre to Post	-1.83	4.60	-12.96	9.30
Post to Follow-up	17.52	7.67	-1.04	36.07
Pre to Follow-up	15.69	7.51	-2.49	33.87
No				
Pre to Post	-2.63	1.44	-6.05	0.78
Post to Follow-up	-4.09	2.50	-9.99	1.81
Pre to Follow-up	-6.72	2.42	-12.44	-0.10

Note: Comparisons using Tukey's HSD not undertaken due to sample size

Analysis of the quantitative data demonstrated that self-efficacy to communicate with consumers who hear voices significantly increased in participants from the pre to post and pre to follow-up stages of the study, whilst empathy significantly increased from the pre to follow-up stage in those whom: were female, English was not their first language, had no previous nursing qualification, had no other educational qualification, and did not have a family member with a mental illness. Self-efficacy and empathy were further explored in the analysis of the qualitative data, which is presented below.

Talking to Consumers Who Hear Voices

The survey included open-ended questions: one in the pre-stage, and two in the post and follow-up stages. (*Appendix C: Survey Instrument*). The first question in each of the stages of study asked the participants to consider whether they had any concerns about talking to consumers who hear voices. In the pre-stage, approximately three quarters of participants (n=275) responded to this question, two thirds of participants in the post-stage (n=228), and over half of the participants responded in the follow-up stage (n=44). The second question, in the post and follow-up stages only, asked participants to add any comments about the VHS, empathy or confidence to communicate with consumers who hear voices. Two thirds of the participants responded to this question in the post-stage and more than a third of participants responded in the follow-up stage.

Three months after the VHS, audio-recorded focus group interviews were conducted with five participants, facilitated by the principal researcher, and one participant attended an individual interview with the same researcher. The interviews comprised nine questions related to the VHS and the participants' experiences, whilst on their mental health nursing clinical placement, of talking with consumers who heard voices (*Appendix F: Focus Group Schedule*). An inductive, content analysis of the participants' responses to the open-ended questions and the focus group interviews was conducted. The following themes were identified: developing awareness and understanding of voice-hearing, developing empathy for consumers who hear voices, developing confidence to talk with consumers about voice-hearing, responding therapeutically, fearing aggression related to voice-hearing, and preparation for nursing practice.

Developing Awareness and Understanding of Voice-hearing: '*I did not think it would feel so real*'

After completion of the VHS, and across all components of the study, participants identified that the simulation developed their awareness and understanding of voice-hearing and its distressing effects on those who hear voices. They indicated that the VHS had provided them with an insight into voice-hearing and its effects on everyday activities and this was related to its experiential nature, the reactions it caused, the feelings it aroused, and the level of realism it achieved.

The Nature of Voice-hearing

A number of participants identified that the VHS had highlighted the intrusive, distracting and distressing nature of voices and the difficulties consumers could face living with them. For many it was very difficult to focus on everyday activities or conversations with others:

I was all over the place; even trying to walk down the corridor was difficult (Focus group).

They were very consuming and distressing and that resonated with me. Not just the voices, but the sounds and it made me second guess...I'm sure I heard my name called several times when I went to get my coffee, but I hadn't (Focus group).

It is now easier to understand how debilitating and distressing voices are (Post-intervention survey).

You can't switch the voices off. It was difficult to do anything when they're there. Very distracting and consuming, difficult to do normal everyday activities ...When it was an instruction or a negative thing, then it was completely distracting (Focus group).

I listened to them and tried to go about things but they were so invasive...I have greater awareness of the challenges they face (Focus group).

It was really helpful to gain some understanding of what people who hear voices go through...I am amazed by their strength to go on living; if that was happening to me, I could not stand it (Post-intervention survey).

This really has helped me to understand what someone who hears voices may be experiencing, how exhausting it can become, how much mental power is used to ignore voices (Post-intervention survey).

Further, the participants' realisation that the distraction they experienced during the simulation was an indication of the distraction and distress that some consumers experience when hearing voices, are illustrated in the following comments:

They're not crazy people; they're struggling with voices, distracted from thought processes (Focus group).

One woman had incredibly intrusive voices, a range of voices. She was tortured by voices...I was amazed that she would get up every morning and go for a walk, but by the afternoon she did retreat to her room with her voices. I did feel quite sorry for her...I had a lot of respect for her (Focus group).

Feeling the Effects of Voices

Participants revealed how the simulation had enabled them to actually experience a range of feelings associated with hearing voices, including anxiety, fear and distress:

The simulation has given me a chance to experience what consumers feel about voice-hearing. It allowed me to feel frightened and scared and anxious about voices and helped me to understand how distressing it was to hear voices (Post-intervention survey).

This simulation is extremely useful in helping me understand the feelings of consumers who hear voices...This sad feeling pushed me to think further about my profession. I want to learn to work with mental health clients with empathy and confidence but without emotional distress (Follow-up survey).

I felt very distracted when I heard the voices on the mp3. I can understand and feel their condition...how they feel when they hear voices (Post-intervention survey).

I felt very frustrated and I will investigate this feeling with consumers on my clinical placement (Post-intervention survey).

I could feel the difficulties of consumers who hear voices; I have experienced it (Follow-up survey)

The sim [simulation] made me realise that I don't have all of you, like distant....When you feel how it actually feels, you are not really with it, not grounded, not present (Focus group).

I am more aware...A man came into the depot clinic and he heard voices...I felt that I understood what he was hearing. He was distant and I sensed it. He was asked if the voices were telling him to do things and he said, "yes, all the time" (Focus group).

Feeling Abnormal

A number of participants were concerned about others' reactions to them during the VHS, those who were not participating in the simulation. They worried about what others might think of their behaviour and whether they would be considered as 'normal':

I'm not sure if I'm acting as normal but that's okay when talking to classmates. When chatting with someone else who is not hearing voices, not using an mp3, I'm not sure what they're thinking about us, behind us (Focus group).

Felt confronting, paranoid, they can tell I'm distracted, nervous; what are they thinking of me? (Focus group).

If I laughed others could see there was something going on that wasn't that normal; like buying a cup of coffee and laughing is not that normal (Focus group).

Gaining Control

For other participants, they consciously resisted the effects of the voices, with one participant expanding that he adopted this approach during the simulation in the event that he might actually hear voices in the future:

I may hear some voices in the future, so I tried to not focus on them, to forget them (Focus group).

For myself, I was trying to listen to the voices for ten to fifteen minutes. Then I tried to do my own stuff (Focus group).

I didn't try to focus on them, and let them be background sounds (Focus group).

Reducing Fears

The VHS also contributed to participants feeling less fearful about people who hear voices and of talking with them about those experiences:

This simulation has helped lessen some of my fears and anxieties that I had in regards to people who hear voices and the illness, schizophrenia (Post-intervention survey).

It's easier now to put myself in the consumer's shoes. I'm not so scared to approach them, now (Post-intervention survey).

My concerns have decreased since this experience. I feel I now have a basis for understanding and empathy (Follow-up survey).

There's a fellow who stands outside the supermarket. I'm not scared anymore, it's completely the sim [simulation] that's changed it. So now I can understand what was going on for him and it's not so scary...I think the sim helped me see that it's a person who hears voices, not a crazy person (Focus group).

Learning by Experience

Further, participants reported that the simulation was an inspiring experience that provided them with a depth of understanding of voice-hearing beyond that previously gained from traditional teaching and learning methods. The experiential aspect of the VHS, learning by and from the experience, and the realism of the simulation were most remarkable; it was 'as if' they had actually experienced voice-hearing. For many, this level of realism was related to the emotional responses that the VHS elicited, including actually feeling the distress of hearing voices, and this added considerably to deepening their understanding:

It is a really good tool for students because it is another level of learning and no one would ever experience it without this opportunity. It has given me a greater depth of understanding, a personal understanding, not one from books (Follow-up survey).

The sim [simulation] was the best way to appreciate how difficult hearing voices is... It was really good listening to the consumer's presentation about voice-hearing (prior to the simulation), but it was still theoretical until we did the sim, because you can't really know what it is like until you do it (Focus group).

The simulation was inspiring because we were able to put ourselves in a consumer's shoes for a short period of time. Thinking about how consumers are not able to turn off the voices has a big impact (Follow-up survey).

It has increased my depth of understanding as to what it must be like to live with voices. Before doing the simulation, I had an idea of what I thought it might be like to experience hearing voices...but I can now completely picture it (Post-intervention survey).

I feel this simulation is great as it gives us a real experience about hearing voices (Post-intervention survey).

This simulation enabled me to understand what it feels like when you hear voices...as I could experience it myself (Post-intervention survey).

I think it's great because it's probably the closest we could come to understanding what life would be like for these individuals (Follow-up survey).

I did not think it would feel so real (Post-intervention survey).

I will never say to a consumer that they are not really hearing voices (Post-intervention survey).

Developing Empathy for Consumers Who Hear Voices: *'I now know how they feel'*

An increased awareness and understanding of voice-hearing, experiencing a range of feelings and effects associated with the simulation, and for some it was the reality of actually experiencing voices that contributed to their development of empathy:

The simulation provided a very good insight of what consumers experience, and through being put in their shoes, I gained empathy (Post-intervention survey).

I feel more empathic towards patients because I now know how they feel (Post-intervention survey).

I feel that I can empathise much more after the simulation than before. I did not think that it would be so hard to concentrate or participate in activities while hearing voices (Post-intervention survey).

More empathic and understanding. You know, and you can then ask appropriate questions. I just thought how lucky we are to have had the sim [simulation] (Focus group).

The simulation should be incorporated throughout this nursing degree. It should begin from 1st year if possible because it really helps with empathy (Follow-up survey).

Some participants also acknowledged that listening to the recorded voices had enabled them to go beyond the simulation experience and to imagine living with voices, which further contributed to their development of empathy, and this also relates to the level of realism that the simulation achieved:

I found the hearing voices simulation a highly valuable experience that contributed towards me developing empathy with people who hear voices...Imagining what it would be like to have to deal with this 24/7 definitely gave me a better understanding and a base from which to empathise with people who hear voice (Post-intervention survey).

I feel very empathic towards the people who hear voices. Now I can imagine how they are struggling to live a life every day, hearing voices (Post-intervention survey).

Further, some participants identified that empathy was the crucial component of interactions with consumers who heard voices:

Talking to patients with empathy is the most important component because that shows you accept and try to help the patients who hear voices (Follow-up survey).

I think it is a kind of torture to hear voices. It creates emotional and physical discomfort for people and I truly understand how these people feel now. As a nurse, I think we should show our understanding and empathy towards patients (Post-intervention survey).

Developing Confidence to Talk with Consumers about Voice-hearing: ‘You’ve got to take the first step and then it gets easier’

Prior to the simulation, some participants expressed concerns that they were not confident to talk with consumers who hear voices:

Even though I have had a first-hand experience with a family member, I do not feel I would be able to feel confident nursing a consumer who hears voices (Pre-intervention survey).

I will betray my natural feelings of apprehension when meeting them (Pre-intervention survey).

I am unsure as to how to bring it up in a conversation (Pre-intervention survey).

My main concerns are what are the appropriate or right questions to ask. Is my message getting through? (Pre-intervention survey).

Post simulation, a small number of participants remained unsure and not yet confident to engage in conversations about consumers' voice-hearing experiences:

I'm still not confident to talk to voice-hearers because I don't know what their voices are saying (Post-intervention survey).

This was a very hard simulation to do...a real eye opener about empathy and confidence. We still lack knowledge, even though we're graduating soon (Post-intervention survey).

I have empathy for their suffering, but I am not confident, yet. I need to build skills to engage consumers in conversations about their voice-hearing (Post-intervention survey).

However, the majority reported that the VHS had provided them with a heightened understanding of consumers' voice hearing experiences and the effects of those experiences. This in turn contributed to alleviating their concerns and increased their confidence to talk to consumers who hear voices:

I feel it is now easier to show empathy towards consumers who hear voices, and it is easier to be more understanding...I'll be able to talk to consumers (Post-intervention survey).

I am concerned about their level of distress and how the voice-hearing is affecting them (but) I feel confident in communicating with them (Post-intervention survey).

After completing this simulation, my concerns have eased regarding talking to individuals who hear voices (Post-intervention survey).

The simulation provided me with a very good understanding and insight of consumers' experiences and through being put in their shoes, I gained empathy and confidence that I can ...communicate with consumers without being intimidated (Post-intervention survey).

I felt more confident having learnt it...I would be prepared and engaged to work with voice-hearers and not be scared. I felt that there was enough education to be involved (Focus group).

It's also about confidence...You've got to take the first step and then it gets easier...I would be more confident asking about it, now (Focus group).

I feel confident to communicate with consumers who hear voices because I understand about what hearing voices are and how they feel when they are hearing voices...Now I can interact and understand their situation and the consequences of hearing voices (Post-intervention survey).

The simulation has given me a greater insight as to what these individuals' experience on a daily basis and I feel I will be able to better communicate with this population (Post-intervention survey).

I feel confident to talk with people who hear voices and I will make every effort to display empathy and understanding to the individual (Post-intervention survey).

Those participants who had undertaken mental health clinical placements and attended the focus group interviews captured how the VHS prepared them for their conversations about voice-hearing with consumers:

It does prepare you to talk to them, and I found I could ask them...One woman had incredibly intrusive voices, a range of voices, and she was happy to talk about it...The sim and the subject gave me a broader perspective to talk to her about it (Focus group).

I was initially a bit scared, but because of the sim I was ready to meet the patient...I could pay more attention and provide care...I like talking to them and find their stories interesting (Focus group).

An understanding, empathy. I felt safer to ask questions. Before, when I thought about people who had voices, I didn't have that understanding...It opened my eyes (Focus group).

During the follow-up stage, responses related to a lack of confidence were infrequent and similarly reflected the participants' views that the simulation had contributed to their increased confidence to talk with consumers about their voice-hearing experiences:

I can feel the difficulties of consumers who hear voices...and I have experience and confidence to talk with consumers (Follow-up survey).

Confidence is very important because it can generate better communication with patients (Follow-up survey).

It has helped me to become more confident to empathise and ask questions about the kind of voices being experienced (Follow-up survey).

Health care providers should think like their patients...and with this simulation, I am confident to communicate with consumers (Follow-up survey).

The simulation increased my confidence and empathy levels communicating with patients who hear voices. It is now easier to relate to patients and their mental health issues (Follow-up survey).

Responding Therapeutically: ‘It’s like opening a Pandora’s Box’

Across all three stages of the study, the ability to respond therapeutically to consumers who hear voices was the most frequently reported concern of participants. During the pre-stage of the study, prior to undertaking the VHS, the concerns related to the participants’ limited understanding of voice-hearing experiences and the skills of therapeutic communication necessary to talk about voice-hearing, including empathic responding.

Not Knowing What to Say

Several participants identified concerns related to not knowing what to say to consumers who hear voices. These concerns are reflected in the following responses from participants in the pre and post stages:

Will I be able to understand them and what they are going through...Will I know what to say? (Pre-intervention survey)

I do not have the education – biomedical, pharmacologically nor socially to understand why an individual may endure a state of ...hearing voices (Pre-intervention survey).

I need more educational background in mental health strategies to encourage effective communication (Pre-intervention survey).

I am still unsure how to support them when they tell me that they are hearing voices. I worry that I won’t be empathic enough (Post-intervention survey).

What approach should I use in relating to the voices...Should I seem interested in their voice-hearing experience or not. Would that be beneficial to their condition? (Post-intervention survey).

I feel I don’t know how to initiate the conversation and especially how to speak in a manner to make them talk about their feelings (Post-intervention survey).

I am concerned about listening and empathising with the consumers...especially when I can see them suffering from the voices (Post-intervention survey).

Adversely Affecting the Consumer

Of considerable concern for participants in the pre-stage, less so in the post-stage, and of little concern at follow-up stage, was the adverse impact that their interactions might have on the consumers. This was particularly related to the participants' verbal responses, but also included their behavioural responses. In the pre-stage, their concerns included upsetting and offending the consumer, worsening their condition, seeming uncaring, and lacking competency to assist consumers, as the following responses illustrate:

I will upset them or worsen their condition by saying the wrong thing or failing to act in a manner that has a negative impact on them (Pre-intervention survey).

Not being able to understand their experience, not knowing what to say, and not knowing how to help them (Pre-intervention survey).

I might say the wrong thing. The client might think that I am being rude to them....and feels that I don't care or understand (Pre-intervention survey).

I might say something wrong, to possibly trigger an undesirable response that I am not competent to deal with (Pre-intervention survey).

I fear that I might make their condition worse if I say the wrong things. I'm concerned that they will feel paranoid talking to me (Pre-intervention survey).

In the post-stage, whilst some participants stated that they might say the wrong thing, they were more concerned about how this would affect developing ongoing conversations and therapeutic relationships with consumers:

Any questions I ask will frustrate them and I'm not equipped with the most appropriate communication skills to speak about voice-hearing (Post-intervention survey).

I will offend them unintentionally in some way. I won't be able to establish any kind of therapeutic relationship with them (Post-intervention survey).

I am concerned about making them feel safe to talk with me about voices (Post-intervention survey).

I will have to concentrate more on communicating to enable me to work with them in a helpful way (Post-intervention survey).

In the Follow-up stage, concerns related to adverse effects were reported infrequently as compared to the previous two stages and related to offending the consumer and causing distress, with some participants feeling concerned that something they said could exacerbate a consumer's mental illness:

Saying the wrong thing and the individual misunderstands me and takes offence; therefore, becoming more guarded (Follow-up survey).

Saying something that will trigger their illness and add to their suffering (Follow-up survey).

My words might trigger a reaction in them (Follow-up survey).

For some of the participants who attended the focus group interviews, the distressing feelings they experienced during the simulation, their identification with how consumers who hear voices might feel, and a desire to cause no harm, contributed to their decision not to initiate conversations about voice-hearing with some consumers during their mental health nursing clinical placements:

On my last placement after the sim, I didn't ask (about voice-hearing) because if they're experiencing what I experienced, I was already paranoid and I wouldn't want anyone to know (Focus group).

I didn't more often than not because I wouldn't want someone to do that to me, especially after having the sim experience...I felt sorry for them and didn't want to pour lemon juice on a paper cut (Focus group).

I wanted to but she was very unwell ...so I didn't pursue it. I kind of regret it now. I might have been able to draw her out of that state (Focus group)

She didn't realise that the voices were part of a mental illness...She thought they were the neighbours talking about her...I felt sad and sorry for her and didn't ask her much about it (Focus group).

Developing Therapeutic Communication Skills

Concerns relating to responding therapeutically changed over the study stages. Prior to the VHS experience, participants were concerned about their ability to demonstrate understanding and empathy and to use effective communication strategies to explore consumers' voice-hearing experiences. After completing the VHS, participants overall expressed less concern about discussing voice-hearing experiences with consumers, and they demonstrated an awareness of specific strategies that could be used when talking with consumers about those experiences, including: actively listening, being

patient, providing adequate time, and eliciting information about the content, meaning and effects of voices:

Finding the words to use and how to say that you empathise with their situation (Pre-intervention survey).

Finding the correct response so as not to discourage them from being open about talking about their voices (Pre-intervention survey).

Trying to understand where the voices are coming from and what importance they have for the consumer (Pre-intervention survey).

Not being judgemental...that is when confidence to communicate develops (Post-intervention survey).

We should be patient and calm while communicating...and be a good listener because the consumers who hear voices are easily distracted and frustrated. It is not just a forty-five-minute simulation; it is ongoing (Post-intervention survey).

I feel better equipped now to talk to consumers about their voice-hearing experiences and how to communicate with them like...asking uncomplicated questions (Post-intervention survey).

I need to ask what are they hearing, how loud is it, when does it happen, how does it make them feel (Post-intervention survey).

First, I have to clarify if they are comfortable to talk about it, that they feel safe and trusting of me, the nurse (Follow-up survey).

Nurses should try to engage consumers to open up about their experiences in hearing voices for further understanding of their issues...It may contribute to more precise treatment plans for consumers (Follow-up survey).

Acceptance and Incorporation of Consumers' Perspectives

The importance of nurses developing their understanding of voice-hearing experiences, informed by consumers' experiences and perspectives, including their psychological and emotional experiences, was deemed crucial by participants for the development of trusting, therapeutic nurse-consumer relationships:

Being able to be understood and acknowledged that they do hear voices, is really important (Post-intervention survey).

Nurses might have difficulties understanding the consumers' situation...so consumers might then feel shame sharing their stories about voices (Post-intervention survey).

Understanding the physical and psychological difficulties consumers are experiencing is a priority to build sustainable therapeutic relationships voices (Post-intervention survey).

I found the voices disturbing... and I understand why some consumers can not express their feelings...As a nurse, we should pay more (attention) to their feelings about voices (Post-intervention survey).

My concern is to understand the person who hears voices' own reality. The reality is different from my own, but it is their reality (Follow-up survey).

I think it is important to accept and inquire about an individual's immediate state or reality. Acceptance allows flow of conversation and a deeper form of trust. As long as the professional is willing to listen and not override or dictate another's reality, a clearer picture will present (Follow-up survey).

For other participants however, concerns remained related to responding adequately to consumers' voice-hearing experiences and assisting them to cope:

It's like opening a Pandora's Box that cannot be shut. Am I strong enough and professional enough to handle and cope with what is discussed? (Post-intervention survey).

I may think that I understand their feelings but, in fact, it may not be like that (Post-intervention survey).

It's still hard to know what to say in these situations, especially if they are looking to me for answers or ideas to help stop the voices (Post-intervention survey).

Having the ability to appropriately ask questions so as to elicit ... adequate details or information regarding their experiences (Follow-up survey).

I need to know more about how to deal with voices from a patient's perspective. I don't feel I have enough knowledge, yet (Follow-up survey).

Several participants in the focus group interviews had the opportunity to discuss voice-hearing experiences with consumers during their mental health nursing clinical placements. Their approaches reflect some of those identified by participants in the above section on therapeutic communication skills, such as active listening, asking direct questions, determining the nature of the voices, focusing on voice-content, and clarifying meanings:

I asked him directly if he hears anything, and he said yes. And I asked was it a voice or other stuff, and he said voices. But when I asked him if the voices are talking to you now, he didn't really respond (Focus group).

She heard the voices at night, that's why she thought it was the neighbour. And we asked her if she heard them at other times...and she said she can hear voices out on the street, in the morning too... But she still thinks its people on the street, not voices in her head...I just listened, it was a team member who asked questions, so I didn't get that experience (Focus group).

I focused on the content of voices, not about how they were feeling...A number of voices tried to tell the patient that Nicole Kidman was doing witchcraft on her because she was jealous of her red hair (Focus group).

The consumer said all of a sudden, "she's killing me slowly". That prompted me to say, "I don't understand, who's killing you slowly". He was frustrated that he let this out and tried to change the conversation. Then he said, "from the north part of America"... and I said, "what do you mean, the north part", and he wouldn't answer me, and I think he was, I don't know, embarrassed (Focus group).

Two of these participants also highlighted the distinction between talking about voice-hearing experiences with consumers at different stages of recovery from mental illness, identifying that consumers in an acute phase of a psychosis might view voices as an experience other than illness:

There were people there of varying stages of recovery. They were starting to get things under control and see voices as part of an illness... I think they talked about them differently...There was one guy who had come to the point where he was like, "I know that's what was happening and I know now that I need to keep taking the medication". He seemed to come across as having insight and understanding (Focus group).

When they're in hospital, I can sense that they don't want to talk or share or feel less able, but when I worked in the community... one of the ladies was getting a job and she needed to get her depot. She didn't want to go back in there (hospital). It's different talking to someone in recovery than one who is more acute (Focus group).

Two weeks isn't that long to build up a rapport. But some people said they didn't want to talk about it... She only trusted certain nurses (Focus group).

Discouragement by Registered Nurses

For some participants who had opportunities during mental health clinical placements to interact with consumers who heard voices, the decision to initiate a conversation about voice-hearing was directly and indirectly discouraged by the Registered Nurses working in the clinical setting:

He said something about a shadow and being followed. Maybe he wanted to talk about it...I was asking him about it but the RN said I didn't need to ask that (Focus group).

I didn't have a chance to talk about it much because I'm always with team members and they did all the jobs and talking. Most of them know each other quite well, so they're not talking about hearing voices on home visits (Focus group).

When I met a patient who heard voices...he was an alcohol and other drug patient and the nurse didn't involve me in the care, so I didn't get much of a chance, and he (the patient) didn't really want to talk about voice-hearing...His care focused on alcohol and other drug use, but he could see and hear things (Focus group).

Fearing Aggression Related to Voice-hearing: 'You do not know what the patients' voices are telling them'

Aggression related to hearing voices was the next most frequently reported concern of participants surveyed in the pre-stage of the study. This was less frequently reported in the post-stage, virtually not at all during follow-up stage, and it was no longer a concern for the participants of the focus group interviews. Participants in the pre-stage were most concerned about consumers being aggressive towards them because of the content of their voices; specifically, this related to consumers responding to commanding voices instructing them to act in an aggressive or violent manner to others. Responses included:

Consumers being aggressive is an utmost concern (Pre-intervention survey).

My concern for mental health consumers is how persecutory is (sic) the voices...and if they are going to act on their commands (Pre-intervention survey).

The voices might be commanding the consumer to act violently towards me (Pre-intervention survey).

For other participants, it was concern about the voices leading to aggression directed at the consumer, in the form of self-harm and suicide:

Knowing that they are hearing dangerous things which could lead to dangerous activity such as bodily harm (Pre-intervention survey).

Triggering distress with negative voices, suicidal voices (Pre-intervention survey).

A number of respondents indicated that they feared that they might be placed in a dangerous situation when working with consumers who hear voices because the voice content is unknown:

My main concern would be that you do not know what the patients' voices are telling them. It may lead to a dangerous situation for the patient and myself (Pre-intervention survey).

They may be hearing voices that are negatively directed (and) they will behave irrationally or dangerously towards me (Pre-intervention survey).

Whilst an analysis of participants' responses in the post-stage of the study revealed less concern about aggression directed to them related to the content of consumers' voices, for a few participants, it remained a concern:

Understanding what to do if a person who hears voices overreacts or turns angry at you (Post-intervention survey).

It's intimidating as the voice could be telling them to harm you (Post-intervention survey).

My concern stems from my experience of a relative and it has limited my confidence...I fear aggression and don't actually know how to face confrontation (Post-intervention survey).

In the follow-up stage, this concern was rarely reported, and when it was, it was related to concerns about triggering an aggressive reaction in the consumer in response to discussion of voice-hearing. It was not a concern expressed during the focus group interviews:

Not knowing what is appropriate to say and being put at risk if the individual is aggressive (Follow-up survey).

I wasn't sure before if we might contribute to their distress, to worsening or making them feel uncomfortable. If I get too close would they get scared. But now I can see...that if you interact or speak, they're still there, still a person there. I'm not scared of that (Focus group).

Preparation for Practice: *'I think more of the coursework could be devoted to actually communicating with individuals who hear voices'*

Whilst the VHS was deemed valuable in increasing participants' understanding and awareness of voice-hearing, decreasing fears about those who hear voices, and increasing confidence to discuss voice-hearing with consumers, participants across all components of the study identified the need for additional ways to prepare them for conversations with people who hear voices, such as: ongoing development of therapeutic communication skills, opportunities to listen to consumers discussing their voice-hearing experiences, and observing mental health nurses interacting with consumers who hear voices. Several of the participants highlighted that talking directly with consumers who had first person experiences of voice-hearing, was the ultimate preparation for their future nursing practice.

Ongoing Therapeutic Communication Skills Development for Confident Practice

Therapeutic communication skills development, whereby participants could refine their skills, specifically related to speaking confidently with consumers about their voice-hearing experiences, was highlighted by several participants:

I am not confident, but I want to build up skills and techniques in the future to engage more in conversations with consumers (Post-intervention survey).

I think that I need more attention communicating with consumers who hear voices. Verbal and non-verbal communication skills are quite important (Post-intervention survey).

It would be good to have a workshop after the sim [simulation] to brainstorm ways to talk to persons who hear voices, the approaches to initiating conversations. Also being able to know what are the common concerns people have (Post-intervention survey).

It's still hard to know how to bring it up with them. I'm unsure how to bring up the topic of voices and discuss it (Follow-up survey).

I'm not sure how much empathy is enough to show (Follow-up survey).

I need to work out how to get an accurate description of their voice-hearing experiences (Follow-up survey).

Role-Play Practise of Therapeutic Communication Skills

The need to practise the communication skills related to discussing voice-hearing with consumers was also identified by participants as important preparation prior to their mental health nursing clinical placements. In particular, inclusion of role-play practice of these skills with their student peers was highlighted:

Role-plays, we groan, but they are good. DVDs of the nurses interviewing consumers, then practise in role-plays, and ask the students to provide alternative interactions or responses to the consumers (Focus group).

Increasing our communication skills practice is required before our placement. We have good clinical knowledge but not skills. We want to safely practise first, in a class or lab. We could do some damage to a real person (Focus group).

Observing Mental Health Nurses Speaking with Consumers

Participants also noted the utility of live interactions between mental health nursing academics and consumers who hear voices, or to view recordings of such interactions, for development of their therapeutic communication skills:

We need more emphasis in class telling us how to communicate with consumers about voice-hearing. ...Tell us we have to do it, and maybe demonstrate the skills to us first (Focus group).

Seeing footage of you (the researcher) practising would be really good, say on DVDs (Focus group).

The mental health nursing subjects have really helped me change my attitudes, and it would be great if you could bring in a voice-hearing consumer to talk to us and with the tutor (a Mental Health Nurse Academic). I don't know if they'd agree to that but we've met quite a few consumers this year (guest lecturers), who were great (Focus group).

Speaking with Consumers about their Voice-hearing Experiences

Beyond the afore mentioned strategies, participants also discussed the importance of opportunities to talk directly with consumers who hear voices about their voice-hearing experiences and about the most useful approaches that nurses could use:

I would like to learn to be more competent in communicating with the consumers even before I go on clinical placement (Post-intervention survey).

Ask consumers to come in and talk about their voice-hearing experiences and tell us how they'd like to be approached by including different consumers with a range of views (Focus group).

The simulation was a valuable learning experience, but I think more of the coursework could be devoted to actually communicating with individuals who hear voices (Follow-up survey).

I think it would be beneficial to know more techniques or skills on how to work with a patient who is hearing voices, especially one-on-one (Follow-up survey).

This was particularly important for one participant who had never interacted with a consumer who heard voices during any of her mental health nursing clinical placements:

I have never interacted with someone who hears voices, thus far...but if there was footage where you could see it, like in a video...to have some footage when someone is hearing voices...so I can recognise it in practice. I've seen people who have schizophrenia, but not everyone hears voices (Focus group).

For the above participant, it was important to not only have access to audio-visual recordings but also to mental health nursing clinical placements in which she could interact with consumers who hear voices:

Using technology like videos would be useful, but so are placements, both are necessary, so that you could see it first, before going on placement...I never got that experience on placement, and I'm about to leave university (Focus group).

Benefits of the VHS Workshop for all Mental Health Professionals

The value of the VHS workshop as training for all health professionals currently working with consumers who hear voices was also identified:

I feel like I have really benefited from the simulation, and I have spoken to many mental health professionals who all praise this study (Follow-up survey).

I think it requires ...encouragement for health professionals to participate in the workshop...I think more promotion and education in regards to hearing voices will contribute to the development of treating patients experiencing hearing voices in the clinical setting as well as in the community (Post-intervention survey).

I recommend it to other health professionals and their students (Post-intervention survey).

Summary

In this chapter the results of the analyses of the quantitative and qualitative data were presented. The analysis of the quantitative data revealed that participants' self-efficacy to communicate (SEC) increased from baseline, and the ANOVA indicated that there were significant differences across the three stages of the study. *Post hoc* tests revealed that SEC significantly increased between the pre and post-stage and the pre and follow-up stage regardless of gender, English language, educational qualification, and a family member having a mental illness.

Empathy increased across time; however, the ANOVA and *Post hoc* tests revealed no significant differences in empathy between the study stages. *Post hoc* tests across groups and between stages revealed a significant increase in empathy for females only, between the pre and follow-up stages. There were no significant differences in empathy for males at any of the study stages.

Participants whose first language was not English had significant increases in empathy as compared to those whose first language was English, with those increases occurring from the pre to follow-up stage. Participants without a prior nursing qualification had significant increases in empathy with *Post hoc* tests indicating significant increases from post to follow-up and pre to follow-up, whilst those who had a nursing qualification did not have significantly increased empathy at any stage of the study. Participants without any prior educational qualification had significantly higher empathy than those who did have educational qualifications other than nursing. *Post hoc* tests demonstrated that those without any prior educational qualification had significant increases in empathy from post to follow-up and pre to follow-up. Participants without a family member who had a mental illness had significant increases in empathy whilst those who had a family member with a mental illness did not have significant increases in empathy.

From an analysis of the qualitative data, six themes were identified: developing awareness and understanding of voice-hearing, developing empathy for consumers who hear voices, developing confidence to talk with consumers about voice-hearing, responding therapeutically, fearing aggression related to voice-hearing, and preparation for nursing practice. The most frequent responses were related to developing an awareness and understanding of voice-hearing and responding therapeutically to consumers who hear voices. For many participants, their increased

awareness and understanding of voice-hearing developed as a result of the VHS workshop, led to increased empathy towards consumers and the confidence to speak with them about their voice-hearing experiences; however, the need for ongoing therapeutic communication skills development was recognised as important preparation for the participants' mental health nursing clinical placements and their future practice as Registered nurses.

CHAPTER FIVE: DISCUSSION AND CONCLUSION

The aim of this study was to investigate the relationship between the Voice Hearing Simulation (VHS) and nursing students' empathy for, and self-efficacy to communicate with, consumers who hear voices. In this chapter, a discussion of the results of the study related to the current literature is presented, enabling insights into the development of self-efficacy to communicate and empathy in nursing students. Kolb's (1984) Experiential Learning Cycle provides the framework for discussion of the uniqueness and success of the VHS as an experiential learning approach. Limitations of the study are identified, followed by final conclusions, and recommendations for practice and research.

The discussion focuses on nursing students' increased self-efficacy to communicate with consumers about voice-hearing experiences after participation in the VHS. In particular, the discussion highlights how the VHS provided students with insight into voice-hearing experiences, consequently alleviating their concerns and fears and resulting in increased confidence to talk about voice-hearing experiences with consumers during mental health nursing clinical placements and in their future nursing practice. Further, a discussion of the relationship between the VHS and nursing students' increased empathy at six-month follow-up is presented, with specific exploration of the effects of gender, English as an additional language, prior nursing experience, previous educational qualifications, and where a family member has experienced a mental illness.

Experiential Knowledge and Learning

The participants in this study benefited from developing their experiential knowledge of voice-hearing. Experiential knowledge, the idea that understanding can be generated from personal experiences, is developed through the thoughts, feelings, sensations and bodily reactions derived from the experience; 'to experience something is to embody it and to feel it' (Liamputtong 2014, p. 323). Furthermore, it is the reflection on and processing of those experiences that distinguishes experiential knowledge from merely having an experience (Shapiro 2009). In this study, the participants developed experiential knowledge of voice-hearing and its effects as a result of: the expertise from those who had lived with voice-hearing and collaborated with the researcher on the

VHS design, the complete experiential learning cycle in which they were immersed during the VHS, and the emotional arousal they experienced during the simulation experience. This in turn engendered empathy in the participants for consumers who hear voices and increased confidence to therapeutically discuss their voice-hearing experiences.

Experts by Experience

Learning from experts by virtue of voice-hearing experiences has contributed to increasing nursing students' understanding of the impacts of mental illness and engendering empathy for people living with a mental illness (Cowley et al. 2016). Experiential knowledge adds to overall knowledge, and in healthcare settings knowledge gained from experts by experience, provides a rich source of understanding as it can:

complement the biomedical knowledge of the health professionals and is crucial for the provision of sensitive health care. It helps health professionals to know what it is like for patients to live with such illnesses...and what helps them deal with their condition (Liamputtong 2014, p. 324).

At the heart of VHS workshop in this study was the collaborative relationship developed over several years, between the researcher leading this study and the two consumer consultants who hear voices and are therefore experts by experience. The consultants know what it's like to live with voices and their personal experiences of using mental health services, receiving psychiatric treatments, and recovering provide expertise beyond professional knowledge. These are 'unique experiences that can teach us...about the person behind the illness' (Kottsieper 2009, p178). Additionally, the consumer consultants were trained in the use of the VHS by Patricia Deegan, also an expert by experience, who developed the *Hearing Voices that are Distressing* simulation (Deegan 2006) that was used in the current study.

Each of the components of the VHS workshop in the study was developed collaboratively and designed with consideration of the experiences of voice-hearing rather than psychiatric understandings of auditory hallucinations, thus focusing on internal, rather than external understanding. Of the reviewed studies using Deegan's (2006) voice-hearing simulation with nursing students, only three were a collaboration between experts by profession and experts by experience (Hamilton Wilson et al. 2009;

Kelly et al. 2016; Orr et al. 2013). Combining consumer and professional knowledge informs and develops the practice of health professionals and the therapeutic approaches they use, ultimately benefiting health care consumers (Corstens et al. 2014; Slomic et al. 2016).

The Experiential Learning Cycle of the VHS

Learning is the continuous process of creating knowledge formed through experiences (Kolb & Kolb 2009), and 'experiential learning is fundamental to preparing nursing students for professional practice' (Poore, Cullen & Schaar 2014, p. e246). The VHS workshop in this study was successful because it provided the participants with a complete, experiential learning cycle (ELC) (Kolb 1984). It was a learning and teaching strategy that drew upon the participants' affective, perceptual, cognitive and behavioural abilities in the learning that occurred (Kolb 1984).

Furthermore, the preparation of the academic teaching staff prior to facilitating the VHS workshops, was instrumental to its success. The staff participated in a four-hour, consumer-led training that immersed them in the same ELC that was employed with the students. This prepared the academics to facilitate all aspects of the VHS workshop and to anticipate students' needs and concerns, as they too had experienced this during their training. Furthermore, the researcher leading this study provided the academic staff with a detailed, step-by-step guide to facilitate the VHS workshop, ensuring that all students in each of the twenty tutorial groups received a consistent approach. Preparing the academic staff ensured the success of the VHS, as the reviewed studies of VHS and nursing students, with the exception of Orr et al. (2013), did not report any prior training or preparation of the academic staff.

The ELC of the VHS afforded participants the opportunity to understand voice-hearing through concrete experiences that developed their theoretical and experiential knowledge of voice-hearing, opportunities for reflection on those experiences, conceptualisation and consideration of the implications of that knowledge, and active experimentation during a mental health nursing clinical placement. Figure 5.1 illustrates the ELC and its relationship to the VHS, followed by an elucidation of each of these components.

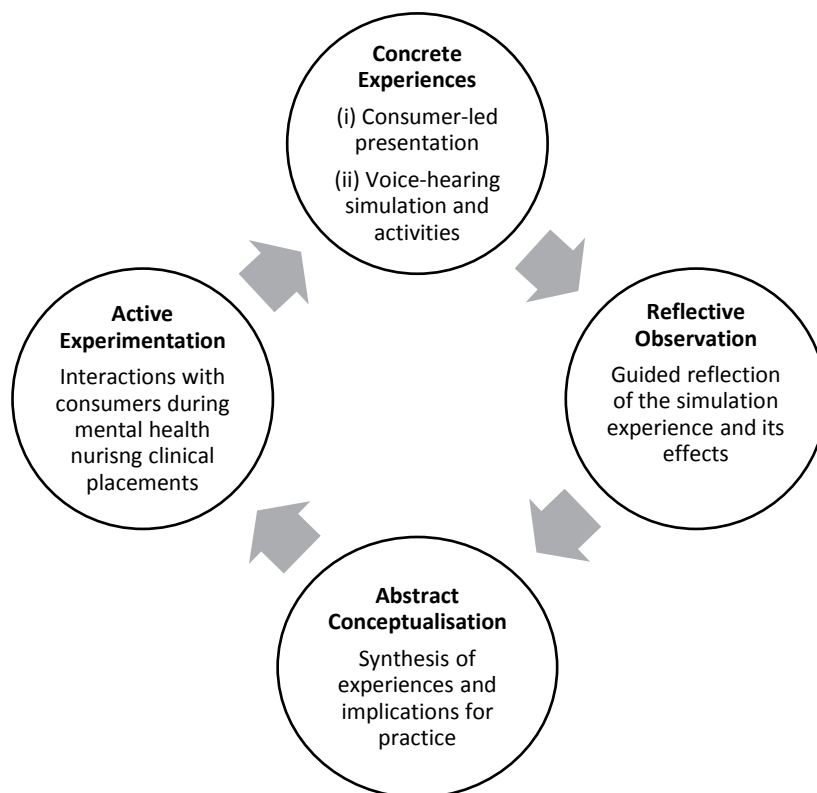


Figure 5-1: Experiential Learning Cycle in Relation to the VHS

Concrete Experience

The VHS provided participants with a two-part concrete experience, comprising a consumer-led presentation on voice-hearing and a voice-hearing simulation whilst undertaking set activities. To focus the participants whilst viewing the consumer-led presentation, they completed questions related to salient points that were then discussed in the tutorial class the week before the simulation component. This developed their knowledge of: socio-cultural understanding of voice-hearing, the experience of voices and their effects on those who heard them, and strategies that are used to cope with distressing voices. A consumer-led presentation as student preparation prior to the voice simulation was a point of difference from the majority of the reviewed studies (Bunn and Terpstra 2009; Chaffin & Adams 2013; Dearing & Steadman 2008; Dearing & Steadman 2009; Kepler et al. 2016; Kidd et al. 2015; Mawson 2013), despite the inclusion of a consumer-led presentation in the *Hearing Voices that are Distressing* curriculum package produced by Deegan (2006).

The consumer-led presentation on voice-hearing provided the participants with a theoretical understanding, an external construction. It was not until they actually engaged in the voice-hearing simulation, for 45 minutes, that they came to “know what it’s like” to hear voices because they now had developed an experiential knowledge of voice-hearing, an internal construction. The findings from this study demonstrate that an awareness and understanding of voice-hearing and its effects on those who hear voices is heightened through the VHS experience, including the distressing and distracting nature of voice-hearing and its negative effects on daily living. This is congruent with previous studies of VHS with nursing and medical students (Bunn & Terpstra 2009; Chaffin & Adams 2013; Dearing & Steadman 2008; Dearing & Steadman 2009; Hamilton-Wilson et al. 2009; Kelly et al. 2016; Kidd et al. 2015; Orr et al. 2013; Sideras et al. 2015). The negative and positive emotional effects of voice-hearing simulation were also reported by undergraduate students of introductory psychology courses (Brown 2008).

Specifically, the level of realism of the voice-hearing experience created an awareness and understanding that participants had not gained from other learning experiences; this was a personal knowing and understanding that extended beyond theoretical knowledge. For many participants, it was not until they had the experience of the voice-hearing that it became real and understood by them as an actual experience, rather than as an hallucination, a symptom of psychotic illness. The reality of the simulated voices reflects the powerful, intrusive, and very real experiences of people who actually hear voices (Beavan 2011; de Jager et al. 2016; Kalhovde, Estad & Talseth 2013; Karlsson 2008; McCarthy-Jones et al. 2015), ‘more real than reality’ (Karlsson 2008, p. 370).

As the participants engaged in the simulation and accompanying activities, they became aware of the emotions this aroused, in response to the simulated voices and the reactions of others on the university campus who could not hear these voices. The participants reported a range of powerful feelings including fear, distress, anxiety, sadness, exhaustion, paranoia, self-consciousness, embarrassment and humour. They worried how others might view their reactions to the voices, such as when they laughed out aloud or did not respond when spoken to. Additionally, they experienced the difficulties of concentrating and undertaking the scheduled activities; they were distracted as the voices demanded their attention or commanded them to act. Many

reported that the voices were consuming and required the use of considerable amounts of their mental energy. This enabled them to envisage what it would mean to live with voices, on a daily basis, unable to 'switch them off'. It was as if they were actually hearing voices and they now knew how that felt. As McAllister (2015) notes:

helping students to feel, question, to imagine and create are not futile or irrelevant endeavours in nursing education (p. 483).

This emotional arousal occurred automatically and it was a powerful contributor to the participants' development of their knowledge and subsequent learning. Emotions are a central component of learning, and the simulation was a learning approach that created intense emotions that:

are deeply interrelated with perceiving and processing information from our external environments...and the embodiment of learning' (Dirkx 2001, p. 68).

Furthermore, adrenaline release is associated with enhancement of memory and even mildly emotional experiences can trigger its release. Therefore, engaging learners' emotional reactions in educational experiences contributes to increasing the meaning and memories of those experiences (Wolfe 2006), and enhances their motivation and interest (Hyland 2009; Rowe et al. 2013; Shuwirth 2013).

Learning is associated with friction, with being pushed out of your comfort zone, with understanding that your current view on how things are does not align with new information. This is both exciting and frightening (Shuwirth 2013, p. 15).

For the participants in this study, the voice-hearing simulation experience caused them to feel uncomfortable and the emotional arousal created a tension between the 'exciting and the frightening'. The realisation that voices are actually frightening, distressing and all-consuming were revelations unknown to many participants prior to the simulation experience. This new understanding developed from the strong and memorable feelings that they experienced and engendered an excitement about the value of the simulation experience. This was reflected in their views related to future use of the VHS as a learning strategy; that it should be incorporated earlier in their

nursing studies, be available to nursing and other health professions students in all universities, and provided to health professionals working in mental health services who have not previously undertaken the experience.

Reflective Observation

The voice-hearing simulation experience provided the impetus for reflection and observations by the participants (Kolb 1984). Immediately after the simulation an opportunity for reflective observation was provided. It was a guided period of reflection of 45-minutes' duration. The incorporation of a substantial period of time to reflect on simulation experiences has been noted by several researchers as possibly the most important component for students' learning (Fey et al. 2014; Lasater 2007; Lusk & Fater 2013). The reflective observation promotes learning as it can 'bridge the gap between experiencing an event and making sense of' it (Fey et al. 2014, p. e250). Several studies of VHS with nursing and medical students did not include an opportunity for reflection (Bunn and Terpstra 2009; Dearing & Steadman 2009; Kepler et al. 2016; Mawson 2013), and in those that did so, there was considerable variation in their duration.

The guided reflection in the current study was facilitated by the two academic staff members in each tutorial group, all of whom were experienced mental health nurses, with well-developed group facilitation and communication skills. Facilitation of the reflection enabled the participants to consider and discuss the concrete experience, the simulation, 'in a trusting, open environment' (Merriam, Caffereella & Baumgartner 2012, p. 169). Furthermore, all of the academic staff used a structured format to guide the reflective observation. Additionally, one of the pair of staff was immediately available if any of the participants required additional support as a result of processing distressing emotions associated with the experience. These factors ensured the psychological safety of the participants whilst processing their experiences (Fey et al. 2014).

The guided reflection in this study was effective because it incorporated the best practices of simulation learning management, as revealed in a review of the literature by Lusk and Fater (2013). They assert that such practices include: a facilitator who provides a safe, non-judgmental environment, uses active-listening, encourages active

participation and self-reflection by the learners, presents a structured format, and allocates adequate time for the process, at least as long as the simulation component. Enhanced learning occurs when learners have ‘opportunities to make meaning...and their psychological needs are respected’ (Wolfe 2006, p. 41), and these were vital components of the VHS in this study.

During the first stage of the reflection, the participants were specifically asked to consider what they had learnt about voice-hearing from their reactions to the simulation experience, including their feelings, thoughts and behaviours as they engaged in the various activities and interactions with others. Each of the participants expressed their reflections to the wider group, providing an opportunity for all to further develop their knowledge. It contributed to their overall learning through the transformation of their own and each other’s experiences and understandings, as ‘learning is the process whereby knowledge is created through the transformation of experience’ (Kolb 1984, p. 38).

Much of this discussion focused on how real the simulation felt, the range of effects they personally experienced, and the reactions to them by others who were not hearing voices. Specifically, consideration of the emotions participants felt at various points during the simulation was explored because it provided insight into how those who hear voices might feel and respond. This ‘is critical to guiding a student on how they may want to respond under similar emotional conditions in the future’ (Finch et al. 2015, p. 33). For the participants in this study, the emotional responses they experienced during the VHS and the subsequent reflection on that experience, provided guidance for their future nursing interactions with people who hear voices.

Abstract Conceptualisation

The participants then had an opportunity to synthesise their reflections and observations in the process of abstract conceptualisation, the drawing out of the implications for action/practice (Kolb 1984). This occurred during the second stage of the guided reflection component when participants were asked to consider the implications of their experiences of voice-hearing and its effects for their nursing practice development, particularly given their impending mental health nursing clinical placements. It provided an opportunity to think about how their learning could be transferred and applied to practice in a healthcare setting; a transferability to other

situations (Lusk & Fater 2013) involving a transformation of knowledge into actions (Jarvis 2006; McAllister 2011; McAllister 2015).

Participants discussed approaches such as: being patient, accepting voice-hearing experiences as real, having confidence to seek the consumer's consent to ask about their voice experiences, actively listening, and responding empathically towards those who hear voices. However, this process also assisted the participants to identify areas of practice in which they did not feel confident, such as the specific questions that might be asked to elicit information about voice-hearing experiences, and concerns related to continuing a conversation about voice-hearing if the voices were extremely distressing. The opportunity to identify the benefits and also the limitations of their new-found knowledge was a beneficial component of the ELC, prior to interacting therapeutically with consumers during the scheduled mental health nursing clinical placements.

Active Experimentation

The final stage of the ELC was active experimentation, the testing out of the implications for practice (Kolb 1984). This was undertaken while the participants undertook a two-week mental health nursing clinical placement during which they had the opportunity to interact with consumers who heard voices. They had occasions to apply their new knowledge to interactions with actual consumers and to gauge the consumers' responses to their approaches; the knowledge they developed as a result of the VHS guided their nursing practice (Poore et al. 2014). The realness of the voice-hearing simulation enabled participants to appreciate that some consumers fear disclosing voice-hearing to professionals because 'disclosure may result in invasive treatments or involuntary admission to a psychiatric hospital' (de Jager et al. 2016, p 412). However, participants did report interactions with consumers about voice-hearing, reinforcing what a number of authors have previously reported about consumers and their willingness to discuss voice-hearing with nurses (Coffey and Hewitt 2008; Jones & Coffey 2012; Jones & Shattell 2013; Place, Foxcroft & Shaw 2011; Romme & Morris 2007; Schnackenberg & Martin 2013).

Developing Nursing Students' Confidence to Talk about Voice-hearing

Self-efficacy to Communicate

One of the major findings of this study was the significant increase in the participants' self-efficacy to talk with consumers about voice-hearing immediately after completing the VHS and at six-month follow-up. This occurred regardless of the participants' gender, previous nursing qualification and other educational qualifications, English language background, or whether a family member had a mental illness. As a result of the VHS experience, the participants were confident to initiate conversations about voice-hearing experiences and this can be explained with reference to Bandura's (1977b) *Social Learning Theory*, particularly self-efficacy. Self-efficacy 'is the conviction that one can successfully execute the behaviour required to produce the outcomes' (p. 79), and the degree to which that conviction is held is central in influencing attempts to perform an action or cope with a difficult situation. Tasks associated with high self-efficacy are more likely to be pursued (Bandura 1977b). Having the necessary skills and knowledge is not enough to produce an outcome or action alone; efficacy expectation, the self-confidence in effectiveness to undertake the action or cope with a situation, is critical (Bandura 1977b). The four sources that affect a person's self-efficacy expectations are: performance accomplishments based on personal experiences, vicarious experiences such as seeing others' performances, verbal persuasion, and emotional arousal and physiological feedback (Bandura 1977b).

In this study participants had opportunities to develop their efficacy expectation, that is their self-confidence through: performance accomplishments based on personal experiences of simulated voice-hearing and its effects, verbal persuasion by the academic facilitators during the guided reflection and abstract conceptualisation component, by encouraging the students to consider how they might communicate with consumers during their mental health nursing clinical placements, and experiences of emotional arousal associated with the simulation experience. Their self-confidence was borne out in significantly increased self-efficacy from before to immediately after completing the VHS and was at its highest at follow-up, six months after the VHS experience and after completing a two-week mental health nursing clinical placement. The clinical placement provided an opportunity for participants to implement their new-

found knowledge and confidence by actually talking with consumers who heard voices; this provided performance accomplishment based on further personal experiences. Performance accomplishments are considered the most dependable source of efficacy expectations, as personal experiences of accomplishments or successes increase expectations of mastery of a behaviour or situation (Bandura 1977b).

As a result of the VHS, the participants were motivated to engage in conversations with consumers about voice-hearing during their mental health nursing clinical placements. They reported that they: were prepared and ready to talk with consumers who heard voices, felt safe to ask questions about the consumers' voice-hearing experiences, and found it interesting to converse about voice-hearing. Importantly, is that a high self-efficacy expectation equates to improved performance and self-efficacy acts independently of individual skills, knowledge and cognitive abilities; their 'level of motivation, affective states and actions are based more on what they believe than on what is objectively true' (Bandura 1997, p. 2). Participants did, however, note that they resisted talking about voice-hearing if: they observed that the consumer was very distressed by voices, they thought it would cause the consumer more distress to talk about it, or the consumer was unwilling to discuss their experiences. It is also likely that, during their clinical placements, the participants might have observed health professionals talking with consumers about voice-hearing, thus providing them with vicarious experiences of others' performances that could also have contributed to their self-efficacy expectations and overall self-efficacy to communicate.

The high level of realism of the simulation experience and strong emotional arousal it evoked in the participants contributed to increased self-efficacy in the participants; a lack of realism in simulation has been associated with low self-efficacy in nursing students and with maintaining a theory-practice gap in nursing education (Pike & O'Donnell 2010). The emotional arousal related to the level of a realism in the VHS and concomitant increased self-efficacy is also supported by other studies, including high-fidelity training simulators with police officers (Holbrook & Cennamo 2014) and a simulation using Google Glass and mannequins with nursing students (Vaughn, Lister & Shaw 2016). The use of standardized mental health patients depicting anxiety and depression symptoms was linked to increased confidence to communicate, post simulation in a small cohort of nursing students; however, whether that confidence could be maintained over time was not addressed (Martin & Chandra 2016).

There is an absence of studies on VHS as an educational strategy and self-efficacy of nurses and other health professionals to communicate with consumers who hear voices, as it was not measured in any of the studies in the reviewed literature. Whilst some reported that the VHS experience enabled students to discuss voice-hearing with consumers or identified the approaches they would use during those discussions (Fossen & Stoeckel 2016; Kelly et al. 2016; Orr et al. 2013), unlike the current study, they did not measure the participants' self-efficacy to do so. Further, although the study by Kepler et al. (2016) of the use of a VHS with nursing students reported improved attitudes toward people who hear voices, self-efficacy to provide nursing care did not change significantly, and confidence to communicate was inconsistent. Limitations of that study included the lack of a reflective processing session post the VHS, conversations between participants during the VHS so as to experience the effects of voice-hearing on socialisation, and follow-up after the students undertook a mental health clinical placement (Kepler et al. 2016).

In contrast to the limitations identified above in the study by Kepler et al. (2016), the observed increase in self-efficacy of participants at all stages of the current study can be explained by examining the components of the VHS. Specifically, it provided opportunities for conversations between participants during the voice-hearing simulation, inclusion of a guided reflection after the simulation, and follow-up opportunities for students after completion of their mental health nursing clinical placement. There were several opportunities for inclusion of conversations that enabled the participants to experience the effects of voice-hearing on socialisation, as they first conversed with each other in pairs and then with the larger group during the social group activity. Further, in the subsequent activity that involved interactions outside of the classroom, around the University campus, such as in the café, or whilst making a telephone call, participants were encouraged to converse with others who were not aware that they were 'hearing voices'.

The above components of the VHS provided the participants opportunities to develop an awareness of the effects of voice-hearing on everyday conversations with others in social settings, including in pairs and in groups, and the guided reflection afforded them insights into the interpersonal skills and approaches for conversations with consumers about voice-hearing. Both of these factors contributed to their self-efficacy and sense of confidence to talk about voice-hearing with others. Finally, in contrast to the findings by Kepler et al (2016), there were opportunities for follow-up with the participants after

completion of their mental health nursing clinical placement. The students were given the opportunity for follow-up during the focus group interviews and when completing the follow-up survey, six months post the VHS.

Increasing Awareness and Decreasing Fears and Concerns

Prior to undertaking the VHS, the participants identified specific concerns related to their initial lack of confidence to talk about voice-hearing with consumers, including fears about: saying the wrong thing, not understanding what consumers experience when hearing voices, not knowing what to say, worsening the consumer's condition, and aggression from the consumer related to the content and demands of voices. Immediately following the VHS, their self-efficacy increased significantly, and they reported that their concerns and fears had lessened and they were more confident to engage in conversations about voice-hearing. This was related directly to the VHS experience as it had increased their awareness and understanding of voice-hearing and its impacts (Chaffin & Adams 2013; Dearing & Steadman 2008; Hamilton-Wilson et al. 2009; Kepler et al. 2016; Orr et al. 2013; Kelly et al. 2016), which then diminished their fears about consumers who hear voices and consumers' reactions to those voices. For those participants whose concerns remained, they related to inadequate communication skills and the potential to jeopardise the development of therapeutic relationships with consumers. However, they countered these concerns by acknowledging that the inclusion of consumers' perspectives of voice hearing was central to the development of therapeutic relationships, along with a commitment to further developing their own communication skills.

Increasing Therapeutic Engagement

Accepting the Reality of Voice-hearing

This study highlighted that the VHS assisted students to more fully understand the reality of voices and voice-hearing, and this understanding was the starting point to engage with consumers about their voice-hearing experiences. 'A necessary first step is to accept voices as being real' (Romme & Morris 2013, p. 267) and acknowledge that they are a valid part of the person (Corstens, Longden & May 2012). Prior to undertaking the VHS in this study, participants were unsure about the nature of voice-hearing and communicating therapeutically with consumers about their voice-hearing experiences without causing harm or distress to them. After participating in the VHS

and at follow-up, self-efficacy increased and participants were more confident to have conversations with consumers who hear voices. They were able to identify communication strategies they could and did use to facilitate these conversations, such as active listening, eliciting information about the content and effects of voices, and demonstrating empathy. The value of talking about voices as a real experience is recognized by those who hear them and, increasingly, by mental health professionals (Beavan & Read 2010; Corstens et al. 2012; de Jager et al. 2016; de Leede-Smith & Barkus 2013; Fenekou & Georgaca 2010; Jenner et al. 2008; Jones & Shattell 2013; Kalhovde et al. 2013; McCarthy-Jones et al. 2015; Romme 1998; Romme & Escher 1989; Romme et al. 1992; Romme & Morris 2013, Sapey & Bullimore 2013; Schnackenberg & Martin 2013).

Developing the Skills of Talking about Voice-hearing

Whilst the VHS contributed to the participants' development of knowledge of voice-hearing and confidence to talk with consumers about their voice-hearing experiences, participants identified a need for development of the specific communication skills to discuss those experiences. They highlighted the ways in which nursing students might be further prepared for practice with consumers who hear voices, through a follow-up session after the VHS, including demonstrations by the academic staff interacting with consumers about voice-hearing experiences, and role-play practise of talking about voice-hearing.

Developing Nursing Students' Empathy for Consumers who Hear Voices

Educational Approaches

This study illustrated the significance of the VHS as an experiential learning approach to enhance and sustain nursing students' empathy. Its effectiveness is supported by studies demonstrating that empathy increases in nursing, medical and other health professions students after their participation in educational interventions designed to develop empathy (Hojat et al. 2013; Howick & Rees 2017; Sheehan et al. 2013; Ward 2016; Williams et al. 2015). Such programs to enhance empathy and the approaches

used vary considerably (Cunico et al. 2012; Halpern 2014; Hojat et al. 2004; Hojat 2007; Hojat 2009; Kiosses, Karathanos, & Tatsioni 2016; Mercer & Reynolds 2002; Nunes et al. 2011; Sheehan et al. 2013; Williams et al. 2015; Ward 2016). For example, educational programs that develop the requisite communication and other interpersonal skills required for empathic communication in nursing students are reported in a number of recent studies (Cunico et al. 2012; Nunes et al. 2011; Reynolds 2000; Sheehan et al. 2013; Ward 2016). Educational approaches that are inclusive of actual patient experiences and periods of reflection are central in the development of empathy (Ahrweiler et al. 2014; Bearman et al. 2015; Mercer & Reynolds 2002), as are approaches utilising interactions between actors as simulated patients and students (Berg et al. 2011). However, as empathy takes time to develop, such approaches might not initially result in increases (Berg et al. 2011).

The current study is unique in that it not only sought to increase nursing students' empathy for consumers who hear voices immediately after participation in a VHS but this was maintained over a six-month period. Empathy in nursing and other health professions students and its positive relationship to participation in a VHS have been reported in several studies (Bunn and Terpstra 2009; Chaffin & Adams 2013; Dearing & Steadman 2008; Dearing & Steadman 2009; Fossen & Stoeckel 2016; Hamilton-Wilson et al. 2009; Kidd et al. 2015; Mawson 2013; Orr et al. 2013; Sideras et al. 2015; Skoy et al. 2016), with two of these studies measuring empathy using the Jefferson Scale of Empathy (JSE) (Bunn & Terpstra 2009; Sideras et al. 2015). Bunn and Terpstra (2009) reported increased empathy immediately post the VHS, whilst Sideras et al. (2015) measured empathy four-weeks post-simulation finding that empathy had not increased from baseline. Of importance is whether any increases in empathy related to such educational interventions can be sustained over time, as there is limited evidence to support a lasting effect (Kiosses, Karathanos, & Tatsioni 2016). Whilst there are not any previously reported studies of VHS and increases in empathy over an extended time period, the current study demonstrated that the VHS is an educational intervention that contributed to increasing nursing students' empathy from baseline to post, with further and significant increases, six months later.

Developing Emotional Empathy

Whilst the measurement of empathy in this study, using the JSE, was based on cognitive empathy, the findings from the qualitative data indicate that emotional empathy for people who hear voices was also enhanced. Empathic connections with patients are some of the most significant and memorable for nurses (Stayt 2009). Empathy requires engagement with the other (Sulzer, Feinstein & Wendland 2016), and as empathy spurs compassionate and caring responses, it is a vital aspect of nursing practice (Morse et al. 2006). Morse et al. (2006) contend that emotional empathy is learnt by experience, whereas therapeutic or clinical empathy, the verbal and behavioural responses, are learnt by rote. In an extensive review of the evaluation of training approaches to enhance empathy in the human services and social sciences disciplines, Lam, Kolomitro and Alamparambil (2011) concluded that whilst knowledge of empathy and the skills to act empathically can be taught, there was little evidence that training develops emotional empathy towards others:

Just knowing about and exhibiting empathic behaviour without a visceral concern for others is not the ultimate goal in empathy training (pp. 196-197).

Participants in this study had the opportunity to not only experience voice-hearing and its effects during the simulation, including the emotional effects, but also to transfer the knowledge gained to their interactions with mental health consumers during clinical placements, thus arousing their emotional empathy.

A recent systematic review of simulation as an educational approach to teaching empathy and empathic behaviour in health professions students contended that the most useful simulations were those in which the students 'stood in the shoes' of the patients (Bearman et al. 2015), including acting the role of the patient or through a patient experience. The VHS in the current study provided the participants with an opportunity to stand in consumers' shoes who hear voices, to experience, viscerally what consumers experience and live with, day-to-day. This increased participants' understanding of voice-hearing, enabled them to imagine what living with voices could mean, and ultimately developed their empathy for consumers who heard voices. The VHS fostered acceptance in the participants of the reality of voice-hearing which was the impetus for acknowledging and directly enquiring about those experiences with actual consumers whom they met during their clinical placements.

The importance of empathic engagement with consumers who live with voice-hearing cannot be overstated as it 'enables patients to talk about stigmatized issues that relate to their health that might otherwise never be disclosed' (Halpern 2001, p. 94). A genuine interest and curiosity to engage and talk with consumers about voice-hearing was identified by the participants and demonstrated by those who reported these interactions from their clinical placements. These participants actively implemented their experiential knowledge during their interactions with consumers, in what could be considered as an 'engaged curiosity'; they were curious to find out what was not known about the other (Halpern 2014, p. 302). They focused their conversations on the content and frequency of voices, the feelings associated with the consumers' voice-hearing experiences, and the meanings of the voice-content. Furthermore, they reported responding empathically, including determining whether to pursue conversations about voice-hearing based on the consumers' reactions and levels of distress. Ultimately, this contributed further to the participants' experiential learning about voice-hearing and empathy for those who hear voices. The awareness and insights that these nursing students gained have the potential to contribute to their practice development as graduate nurses supporting future consumers who hear voices.

Characteristics of Nursing Students

Whilst empathy increased in participants in the current study post participation in the VHS, it was significantly increased in those who did not have a prior nursing qualification nor any other tertiary education qualification. Furthermore, of note is that it was significantly increased at six-month follow-up for: females, those whose first language was not English, those without prior nursing experience, those without any previous tertiary education qualification, and those who did not have a family member who had a mental illness. These findings are discussed below.

Gender

The current study found empathy was higher in females as compared to males, at all stages of the study, and it significantly increased in females at six-month follow-up. Several studies that have measured health professions students' empathy using a

version of the JSE, (Bunn & Terpstra 2009; Dewaele & Wei 2012; Hojat et al. 2002a; Hojat et al. 2002b; Fields et al. 2011; Nunes et al. 2011; Petrucci et al. 2016; Ward et al. 2009; Ward 2016; Williams et al. 2015; Wilson, Prescott & Becket 2012) support this study's findings that females report higher empathy as compared to males. This difference in empathy between the genders has been reported to be related to a tendency for females to empathise and for males to systematise, to analyse and construct (Baron-Cohen 2003). It has been reported that females are more likely to respond to the emotional expression of others as compared to males (Duarte et al. 2016), and that empathy is expected in professions where women dominate, such as in nursing (Wilson et al. 2012).

English as a Second Language

For the majority of participants in the current study, English was their second language, and the voice simulation was recorded by North American speakers of English. Overall, participants' empathy increased across all stages of the study regardless of their first language however, only those whose first language was not English had significantly increased empathy from baseline to follow-up. This is explained in relation to cross-cultural empathy, which is 'a general skill or attitude that bridges the cultural gap between therapist and client' (Dyche & Zayas 2001, p. 246), and requires an 'empathic imagination... to accurately imagine their world' (p. 248). The learning of a second or subsequent language could have facilitated these participants' ability to empathise more with others.

Of the participants whose first language was not English and who were also international students now living in a new country and culture, the experience afforded them new perspectives. These new perspectives contributed to their experiential knowledge of what it is like to be considered different and to feel different. Being misunderstood, a lack of cross-cultural understanding by others, and feelings of loneliness and isolation are examples of such experiences from minority nursing students in the USA (Gardner 2005). Such experiences and the insights developed contribute to the ability to empathise with others. The experiences of learning a second or subsequent language, and the experience of cultural difference, help to explain why the participants in the current study whose first language was not English, were more empathic:

Neuroscience is beginning to detect subtle differences in the human brain related to how people think, feel, and empathize with others according to the languages they speak...that it has the capacity to adjust and grow in response to social experience, actually building into its structure the perspectives of so-called “foreign” others...Becoming proficient in another language makes cross-cultural empathy possible (Rolbin & della Chiesa 2010, p. 204).

Further, there is evidence that people who frequently speak a number of languages have higher empathy (Dewaele & Wei 2012). Whether those who are empathic are more likely to learn and speak a number of languages or whether using several languages increases empathy was not determined by these authors. Although multilingualism was not identified in the participants of the current study, speaking a language other than English helps to explain the significantly higher empathy at follow-up of participants in whom English was an additional language.

Studies of first year nursing and medical students whose English was not their first language report that the participants encountered more difficulties with therapeutic communication (Bosher & Smalkovski 2002; Miguel et al. 2006), including responding empathically (Avdi, Barson, & Rischin, 2008; Miguel et al. 2006). Medical students from culturally and linguistically diverse backgrounds were less inclined to respond to emotional content expressed by ‘patients’, portrayed by actors, and more inclined to respond to biomedical or factual content (Avdi, Barson, & Rischin 2008). The authors proposed that this was related to the participants’ high academic performance in science subjects and a resultant focus on the patients’ biomedical content (Avdi, Barson, & Rischin 2008). Empathy takes time to learn and develop, and participants in the current study were in their final year of the Bachelor of Nursing (BN), with more experience of the knowledge and skills of therapeutic communication. They had experienced more opportunities during simulations and clinical placements in which to develop empathy that was significantly increased at follow-up. Whilst the above studies of first year students did not measure their empathy, they do highlight that developing empathy and empathic responding in health professions students require specific educational interventions.

Prior Nursing Experience

A number of studies report a decline in empathy of health care professions students as their degree progresses and, therefore, clinical practice experiences increase (Hojat et al. 2004; Neumann et al. 2011; Nunes et al. 2011; Ward et al. 2012; Wilson, Prescott & Becket 2012). Nunes et al. (2011) reported that the decline in empathy across five health disciplines began during the students' first year of studies, and this was also the case for female and male medical students (Austin et al. 2007). A decline in empathy is borne out in the findings from studies of third year nursing students (Wilson, Prescott & Becket 2012), third and fourth year nursing students (Ward et al. 2012) and third year medical students (Hojat et al. 2004; Hojat et al. 2009b), all of whom had undertaken clinical placement experiences in health care settings.

Whilst the current study did not measure students' empathy over the three years of their nursing degree, participants who did not have any prior nursing experience on commencement of the Bachelor of Nursing were significantly more empathic at follow-up, which coincided with the completion of the degree. Conversely, those participants who had a prior nursing qualification and more clinical experience reported lower levels of empathy at follow-up. This difference in reported empathy of the participants with a prior nursing qualification can be explained in terms of the development emotional intelligence, of which empathy is a key factor, as it relates to their prior educational experiences and the management of the emotional labour associated with their past nursing practice.

Empathy is a component of emotional intelligence (EI), which refers to the ability to identify and process emotional information in the self and in others (Salovey and Mayer 1990) and use emotions in problem-solving and decision making (Mayer & Salovey, 1995). In the model of EI, developed by Mayer and Salovey (1997), understanding emotion and emotional language, and accurately perceiving emotions in the self and others, align with empathy and empathic responding. Specifically, EI correlates with self-reports of empathy that 'involve a view of oneself as emotionally responsive and concerned about the feelings of others' (Mayer, Caruso & Salovey 2000, p. 293).

EI is dynamic, it can be developed (Freshwater & Stickley 2004; van Dusseldorp, van Meijel & Derksen 2010), and is key to forming therapeutic relationships inherent in nursing practice (Hurley 2008; McQueen 2004; Roberts 2010; Snowden et al. 2015; van Dusseldorp, van Meijel & Derksen 2010). Nursing practice involves frequent interpersonal interactions with patients that can evoke a range and intensity of emotions in nurses. Reasoning with these emotions in relation to the people in a nurse's care is central to EI (Freshwater & Stickley 2004). Fostering the development of EI could assist with concerns related to the level of care, compassion (Snowden et al. 2015) and empathy by nurses (Freshwater & Stickley 2004).

In clinical practice, the 'real work' of direct nursing interventions and being seen to 'do something' is more highly valued than 'being with' patients' (Sharp, McAllister & Broadbent 2016, p. 308), but as McAllister (2011) warns, the education of nurses must go beyond the development of technical skills and incorporate opportunities that enhance the personal qualities of empathy and caring. Such caring and empathic understanding require a level of emotional intelligence, developed through education and practice (Edward, Hercelinskyj & Giandinoto 2017; Freshwater & Stickley 2004; Hurley 2008; Roberts 2010). For the group of participants in the current study with previous nursing experience, their prior educational experiences likely focused on technical knowledge and the practical aspects of nursing that did not afford them adequate opportunities for development of the emotional aspects, such as empathy.

In addition, nurses are affected by the emotional world of those in their care. The regulation of emotions within the self and demonstration of professional emotional expression in the workplace is known as emotional labour (Hochschild 1983). The management of emotional labour utilises surface and deep acting in the production of emotional expression (Hochschild 1983) and involves conscious and unconscious processes to achieve it (Kamp & Dybbroe 2016). During therapeutic interactions with patients, nurses are faced with the dilemma of demonstrating sufficient emotional expression to convey concern and caring whilst concomitantly managing those emotions (Karimi et al. 2014). A high level of EI is required to cope with the emotional labour of nursing work and is necessary for empathic nursing practice (Edward et al. 2017; van Dusseldorp, van Meijel & Derksen 2010). Further, the more stress nurses experience, the lower the empathy they report and the higher the risk of burnout (Ashouri, Taleghani & Saburi 2017; Ferri et al. 2015). Given the reported lower levels of empathy in participants in this study who had prior nursing experience, it is likely that

they had previously developed controlled emotional engagement with patients to reduce the emotional labour of their practice and, consequently, lower reported empathy.

Other Tertiary Qualification on Commencement of the Bachelor of Nursing

Studies of empathy and educational level indicate that those with a university education score higher on empathy (Dewaele & Wei 2012). Further, nursing students who had completed a non-nursing degree prior to commencing nursing education were more empathic than nursing students without a prior degree; this was particularly the case for the students who had completed an undergraduate science degree (Ward et al. 2009; Ward 2016).

Participants in the current study who did not hold any prior non-nursing tertiary qualification on commencement of the BN were significantly more empathic at follow-up, as compared to those who had a tertiary educational qualification other than nursing on commencement of their studies. The majority of the participants who held a tertiary qualification other than nursing had a certificate or diploma as opposed to a bachelor's or higher degree. These participants may have undertaken previous studies that had not included educational interventions specifically designed to foster emotional development generally, and empathy development, specifically; however, this is unknown.

Mental Illness in a Family Member

In the current study, empathy increased significantly in participants who did not have a family member with a mental illness. Participants in the current study with a family member who had a mental illness reported lower empathy than those who did not have a family member with a mental illness. The effects on the family, coupled with a lack of understanding, assistance and support from others, help explain these findings.

The participants with a family member who had a mental illness were likely to have experienced supporting, and perhaps caring for, that person, either voluntarily or by necessity. Although there are benefits for the family member and the carer, care-giving is associated with significant negative effects for the carers' health and wellbeing, including emotional, physical, psychological, and social (Bademli, Lok & Kilic 2017;

Chou et al. 2009; Crowe & Brinkley 2015; Diminic et al. 2016; McCann, Blamberg & McCann 2015; Mackay & Pakenham 2012; Perlick et al. 2011; Rowe 2012; Stephens et al. 2011; van der Sanden et al. 2016; Vella & Pai 2013). Where there is a perceived risk of harm to the family member who has the illness or to others, caring is more negatively appraised and causes greater psychological distress and burden in the carer (Katz, Medoff, Fang & Dixon 2015). Further, many families experience loss and grief in reaction to their relative's condition; a bereavement process for the loss of who the person was (Foster 2011; Jones 2004; Richardson et al. 2013; Richardson et al. 2011; Treanor, Lobban & Barrowclough 2013), and can be accompanied by a range of negative feelings (Bademli, Lok & Kilic 2017; Jones 2004; Wasserman, de Mamani, & Suro 2012). In addition, stigma from others towards the person living with a mental illness and their family, can contribute to psychological distress and a reduced quality of life (van der Sanden et al. 2016).

In families who had a relative who experienced a psychosis, the development of a range of strategies to cope with the difficulties and stresses they encountered facilitated the expression of empathy to their relative (Treanor, Lobban & Barrowclough 2013, p207). Understanding by others, including health professionals, of the difficulties families experience supporting a member who has a mental illness, and the assistance they require to cope, is warranted but not necessarily forthcoming (Bademli, Lok & Kilic 2017; Foster 2011; McCann, Blamberg & McCann 2015; Rowe 2012; Stephens et al. 2011; van der Sanden et al. 2016). The findings of this study demonstrating lower empathy in those with a family member who has a mental illness, highlight the importance of developing health professionals' empathy not only for consumers living with a mental illness but also their families, so as to assist them in their supporting or caring roles.

Limitations of the Study

The diversity of participants in the study was limited as they were recruited from undergraduate nursing students in a Bachelor of Nursing program at one large, city university who volunteered to participate. The participants were primarily young, female adults, and for the majority, English was not their mother tongue. The study used a non-randomised design (Leavy 2017), comprising only a group who received the VHS intervention, and whilst measures of empathy and self-efficacy were taken during

three-time periods, pre, post and at follow-up, a control group for comparisons was not included. Additionally, the number of participants at six-month follow-up was considerably lower in comparison to the pre and post stages. There is the possibility that participants who found the VHS useful might have been more likely to respond to the post and follow-up surveys and the focus group interviews, and those who dropped-out may have responded to the VHS in a different way. Additionally, whilst attempts were made to match pre and post surveys to provide complete demographic data, there was missing data from some of the post stage surveys as not all of the participants had completed a pre stage survey. Further, a convenience sample of participants who self-selected to undertake the focus group interviews was used and their responses might not be indicative of the larger sample who participated in the study.

The findings of the study rely on the participants' self-reports of self-efficacy and empathy. The psychometric properties of the scale measuring self-efficacy were unknown prior to its use and the alpha was determined *post hoc*. Social desirability, the preference of presenting the self in a way that is socially or professionally acceptable, could have resulted in response bias in some of the participants (Waltz, Strickland & Lenz 2010). Increases in empathy for, or self-efficacy to communicate with, consumers who hear voices could reflect their willingness to indicate that they were empathic and confident nursing students. Strategies used to reduce the potential for response bias in this study included participant anonymity in the survey responses, open-ended questions in addition to survey questions to increase the depth of examination, and not using a questionnaire format that required 'fixed response alternatives, such as 'true/false' (Waltz, Strickland & Lenz 2010, p. 434). Response bias could also have occurred in relation to the guided reflection component of the VHS, following the simulation component. The discussion that ensued during the participants' reflection could have shaped their responses to the post survey questionnaire, distributed immediately after the VHS concluded.

Despite statistically significant increases in nursing students' self-efficacy and empathy, and self-reports of changes in nursing behaviour when the participants interacted with consumers during their mental health nursing clinical placements, the students' practice was not observed by the researcher nor measured in this study. Specifically, conversations with consumers related to their voice-hearing experiences, and consumers' appraisals of these nursing interactions were not collected, and so there is no evidence that the consumers considered the nursing students to be confident and

empathic. Moreover, the JSE measured cognitive empathy; while this can be considered a limitation, the qualitative data provided insight into emotional empathy.

Recommendations

The use of the VHS for developing and sustaining empathy for and self-efficacy to communicate with consumers who hear voices has implications for the educational preparation and practice of nursing and other health professions students, and future directions for research.

Educational Preparation for Confident and Empathic practice

'Empathy and confidence are the basis on which any effective relationship, understanding and communication can be built' (Ioannidou & Konstantikaki 2008, p. 119). Many consumers acknowledge that examining the causes and effects of their voices are beneficial to their recovery (Corstens et al. 2014), and for some, the opportunity to discuss these experiences with health professionals, including mental health nurses, is considered important (Coffey & Jones 2008; Jones & Shattell 2013; Place et al. 2011; Romme & Morris 2007). Given that nurses talk with consumers about a range of their experiences, then nurses should include voice-hearing experiences in those conversations (Jones & Shattell 2013; Schnackenberg & Martin 2014). To do so, they require the knowledge, skills and confidence to discuss voice-hearing during their therapeutic interactions. This study demonstrated that the VHS significantly enhanced and sustained nursing students' self-efficacy to talk with consumers about voice-hearing by increasing their awareness and understanding and reducing their fears and concerns. Consequently, it developed their confidence to initiate conversation with consumers about voice-hearing experiences during mental health nursing clinical placements, and its inclusion in all undergraduate nursing programs is recommended as essential preparation for practice.

The simulation component of the VHS engendered strong emotional arousal in the participants, allowing them to feel the effects of voice-hearing and contributing to their development of empathy for consumers who hear voices. The experiential learning cycle of the VHS in this study enhanced and sustained nursing students' empathy well after the simulation experience. Given the decline in nursing and other health professions students' empathy, educational approaches that target the development

and sustainment of empathy are warranted (Hojat et al. 2013). Further, as health care services comprise inter-professional teams who work collaboratively and therapeutically with consumers of those services, the merit of incorporating this VHS workshop in the educational preparation of all health professions students to enhance their empathy, is warranted.

As a direct result of the finding that participants identified a need for communication skills development directly related to conversations about voice-hearing, the candidate has now developed a teaching and learning module situated in the subsequent tutorial following the VHS workshop. Students now have the opportunity to view a series of filmed interactions between her and three consumers talking about hearing voices. It demonstrates the ways to approach conversations about voice-hearing experiences and the communication skills required, includes discussions of the impacts, coping strategies and ways nurses can support consumers living with voices. Accompanying the interactions are a series of questions for discussion, followed by in-class, facilitated, role-plays to practise communication skills related to conversations about voice-hearing.

In addition to the above recommendation, a further recommendation is the development of a follow-on workshop in which to practise therapeutic interactions live, with consumers who have experiences of voice-hearing. Before nursing students' scheduled mental health clinical placements, facilitated conversations directly with consumers would more fully develop the communication skills they require for sound practice; specifically, developing rapport, and engaging in conversations about the content, frequency and effects of voices, the coping strategies used, and the support required to live with voices, are recommended.

Additionally, the *Maastricht Hearing Voices Interview* (Romme & Escher 2000) approach to conversations about voice-hearing is relevant for developing graduate nurses' skills to discuss voice hearing experiences with consumers. The Maastricht approach situates voices as having meaning and in reaction to adverse life events, rather than meaningless symptoms of illness, and aims to empower individuals and assist them with coping (Romme & Escher 2000). It is used to gather information related to voice-hearing including: characteristics of the voices, voice content, history of voice-hearing experiences, triggers of voices, explanations of the origins of the voices, the impacts on living, coping strategies, treatment history, and social networks (Romme

& Escher 2000). It has been used by a range of health professionals, including nurses, and it takes a journalistic approach to enquiring about voice-hearing experiences rather than a professional expert approach (Sapey & Bullimore 2013). The feasibility of its inclusion in graduate mental health nursing programs is worthy of consideration and implementation.

Future Directions for Research

The results of the current study were based on a cohort of nursing students from one university only. Future studies should include the use of the VHS with a larger sample of nursing students from several universities and the inclusion of a control group for comparisons.

As this study investigated students' self-reports of empathy and self-efficacy to communicate after the VHS, future studies should include observations of nursing students' therapeutic engagement with consumers who hear voices, including initiating conversations about and responding to consumers' voice-hearing experiences. This would provide deeper insights into the students' behaviour during actual interactions with consumers, including their ability to practice confidently and empathically. Furthermore, it is vital that consumers provide feedback to students whilst on clinical placements regarding their demonstration of empathy (Howick & Rees 2017), and future studies could investigate consumers' reports of nursing students' therapeutic interactions with them regarding, related to their voice-hearing experiences. Specifically, ascertaining whether nursing students initiate conversations with consumers about their voice-hearing experiences and how they respond to those experiences are necessary.

Conclusion

In conclusion, the hypotheses of this study that final year nursing students' self-efficacy and empathy would increase after participation in an experiential voice-hearing simulation workshop (VHS) and be maintained for the following six months were supported. Kolb's (1984) Experiential Learning Cycle that underpinned the VHS was central to the success of this study. The VHS was designed in collaboration with experts who had experience of voice-hearing and who were trained in the use of the simulation. The level of realism of the simulation engendered strong emotional arousal

in the participants. They heard voices, albeit from an Mp3 player and felt the effects; this was central to their development of empathy for consumers who hear voices. The guided reflection component ensured that the participants had time to safely reflect on, and consider the relevance of, their experiences for therapeutic nursing practice, including the communication strategies they might use when talking with consumers about their voice-hearing experiences. The opportunity to develop their practise in the context of their new-found knowledge was borne out for many participants during their interactions with consumers whilst on the scheduled mental health nursing clinical placements.

Nursing students' self-efficacy to communicate with consumers who hear voices increased significantly at all stages of this study. Further, sustaining nursing students' self-efficacy to communicate with people who hear voices has not previously been reported in the literature. Whilst there is evidence that nurses do not routinely discuss voice-hearing experiences with mental health care consumers (Coffey & Hewitt 2008; Jones & Coffey 2012), the VHS in this study provided participants valuable insight into voice-hearing experiences, concomitantly alleviating their concerns and fears, and resulting in increased confidence to talk about voice-hearing experiences with consumers during mental health nursing clinical placements and in their future nursing practice.

Empathy is noted to decline in health professions students as their clinical practice experience increases (Hojat et al. 2004; Neumann et al. 2011; Nunes et al. 2011; Ward et al. 2012; Wilson, Prescott & Becket 2012). This study of the use of an experiential VHS demonstrated increased empathy in participants at all stages, with significant increase at six-month follow-up, at the completion of the participants' final year of the BN. This was particularly the case for females, those for whom English is a second language, those without a previous nursing qualification or any other educational qualification, and in those who do not have a family member with a mental illness. The findings are encouraging and in contrast to the only other study of VHS and sustainability of empathy in nursing students that reported decreased empathy at four-week follow-up (Sideras et al. 2015).

Given its utility for empathic and confident practice, the VHS should be included in the educational preparation of all health professions students.

APPENDICES

Appendix A: Participant Information Sheet

PO Box 123
Broadway NSW 2007 Australia
e: rio@uts.edu.au



Human Research Ethics Committee
Research Innovation Office
Level 14, Tower Building
15 Broadway
Ultimo, NSW 2007
Tel +61 2 9514 9681 Fax +61 2 9514 1244

Participant Information Sheet

Listening to voices: The use of a voice-hearing simulation to increase nursing students' empathy for and therapeutic engagement with mental health consumers who hear voices.

PhD Candidate: Ms Fiona Orr

Supervisors: Professor Jane Stein-Parbury and Dr Michael Roche

You are invited to participate in a study conducted by a doctoral student and academic supervisors from the University of Technology, Sydney, Faculty of Health. We are interested in measuring nursing students' empathy for and self-efficacy to communicate with consumers who hear voices.

What does the study involve? Prior to the scheduled learning activity, the Hearing Voices Simulation Workshop, you will be invited to complete a survey about empathy, self-efficacy to communicate and a standard set of questions about you and your professional background (e.g. age, gender, previous years of experience in nursing). The survey will be completed in the lecture room.

After the Hearing Voices Simulation Workshop, you will be invited to complete the survey again in the tutorial room and you will also be asked to complete the survey after your mental health nursing clinical placement.

You will also be invited to participate in an audio-recorded focus group after your mental health clinical placement to discuss your experiences of talking with consumers who hear voices. A tutorial room will be booked for this purpose.

How much time will the study take? The surveys will take approximately 10 minutes to complete on each occasion.

The focus group will be conducted for 1.5 hours and will be audio-recorded.

Will the study benefit me? Information gained from research participants will provide insight into the development of empathy and communication through the use of a Hearing Voices Simulation. Participants can have access their empathy and self-efficacy scores.

Will the study involve any discomfort for me? It is unlikely that the completion of the survey will involve any discomfort to you. If you participate in the focus group there is a slight chance that you might feel embarrassed or uncomfortable. The focus group will be co-facilitated by the candidate's supervisor who is a mental health nurse. If you require support, as a result of participation in the focus group, assistance will be sought from the University's Counseling Service.

Will anyone else know the results? How will the results be disseminated? All aspects of the study, including results, will be confidential. Participants' student ID numbers will be converted to a code and thus be de-identified. Only the PhD candidate and her supervisors will have access to the de-identified data obtained from the study. Results from the study will be disseminated through articles in peer reviewed journals and conference presentations. Participants will not be identified in any presentations or publications. The privacy and anonymity of all participants will be maintained at all stages of the study.

Can I withdraw from the study?

Participation in the study is completely voluntary and you may withdraw at any stage. There is no penalty for refusing to undertake the study.

Can I tell other people about the study?

Yes, you can tell other people enrolled in the subject Complex Nursing Care - Mental Health (92316) about the study by providing them with the chief investigator's contact details.

What if I require further information?

If you require further information, the Academic Supervisor of this study would be very happy to discuss with you any aspect of the study or to answer your questions. Her contact details are listed below:

Professor Jane Stein-Parbury

T: 0418 287 241E: Jane.Stein-Parbury @uts.edu.au

What if I have concerns or a complaint?

NOTE: This study has been approved by the University of Technology, Sydney Human Research Ethics Committee. If you have any complaints or reservations about any aspect of your participation in this research which you cannot resolve with the researcher, you may contact the Ethics Committee through the Research Ethics Officer, (ph: 02 – 9514 9772 , Research.Ethics@uts.edu.au), and quote the UTS HREC reference number. Any complaint you make will be treated in confidence and investigated fully and you will be informed of the outcome.

(UTS HREC Approval Number 2012- 444A)

Appendix B: Participant Consent Form

PO Box 123
Broadway NSW 2007 Australia
e: rio@uts.edu.au



Human Research Ethics Committee
Research Innovation Office
Level 14, Tower Building
15 Broadway
Ultimo, NSW 2007
Tel +61 2 9514 9681 Fax +61 2 9514 1244

Participant Consent Form

I consent to participate in the research project titled:

Listening to voices: The use of a voice-hearing simulation to increase nursing students' empathy for and therapeutic engagement with mental health consumers who hear voices. (UTS HREC Approval Number 2012-444A)

I acknowledge that:

I have read the participant information sheet and have been given the opportunity to discuss the information and my involvement in the project with the researcher/s.

The procedures required for the project and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction.

I understand that my participation in this research will involve completing a survey before and immediately after participating in a voice-hearing simulation workshop, and again after completion of the mental health nursing clinical placement.

The survey data will be de-identified and stored securely. Access to the data is only available to the student researcher, Fiona Orr and her supervisors, Professor Jane Stein-Parbury and Dr Michael Roche, and the data will be destroyed five years after publication.

I understand that my involvement is voluntary and confidential, that the information gained during the study may be published, but no information about me will be used in any way that reveals my identity.

I understand that I can withdraw from the study at any time, without affecting my subject results, progression in the BN program, or relationship with the researcher now or in the future.

I consent to participate in this research (please circle). Yes No

Student ID Number: _____

Name: (please print) _____

Signature: _____ Date: _____

I would like to be contacted to participate in the focus group to be conducted after the Complex Nursing Care - Mental Health clinical placement (please circle).

Yes No

Contact details if you would like to participate in the focus group:

mobile phone number _____ email address _____

Appendix C: Survey Instruments

Hearing Voices Simulation Survey

PRE SIMULATION SURVEY



Listening to voices: The use of a voice-hearing simulation to increase nursing students' empathy for and therapeutic engagement with mental health consumers who hear voices. (UTS HREC Approval Number: 2012- 444A)

This survey is about empathy, self-efficacy to communicate and a standard set of questions about you and your professional background (e.g. age, gender, previous years of experience in nursing).

The survey will take approximately ten minutes to complete.

All aspects of the study, including results, will be confidential. Your student identification number is required so that comparisons can be made between each of your survey responses. Participants' student ID numbers will be converted to a code and thus be de-identified. Only the PhD candidate and her supervisors will have access to the de-identified data obtained from the study.

Hearing Voices Simulation Survey



PRE SIMULATION SURVEY

Please use a pen to answer the following questions, and please provide one response only for each question.

Student ID number:

Age (years):

Gender:

Female

Male

Is English your First Language?

Yes

No

Highest Nursing qualification:

No qualification

AIN Certificate

EN Certificate

RN Overseas trained

Years of experience working as a nurse:

Years of experience working as a nurse in a mental health setting:

Highest non-nursing qualification:

No qualification

Certificate

Diploma

Bachelor's Degree

Graduate Certificate

Graduate Diploma

Master's Degree

Number of health care consumers you have worked with who hear voices:

Do you have a family member who has experienced a mental illness: Yes
 No

Do you have a family member who has a mental illness and hears voices: Yes
 No

8th April 2013 Hearing Voices Simulation Survey V1 Page 139 of 5

Hearing Voices Simulation Survey



PRE SIMULATION SURVEY

Self-efficacy to Communicate with Mental Health Consumers Who Hear Voices Questionnaire

Instructions: Using a pen, please rate how confident you feel in using the listed communication skills, by marking the appropriate circle on the scale to the right of the question. Please use the following 10-point scale (a higher number on the scale indicates more confidence): Mark **one response only** for each question.

1-----2-----3-----4-----5-----6-----7-----8-----9-----10

Not at all confident Totally confident

How confident do you feel about:	1	2	3	4	5	6	7	8	9	10
talking to consumers who hear voices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
talking to consumers about their voice-hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
understanding consumers' experiences of voice-hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
empathising with consumers who hear voices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
supporting consumers who hear voices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
accepting consumers' understandings of their voice hearing experiences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
encouraging consumers to talk about their feelings related to voice hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
talking to health professionals about consumers' experiences of voice hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(from: Ammentorp, J, Sabroe, S, Kofoed, P-E & Mainz, J. 2007, The effect of training in communication skills on medical doctors' and nurses' self-efficacy: A randomized controlled trial. *Patient Education and Counseling*, 66, pp 270-277.)



Jefferson Scale of Empathy

Health Professions Student version (HPS-version)

Instructions: Using a ball-point pen, please indicate the extent of your agreement or disagreement with *each* of the following statements by marking the appropriate circle to the right of each statement.

Please use the following 7-point scale (*a higher number on the scale indicates more agreement*):
Mark one and only one response for each statement.

1-----2-----3-----4-----5-----6-----7
Strongly Disagree Strongly Agree

- | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1. Health care providers' understanding of their patients' feelings and the feelings of their patients' families does not influence treatment outcomes. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. Patients feel better when their health care providers understand their feelings. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3. It is difficult for a health care provider to view things from patients' perspectives. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4. Understanding body language is as important as verbal communication in health care provider - patient relationships. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5. A health care provider's sense of humor contributes to a better clinical outcome. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6. Because people are different, it is difficult to see things from patients' perspectives. ... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7. Attention to patients' emotions is not important in patient interview. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8. Attentiveness to patients' personal experiences does not influence treatment outcomes. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9. Health care providers should try to stand in their patients' shoes when providing care to them. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10. Patients value a health care provider's understanding of their feelings which is therapeutic in its own right. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 11. Patients' illnesses can be cured only by targeted treatment; therefore, health care providers' emotional ties with their patients do not have a significant influence in treatment outcomes. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 12. Asking patients about what is happening in their personal lives is not helpful in understanding their physical complaints. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 13. Health care providers should try to understand what is going on in their patients' minds by paying attention to their non-verbal cues and body language. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 14. I believe that emotion has no place in the treatment of medical illness. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 15. Empathy is a therapeutic skill without which a health care provider's success is limited. . | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 16. Health care providers' understanding of the emotional status of their patients, as well as that of their families is one important component of the health care provider - patient relationship. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 17. Health care providers should try to think like their patients in order to render better care. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18. Health care providers should not allow themselves to be influenced by strong personal bonds between their patients and their family members. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 19. I do not enjoy reading non-medical literature or the arts. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 20. I believe that empathy is an important factor in patients' treatment. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

THANK YOU!

Hearing Voices Simulation Survey

PRE SIMULATION SURVEY



Talking to people who hear voices is not an everyday occurrence. What concerns, if any, do you have about talking to mental health consumers who hear voices?

THANK YOU FOR COMPLETING THIS SURVEY

Hearing Voices Simulation Survey
POST SIMULATION SURVEY



Student ID number:

Self-efficacy to Communicate with Mental Health Consumers Who Hear Voices Questionnaire
Instructions: Using a pen, please rate how confident you feel in using the listed communication skills, by marking the appropriate circle on the scale to the right of the question. Please use the following 10-point scale (a higher number on the scale indicates more confidence): Mark **one response only** for each question.

1-----2-----3-----4-----5-----6-----7-----8-----9-----10

Not at all confident Totally confident

How confident do you feel about:	1	2	3	4	5	6	7	8	9	10
talking to consumers who hear voices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
talking to consumers about their voice-hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
understanding consumers' experiences of voice-hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
empathising with consumers who hear voices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
supporting consumers who hear voices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
accepting consumers' understandings of their voice hearing experiences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
encouraging consumers to talk about their feelings related to voice hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
talking to health professionals about consumers' experiences of voice hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(from: Ammentorp, J, Sabroe, S, Kofoed, P-E & Mainz, J. 2007, The effect of training in communication skills on medical doctors' and nurses' self-efficacy: A randomized controlled trial. *Patient Education and Counseling*, 66, pp 270-277.)

Hearing Voices Simulation Survey
POST SIMULATION SURVEY



Jefferson Scale of Empathy

Health Professions Student version (HPS-version)

Instructions: Using a ball-point pen, please indicate the extent of your agreement or disagreement with *each* of the following statements by marking the appropriate circle to the right of each statement.

Please use the following 7-point scale (*a higher number on the scale indicates more agreement*):
 Mark one and only one response for each statement.

1-----2-----3-----4-----5-----6-----7
Strongly Disagree *Strongly Agree*

- | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1. Health care providers' understanding of their patients' feelings and the feelings of their patients' families does not influence treatment outcomes. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. Patients feel better when their health care providers understand their feelings. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3. It is difficult for a health care provider to view things from patients' perspectives. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4. Understanding body language is as important as verbal communication in health care provider - patient relationships. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5. A health care provider's sense of humor contributes to a better clinical outcome. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6. Because people are different, it is difficult to see things from patients' perspectives. ... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7. Attention to patients' emotions is not important in patient interview. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8. Attentiveness to patients' personal experiences does not influence treatment outcomes. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9. Health care providers should try to stand in their patients' shoes when providing care to them. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10. Patients value a health care provider's understanding of their feelings which is therapeutic in its own right. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 11. Patients' illnesses can be cured only by targeted treatment; therefore, health care providers' emotional ties with their patients do not have a significant influence in treatment outcomes. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 12. Asking patients about what is happening in their personal lives is not helpful in understanding their physical complaints. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 13. Health care providers should try to understand what is going on in their patients' minds by paying attention to their non-verbal cues and body language. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 14. I believe that emotion has no place in the treatment of medical illness. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 15. Empathy is a therapeutic skill without which a health care provider's success is limited. . | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 16. Health care providers' understanding of the emotional status of their patients, as well as that of their families is one important component of the health care provider - patient relationship. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 17. Health care providers should try to think like their patients in order to render better care. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18. Health care providers should not allow themselves to be influenced by strong personal bonds between their patients and their family members. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 19. I do not enjoy reading non-medical literature or the arts. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 20. I believe that empathy is an important factor in patients' treatment. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

THANK YOU!

Hearing Voices Simulation Survey

POST SIMULATION SURVEY



4. Talking to people who hear voices is not an everyday occurrence. What concerns, if any, do you have about talking to mental health consumers who hear voices?

5. Please add any other comments you have about the Hearing Voices Simulation, empathy and confidence to communicate with consumers who hear voices

THANK YOU FOR COMPLETING THIS SURVEY

8th April 2013 Hearing Voices Simulation Survey V1 Page 145 of 3

Hearing Voices Simulation Survey

FOLLOW UP SURVEY



Listening to voices: The use of a voice-hearing simulation to increase nursing students' empathy for and therapeutic engagement with mental health consumers who hear voices.
(UTS HREC Approval Number: 2012- 444A)

This survey is about empathy and self-efficacy to communicate and it will take approximately ten minutes to complete.

All aspects of the study, including results, will be confidential. Your student identification number is required so that comparisons can be made between each of your survey responses. Participants' student ID numbers will be converted to a code and thus be de-identified. Only the PhD candidate and her supervisors will have access to the de-identified data obtained from the study.

Hearing Voices Simulation Survey

FOLLOW UP SURVEY



Student ID number:

Self-efficacy to Communicate with Mental Health Consumers Who Hear Voices Questionnaire

Instructions: Using a pen, please rate how confident you feel in using the listed communication skills, by marking the appropriate circle on the scale to the right of the question.

Please use the following 10-point scale (a higher number on the scale indicates more confidence): Mark **one response only** for each question.

1-----2-----3-----4-----5-----6-----7-----8-----9-----10

Not at all confident Totally confident

How confident do you feel about:	1	2	3	4	5	6	7	8	9	10
talking to consumers who hear voices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
talking to consumers about their voice-hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
understanding consumers' experiences of voice-hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
empathising with consumers who hear voices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
supporting consumers who hear voices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
accepting consumers' understandings of their voice hearing experiences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
encouraging consumers to talk about their feelings related to voice hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
talking to health professionals about consumers' experiences of voice hearing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(from: Ammentorp, J, Sabroe, S, Kofoed, P-E & Mainz, J. 2007, The effect of training in communication skills on medical doctors' and nurses' self-efficacy: A randomized controlled trial. *Patient Education and Counseling*, 66, pp 270-277.)

4th November 2013 Hearing Voices Simulation Survey V1 Page 147 of 4

Hearing Voices Simulation Survey
FOLLOW UP SURVEY



Jefferson Scale of Empathy

Health Professions Student version (HPS-version)

Instructions: Using a ball-point pen, please indicate the extent of your agreement or disagreement with *each* of the following statements by marking the appropriate circle to the right of each statement.

Please use the following 7-point scale (*a higher number on the scale indicates more agreement*):
 Mark one and only one response for each statement.

1-----2-----3-----4-----5-----6-----7
Strongly Disagree *Strongly Agree*

- | | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1. Health care providers' understanding of their patients' feelings and the feelings of their patients' families does not influence treatment outcomes. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. Patients feel better when their health care providers understand their feelings. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3. It is difficult for a health care provider to view things from patients' perspectives. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4. Understanding body language is as important as verbal communication in health care provider - patient relationships. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5. A health care provider's sense of humor contributes to a better clinical outcome. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6. Because people are different, it is difficult to see things from patients' perspectives. ... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7. Attention to patients' emotions is not important in patient interview. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8. Attentiveness to patients' personal experiences does not influence treatment outcomes. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9. Health care providers should try to stand in their patients' shoes when providing care to them. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10. Patients value a health care provider's understanding of their feelings which is therapeutic in its own right. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 11. Patients' illnesses can be cured only by targeted treatment; therefore, health care providers' emotional ties with their patients do not have a significant influence in treatment outcomes. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 12. Asking patients about what is happening in their personal lives is not helpful in understanding their physical complaints. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 13. Health care providers should try to understand what is going on in their patients' minds by paying attention to their non-verbal cues and body language. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 14. I believe that emotion has no place in the treatment of medical illness. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 15. Empathy is a therapeutic skill without which a health care provider's success is limited. . | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 16. Health care providers' understanding of the emotional status of their patients, as well as that of their families is one important component of the health care provider - patient relationship. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 17. Health care providers should try to think like their patients in order to render better care. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 18. Health care providers should not allow themselves to be influenced by strong personal bonds between their patients and their family members. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 19. I do not enjoy reading non-medical literature or the arts. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 20. I believe that empathy is an important factor in patients' treatment. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

THANK YOU!

Hearing Voices Simulation Survey

FOLLOW UP SURVEY



4. Talking to people who hear voices is not an everyday occurrence. What concerns, if any, do you have about talking to mental health consumers who hear voices?

5. Please add any other comments you have about the Hearing Voices Simulation empathy or confidence to communicate with consumers who hear voices.

THANK YOU FOR COMPLETING THIS SURVEY

4th November 2013 Hearing Voices Simulation Survey V1 Page 149 of 4

Appendix D: Approval to Use Jefferson Scale of Empathy: Health Professions Students Version (JSE – HPS version)

From: Sandra Maxwell [Sandra.Maxwell@jefferson.edu]
Sent: Wednesday, 19 December 2012 4:21 AM
To: Fiona Orr
Cc: Mohammadreza Hojat
Subject: RE: Request to use JSPE -R scale for PhD study

Dear Fiona,

Thank you for the explanation of your research study. I did receive the email from your sponsor.

With your agreement to all conditions stated in our previous emails, you have our permission to use the JSE -HPS version for the single not-for-profit study you have described. I have attached a copy of the scale, the User's Guide and the scoring algorithm.

We wish you luck with your research! Please keep us informed of your progress. I look forward to your results.

Kaye

Kaye Maxwell
Empathy Projects
Center for Research

Appendix E: Participant Consent Form - Focus group

PO Box 123
Broadway NSW 2007 Australia
e: rio@uts.edu.au



Human Research Ethics Committee
Research Innovation Office
Level 14, Tower Building
15 Broadway
Ultimo, NSW 2007
Tel +61 2 9514 9681 Fax +61 2 9514 1244

Participant Consent Form – Focus Group

I consent to participate in the research project titled:

Listening to voices: The use of a voice-hearing simulation to increase nursing students' empathy for and therapeutic engagement with mental health consumers who hear voices (UTS HREC Approval Number)

I acknowledge that:

I have read the participant information sheet and have been given the opportunity to discuss the information and my involvement in the project with the researcher/s.

I understand that the purpose of this study is to gain an understanding of nursing students' experiences of communicating with consumers who hear voices whilst on a mental health nursing clinical placement.

I understand that my participation in this research will involve discussion in a focus group for approximately 1.5 hours and the discussion will be audio-recorded. The audio-recording will be transcribed and all data will be stored securely. Access to the data is only available to the student researcher, Fiona Orr and her supervisors, Professor Jane Stein-Parbury and Dr Michael Roche, and the data will be destroyed five years after publication.

The procedures required for the project and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction. I understand that I might feel embarrassed or uncomfortable participating in the focus group and if I require support, the University's Counseling Service is available to me.

I understand that my involvement is voluntary and confidential and that the information gained during the study may be published but no information about me will be used in any way that reveals my identity.

I understand that I can withdraw from the study at any time, without affecting my subject results or relationship with the researcher now or in the future.

I consent to participate in this research (please circle).

Yes No

Student ID Number: _____

Name: (please print) _____

Signature: _____ Date: _____

Appendix F: Focus Group Schedule

I am going to ask you a series of questions related to your experiences of the Voice Hearing Simulation and your interactions with consumers during your recent mental health nursing clinical placement.

- What do you remember most about the Voice Hearing Simulation in the subject, Complex Nursing Care Mental Health?
- Considering the mental health nursing subject you recently completed, how prepared were you for discussions about voice-hearing with consumers?
- During your recent mental health placement, did you talk with any consumers who hear voices?
- Tell me about any conversations you had with consumers about their voice-hearing experiences.
- Did you initiate any conversations about voice-hearing experiences with consumers, and if so, how did you go about it?
- Tell me what consumers wanted to discuss with you in regard to their voice-hearing.
- How did you feel when you asked consumers about their voice-hearing experiences?
- If you didn't initiate any conversations about voice-hearing, what were the reasons for this?
- Are there any ways in which you could have been further prepared to discuss voice-hearing experiences with consumers?

Appendix G: Ethics Approval

From: Ethics Secretariat [Research.Ethics@uts.edu.au]
Sent: Friday, 21 December 2012 6:09 PM
To: Jane Stein-Parbury
Cc: Fiona Orr; Research Ethics
Subject: Eth: HREC Approval Letter - UTS HREC 2012-444A

Dear Jane and Fiona,

Thank you for your response to the Committee's comments for your project titled, "Listening to voices: The use of a voice-hearing simulation to increase nursing students' empathy for and therapeutic engagement with mental health consumers who hear voices.". Your response satisfactorily addresses the concerns and questions raised by the Committee, and I am pleased to inform you that ethics approval is now granted.

Your approval number is UTS HREC REF NO. 2012-444A

You should consider this your official letter of approval. If you require a hardcopy please contact the Research Ethics Officer (Research.Ethics@uts.edu.au).

Please note that the ethical conduct of research is an on-going process. The National Statement on Ethical Conduct in Research Involving Humans requires us to obtain a report about the progress of the research, and in particular about any changes to the research which may have ethical implications. This report form must be completed at least annually, and at the end of the project (if it takes more than a year). The Ethics Secretariat will contact you when it is time to complete your first report.

I also refer you to the AVCC guidelines relating to the storage of data, which require that data be kept for a minimum of 5 years after publication of research. However, in NSW, longer retention requirements are required for research on human subjects with potential long-term effects, research with long-term environmental effects, or research considered of national or international significance, importance, or controversy. If the data from this research project falls into one of these categories, contact University Records for advice on long-term retention.

If you have any queries about your ethics approval, or require any amendments to your research in the future, please do not hesitate to contact the Ethics Secretariat at the Research and Innovation Office, on 02 9514 9772.

Yours sincerely,

Professor Marion Haas
Chairperson
UTS Human Research Ethics Committee

C/- Research & Innovation Office
University of Technology, Sydney
Level 14, Tower Building
Broadway NSW 2007
Ph: 02 9514 9772
Fax: 02 9514 1244
Web: <http://www.research.uts.edu.au/policies/restricted/ethics.htm>

Appendix H: Participant Demographics

	Pre-stage (n=370)		Post-stage (n=344)		Follow-up (n=69)		Overall	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Age	25.3	7.69	26.2	6.89	27	7.6	25.7	7.4
Years working as a nurse	1.46	2.67	1.1	2.38	1.1	2.19	1.3	2.53
	N	%	N	%	N	%	N	%
Gender								
Female	316	85.4%	223	84.8%	51	89.5%	590	85.5%
Male	54	14.6%	40	15.2%	6	10.5%	100	14.5%
English As First Language	173	46.7%	117	34.0%	24	34.8%	314	45.5%
Nursing Qualifications								
No qualification	199	54.1%	145	55.8%	33	57.9%	377	55.0%
AIN Certificate	82	22.3%	60	23.1%	12	21.1%	154	22.2%
EN Certificate	60	16.3%	39	15.0%	8	14.0%	107	16.0%
RN Overseas trained	27	7.3%	16	6.2%	4	7.0%	47	6.8%
Non-nursing Qualifications								
No qualification	114	31.1%	72	28.1%	17	30.4%	203	29.5%
Certificate	96	26.2%	67	26.2%	7	12.5%	170	25.0%
Diploma	73	19.9%	58	22.7%	15	26.8%	146	21.1%
Bachelor's Degree	61	16.7%	40	15.6%	13	23.2%	114	17.0%
Graduate Certificate	5	1.4%	5	2.0%	1	1.8%	11	1.6%
Graduate Diploma	8	2.2%	8	3.1%	1	1.8%	17	2.5%
Master's Degree	9	2.5%	6	2.3%	2	3.6%	17	2.5%
Family Mental illness								
Family member has experienced a mental illness	125	33.7%	89	25.9%	23	31.5%	237	34.3%
Family member has a mental illness and hears voices	25	6.7%	20	5.8%	6	8.1%	51	7.4%

Note: Different amounts of missing data per variable

BIBLIOGRAPHY

- Access Economics. 2009, *The economic impact of youth mental illness and the cost effectiveness of early intervention*, Access Economics, Canberra.
- Ahrweiler, F., Neumann, M., Goldblatt, H., Hahn, E.G. & Scheffer, C. 2014, 'Determinants of physician empathy during medical education: Hypothetical conclusions from an exploratory qualitative survey of practicing physicians', *BMC Medical Education*, vol. 14, no. 122, viewed 4 April 2016, <http://dx.doi.org/10.1186/1472-6920-14-122>
- American Psychiatric Association (APA). 1987, *Diagnostic and statistical manual of mental disorders, DSM III-R*, 3rd edn, revised, APA, Washington.
- American Psychiatric Association (APA). 1994, *Diagnostic and statistical manual of mental disorders, DSM IV*, 4th edn, APA, Washington.
- American Psychiatric Association (APA). 2000, *Diagnostic and statistical manual of mental disorders, DSM IV-TR*, 4th edn, text revision, APA, Washington.
- American Psychiatric Association (APA). 2013, *Diagnostic and statistical manual of mental disorders, DSM V*, 5th edn, APA, Washington.
- Ammentorp, J. & Kofoed, P.E. 2010, 'Coach training can improve the self-efficacy of neonatal nurses. A pilot study', *Patient Education and Counseling*, vol. 79, no. 2, pp. 258-261.
- Ammentorp, J., Sabroe, A., Kofoed, P.E. & Mainz, J. 2007, 'The effect of training in communication skills on medical doctors' and nurses' self-efficacy: A randomised controlled trial', *Patient Education and Counseling*, vol. 66, no. 3, pp. 270-277.
- Ashouri, E., Taleghani, F. & Saburi, M. 2017, 'Empathy, burnout, demographic variables and their relationships in oncology nurses', *Iranian Journal of Nursing and Midwifery Research*, vol. 22, no. 1, pp. 41-45.
- Austin, E.J., Evans, P., Magnus, B. & O'Hanlan, K. 2007, 'A preliminary study of empathy, emotional intelligence and examination performance in MBChB students', *Medical Education*, vol. 41, no. 7, pp. 684-689.
- Australian Institute of Health and Welfare. 2007, *Young Australians: Their health and wellbeing 2007*, Cat. no. PHE 87, AIHW, Canberra.
- Avdi, E., Barson, P. & Rischin, I. 2008, 'Empathic communication skills in CALD medical students interviews', *Prospect*, vol. 23, no. 3, pp. 4-11.

- Bademli, K., Lok, N. & Kilic, A.K. 2017, 'Relationship between caregiving burden and anger level in primary caregivers of individuals with chronic mental illness', *Archives of Psychiatric Nursing*, vol. 31, no. 3, pp. 263-268.
- Bandura, A. 1977a, 'Self-efficacy: Toward a unifying theory of behavioral change', *Psychological Review*, vol. 84, no. 2, pp. 191-215.
- Bandura, A. 1977b, *Social learning theory*, Prentice Hall, Englewood Cliffs.
- Bandura, A. 1997, *Self-efficacy: The exercise of control*, W.H. Freeman and Company, New York.
- Bandura, A. 2001, 'Social cognitive theory: An agentic perspective', *Annual Review of Psychology*, vol. 52, no.1, pp. 1-26.
- Bandura, A. 2003, 'Negative self-efficacy and goal effects revisited', *Journal of Applied Psychology*, vol. 88, no. 1, pp. 87-99.
- Bandura, A. 2006, 'Guide to the construction of self-efficacy scales', in F. Pajares & T. Urdan (eds), *Self-efficacy beliefs of adolescents*, Information Age Publishing, Greenwich, pp. 307-337.
- Baron-Cohen, S. 2003, *The essential difference: Male and female brains and the truth about autism*, Basic Books, New York.
- Bauer, S., Shanda, H., Karakula, H., Olajossy-Hilkesberger, L., Rudaleviciene, P., Okribelashvili, N., Chaudhry, H., Idemudia, S., Gscheider, S., Ritter, K. & Stompe, T. 2011, 'Culture and the prevalence of hallucinations in schizophrenia', *Comprehensive Psychiatry*, vol. 52, no. 3, pp 319-325.
- Bazeley, P. 2013, *Qualitative data analysis. Practical strategies*, SAGE Publications, London.
- Bearman, M., Palermo, C., Allen, L.M. & Williams, B. 2015, 'Learning empathy through simulation: A systematic review', *Simulation in Healthcare*, vol. 10, no. 5, pp. 308-319.
- Beavan, V. 2007, *Angels at our tables: New Zealanders' experiences of hearing voices*, PhD thesis, University of Auckland, New Zealand.
- Beavan, V. 2011, 'Towards a definition of "hearing voices": A phenomenological approach', *Psychosis*, vol. 3, no.1, pp. 63-73.
- Beavan, V., de Jager, A. & Dos Santos, B. 2017, 'Do peer-support groups for voice-hearers work? A small scale study of Hearing Voices Network support groups in Australia', *Psychosis*, vol. 9, no.1, pp. 57-66.
- Beavan, V. & Read, J. 2010, 'Hearing voices and listening to what they say: The importance of voice content', *Journal of Nervous and Mental Disease*, vol.198, no. 3, pp. 201-205.

- Beavan, V., Read, J. & Cartwright, C. 2011, 'The prevalence of voice-hearers in the general population: A literature review', *Journal of Mental Health*, vol. 20, no.3, pp. 281-292.
- Bengtsson, M. 2016, 'How to plan and perform a qualitative study using content analysis', *Nursing Plus Open*, vol. 2, pp. 8-14.
- Berg, K., Majdan, J.F., Berg, D., Veloski, J. & Hojat, M. 2011, 'A comparison of medical students' self-reported empathy with simulated patients' assessments of the students' empathy', *Medical Teacher*, vol. 33, no. 5, pp. 388-391.
- Bosher, S. & Smalkovski, K. 2002, 'From needs analysis to curriculum development: Designing a course for health care communication for immigrant students in the USA', *English for Specific Purposes*, vol. 21, no. 1, pp. 59-79.
- Bosse, H.M., Schultz, J., Nickel, M., Lutz, T., Möltner, A., Jünger, J., Huwendiek, S. & Nikendei, C. 2012, 'The effect of using standardized patients or peer role play on ratings of undergraduate communication training: A randomized controlled trial', *Patient Education and Counseling*, vol. 87, no. 3, pp. 300-306.
- Brown, A. 2015, 'Simulation in undergraduate mental health nursing education: A literature review', *Clinical Simulation in Nursing*, vol.11, no. 4, pp. 445-449.
- Brown, B. 2010, 'Descriptive statistics', in N. Salkind (ed.), *Encyclopedia of research design*, SAGE Publications, Thousand Oaks, pp. 353-360, viewed 6 June 2014, <http://dx.doi.org/10.4135/9781412961288.n111>
- Brown, S.A. 2008, 'Emotional reactions to simulations of auditory hallucinations', *Journal of Psychopathology and Behavioral Assessment*, vol. 30, no. 4, pp. 307-314.
- Brugel, S., Postma-Nilsenova, M. & Tates, K. 2015, 'The link between perception of clinical empathy and nonverbal behavior: The effect of a doctor's gaze and body orientation', *Patient Education and Counseling*, vol. 8, no.10, pp. 1260-1265.
- Bunn, W. & Terpstra, J. 2009, 'Cultivating empathy for the mentally ill using simulated auditory hallucinations', *Academic Psychiatry*, vol. 33, no. 6, pp. 457- 460.
- Chaffin, A.J. & Adams, C. 2013, 'Creating empathy through the use of a hearing voices simulation', *Clinical Simulation in Nursing*, vol. 9, no. 8, pp. e293-e304.
- Chisolm, D. 2006, *Dollars, DALYs and decisions: Economic aspects of the mental health system*, WHO, Geneva.
- Chou, Y.C., Pu, C.Y., Lee, Y.C., Lin, L.C. & Kröger, T. 2009, 'Effect of perceived stigmatization on the quality of life among ageing female family carers: A comparison of carers of adults with intellectual disability and carers of adults

- with mental illness', *Journal of Intellectual Disability Research*, vol. 53, no. 7, pp. 654-664.
- Coffey, M. & Hewitt, J. 2008, 'You don't talk about the voices: Voice hearers and community mental health nurses talk about responding to voice hearing experiences', *Journal of Clinical Nursing*, vol.17, no.12, pp. 1591-1600.
- Coffey, M., Higgon, J. & Kinnear, J. 2004, 'Therapy as well as tablets': An exploratory study of service users' views of community mental health nurses' (CMHNs) responses to hearing voices', *Journal of Psychiatric and Mental Health Nursing*, vol. 11, no. 4, pp. 435-444.
- Coolican, H. 2014, *Research methods and statistics in psychology*, 6th edn, Taylor & Frances, East Sussex.
- Copolov, D.L., Mackinnon, A. & Trauer, T. 2004, 'Correlates of the affective impact of auditory hallucinations in psychotic disorders', *Schizophrenia Bulletin*, vol. 30, no.1, pp.163-171.
- Corstens, D., Longden, E. & May, R. 2012, 'Talking with voices: Exploring what is expressed by the voices people hear', *Psychosis*, vol. 4, no. 2, pp. 95-104.
- Corstens, D., Longden, E., McCarthy-Jones, S., Waddingham, R. & Thomas, N. 2014, 'Emerging perspectives from the hearing voices movement: Implications for research and practice', *Schizophrenia Bulletin*, vol. 40, no. 14, pp. S285-S294.
- Cowley, T., Sumskis, S., Moxham, L., Taylor, E., Brighton, R., Patterson, C. & Halcomb, E. 2016, 'Evaluation of undergraduate nursing students' clinical confidence following a mental health recovery camp', *International Journal of Mental Health Nursing*, vol. 25, no. 1, pp. 33-41.
- Creswell, J. & Plano Clark, V.L. 2011, *Designing and conducting mixed methods research*, 2nd edn, SAGE Publications, Thousand Oaks.
- Creswell, J.W. 2003, *Research design: Qualitative, Quantitative, and Mixed Methods Approaches*, 2nd edn, SAGE, Thousand Oaks.
- Crowe, A. & Brinkley, J. 2015, 'Distress in caregivers of a family member with serious mental illness', *The Family Journal*, vol. 23, no. 3, pp. 286 – 294.
- Cruz, L. 2015, 'Self-reflexivity as an ethical instrument to give full play to our explicit and implicit subjectivity as qualitative researchers', *The Qualitative Report*, vol. 20, no. 10, pp. 1723-1735.
- Cunico, L., Sartori, R., Marognolli, O. & Meneghini, A. 2012, 'Developing empathy in nursing students: A cohort longitudinal study', *Journal of Clinical Nursing*, vol. 21, no. 13-14, pp. 2016-2025.
- Dearing, K. & Steadman, S. 2008, 'Challenging stereotype and bias: A voice simulation study', *Journal of Nursing Education*, vol. 47, no. 2, pp. 59-66.

- Dearing, K. & Steadman, S. 2009, 'Enhancing intellectual empathy: The lived experience of voice simulation', *Perspectives in Psychiatric Care*, vol. 45, no. 3, pp. 173-182.
- Deegan, P. 2006, *Hearing voices curriculum. Complete training and curriculum package*, National Empowerment Centre Store, viewed 2 April 2012, <http://www.power2u.org/mm5/merchant.mvc>
- de Jager, A., Rhodes, P., Beavan, V., Holmes, D., McCabe, K., Thomas, N., McCarthy-Jones, S., Lampshire, D. & Hayward, M. 2016, 'Investigating the lived experience of recovery in people who hear voices', *Qualitative Health Research*, vol. 26, no.10, pp. 1409-1423.
- de Leede-Smith, S. & Barkus, E. 2013, 'A comprehensive review of auditory and verbal hallucinations: Lifetime prevalence, correlates and mechanisms in healthy and clinical individuals', *Frontiers in Human Neuroscience*, vol. 7, Article 367, viewed 5 May 2014, <http://journal.frontiersin.org/article/10.3389/fnhum.2013.00367/full>
- Denscombe, M. 2010, *The good research guide for small-scale social research projects*, 4th edn, Open University Press, Berkshire.
- Dewaele, J.M. & Wei, L. 2012, 'Multilingualism, empathy and multicompetence', *International Journal of Multilingualism*, vol. 9, no. 4, pp. 352-366.
- DiLalla, L.F., Hull, S.K. & Dorsey, J.K. 2004, 'Effect of gender, age, and relevant course work on attitudes towards empathy, patient spirituality and physician wellness', *Teach, Learn Medicine*, vol. 16, no. 2, pp. 165-170.
- Dillon, J. & Hornstein, G.A. 2013, 'Hearing voices peer support groups: a powerful alternative for people in distress', *Psychosis*, vol. 5, no. 3, pp. 286-295.
- Diminic, S., Hielscher, E., Lee, Y.Y., Harris, M., Schess, J., Kealton, J. & Whiteford, H. 2016, *The economic value of informal mental health caring in Australia: Technical report*, University of Queensland, Brisbane.
- Dirckx, J. 2001, 'The power of feelings: Emotion, imagination, and the construction of meaning in adult learning', *New Directions for Adult Continuing Education*, no. 89, pp. 633-72.
- Dos Santos, B. & Beavan, V. 2015, 'Qualitatively exploring hearing voices network support groups', *The Journal of Mental Health Training, Education, and Practice*, vol. 10, no. 1, pp. 26-38.
- Doyle, D., Copeland, H.L., Bush, D., Stein, L. & Thompson, S. 2011, 'A course for nurses to handle difficult communication situations. A randomized controlled trial of impact on self-efficacy and performance', *Patient Education and Counseling*, vol. 82, no. 1, pp. 100-109.

- Duarte, M.I.F., Reposo, M.L.B., Rodrigues, P.J.F. & Branco, M.C. 2016, 'Measuring empathy in medical students, gender differences and level of medical education: An identification of a taxonomy of students', *Investigación en Educación Médica*, vol. 5, no. 20, pp. 253-260.
- Dyche, L. & Zayas, L.H. 2001, 'Cross-cultural empathy and training the contemporary psychotherapist', *Clinical Social Work*, vol. 29, no. 3, pp. 245-258.
- Eaton, W., Romanoski, A., Anthony, J. & Nestadt, G. 1991, 'Screening for psychosis in the general population with a self-report interview', *Journal of Nervous and Mental Disease*, vol. 179, no. 11, pp. 689-693.
- Edward, K., Hercelinskyj, G. & Giandinoto, J. 2017, 'Emotional labour in mental health nursing: An integrative systematic review', *International Journal of Mental Health Nursing*, vol. 26, no. 3, pp. 215-225.
- England, M. 2005, 'Mediation of the relationship between inner voice experiences and health-related quality of life', *Perspectives in Psychiatric Care*, vol. 4, no.1, pp. 22-34.
- England, M. 2007, 'Accuracy of nurses' perceptions of voice hearing and psychiatric symptoms', *Journal of Advanced Nursing*, vol. 58, no. 2, pp. 30-139.
- Epstein, M. 2013, *The consumer movement in Australia. A memoir of an old campaigner*, Our Consumer Place, viewed: 15 August 2015, <http://www.ourcommunity.com.au/files/OCP/HistoryOfConsumerMovement.pdf>
- Escher, S. & Romme, M. 2012, 'The hearing voices movement', in J.D. Blom & E.C. Sommer (eds), *Hallucinations*, Springer, New York, pp. 385-393.
- Evans, J., Webster, S., Gallagher, S., Brown, P. & Sinclair, J. 2015, 'Simulation in nursing education: iPod as a teaching tool for undergraduate nurses', *Issues in Mental Health Nursing*, vol. 36, no. 7, pp. 505-512.
- Fenekou, V. & Georgaca, E. 2010, 'Exploring the experience of hearing voices: A qualitative study', *Psychosis*, vol. 2, no. 2, pp. 134-143.
- Ferri, P., Guerra, E., Marcheselli, L., Cunico, L. & Di Lorenzo, R. 2015, 'Empathy and burnout: An analytic cross-sectional study among nurses and nursing students', *Acta Biomedica*, vol. 86, no. 2, pp. 104-115.
- Fey, M.K., Scrandis, D., Daniels, A. & Haut, C. 2014, 'Learning through debriefing: Students' perspectives', *Clinical Simulation in Nursing*, vol. 10, no. 5, pp. e249-e256, viewed 12 January 2017, DOI: <http://dx.doi.org/10.1016/j.ecns.2013.12.009>
- Field, A. 2013, *Discovering statistics using IBM SPSS Statistics*, 4th edn, Sage, London.

- Fields, S., Hojat, M., Gonnella, J.S., Mangione, S., Kane, G. & Magee, M. 2004, 'Comparisons of nurses and physicians on an operational measure of empathy', *Evaluation and the Health Professions*, vol. 27, no. 1, pp. 80-94.
- Fields, S.K., Mahan, P., Tillman, P., Harris, J., Maxwell, K. & Hojat, M. 2011, 'Measuring empathy in healthcare profession students using the Jefferson Scale of Physician Empathy: Health provider-student version', *Journal of Interprofessional Care*, vol. 25, no. 4, pp. 287-293.
- Finch, D., Peacock, M., Lazdowski, D. & Hwang, M. 2015, 'Managing emotions: A case study exploring the relationship between experiential learning, emotions, and student performance', *International Journal of Management Education*, vol. 13, no. 1, pp. 23-36.
- Fossen, P. & Stoeckel, P.R. 2016, 'Nursing students' perceptions of a hearing voices simulation and role-play: Preparation for mental health clinical practice', *Journal of Nursing Education*, vol. 55, no. 4, pp. 203-208.
- Foster, K. 2011, 'I wanted to learn how to heal my heart': Family carer experiences of receiving an emotional support service in the Well Ways programme', *International Journal of Mental Health Nursing*, vol. 20, no. 1, pp. 56-62.
- Freshwater, D. & Stickley, T. 2004, 'The heart of the art: Emotional intelligence in nurse education', *Nursing Inquiry*, vol. 11, no. 2, pp. 91-98.
- Gardner, J. 2005, 'Barriers influencing the success of racial and ethnic minority students in nursing programs', *Journal of Transcultural Nursing*, vol. 16, no. 2, pp. 155-162.
- Goodman, C. & Evans, C. 2010, 'Focus groups', in K. Gerrish and A. Lacey, (eds), *The research process in nursing*, 6th edn, Wiley- Blackwell, Oxford, pp. 358-368.
- Graneheim, U.H., Lindgren, B.M. & Lundman, B. 2017, 'Methodological challenges in qualitative content analysis: A discussion paper', *Nurse Education Today*, vol. 56, pp. 29-34.
- Gray, B. 2008, 'Hidden demons: A personal account of hearing voices and the alternative of the hearing voices movement', *Schizophrenia Bulletin*, vol. 34, no. 6, pp. 1006-1007.
- Grey, F. & O'Hagan, M. 2015, *The effectiveness of services led or run by consumers in mental health: rapid review of evidence for recovery-oriented outcomes: An evidence check rapid review brokered by the Sax Institute for the Mental Health Commission of New South Wales*, Sax Institute, Sydney.
- Gulbrandsen, P., Jensen, B.F., Finset, A. & Blanch-Hartigan, D. 2013, 'Long-term effect of communication training on the relationship between physicians' self-

- efficacy and performance', *Patient Education and Counseling*, vol. 91, no. 2, pp. 180-185.
- Hamilton Wilson, J.E., Azzopardi, W., Sager, S., Gould, B., Conroy, S., Deegan, P. & Archie, S. 2009, 'A narrative study of the experiences of student nurses who have participated in the hearing voices that are distressing simulation', *International Journal of Nursing Education Scholarship*, vol. 6, article 19, viewed 3 March 2012, <http://dx.doi:10.2202/1548-923X.1727>
- Hammersley, P., Langshaw, B., Bullimore, P., Dillon, J., Romme, M. & Escher, S. 2008, 'Schizophrenia at the tipping point', *Mental Health Practice*, vol. 12, no. 1, pp. 14-19.
- Halpern, J. 2001, *From detached concern to empathy: Humanizing medical practice*, Oxford University Press, Oxford.
- Halpern, J. 2014, 'From idealized clinical empathy to empathic communication in medical care', *Medicine, Health Care and Philosophy*, vol. 17, no. 2, pp. 301-311.
- Hearing Voices Network. 2017, viewed 6 January 2017, <https://www.hearing-voices.org>
- Hochschild, A.R. 1983, *The managed heart: Commercialization of human feeling*, University of California Press, Berkley.
- Hojat, M. 2007, *Empathy in patient care. Antecedents, development, measurement, and outcomes*, Springer, New York.
- Hojat, M. 2009, 'Ten approaches for enhancing empathy in health and human services cultures', *Journal of Health and Human Services*, vol. 31, no. 4, pp. 412-450.
- Hojat, M., Axelrod, D., Spandorfer, J. & Mangione, S. 2013, 'Enhancing and sustaining empathy in medical students', *Medical Teacher*, vol. 35, no. 12, pp. 996-1001.
- Hojat, M., Gonnella, J.S., Mangione, S., Nasca, T.J., Veloski, J.J., Erdmann, J.B., Callahan, C.A. & Magee, M. 2002a, 'Empathy in medical students as related to academic performance, clinical competence and gender', *Medical Education*, vol. 36, no. 6, pp. 522-527.
- Hojat, M., Gonnella, J.S. & Maxwell, K. 2009a, *Jefferson scales of empathy (JSE). Professional manual and user's guide*, Jefferson Medical College, Philadelphia.
- Hojat, M., Gonnella, J.S., Nasca, T.J., Mangione, S., Vergare, M. & Magee, M. 2002b, 'Physician empathy: Definition, components, measurement, and relationship to gender and specialty', *The American Journal of Psychiatry*, vol. 59, no. 9, pp. 1563-1569.

- Hojat, M., Louis, D.Z., Markham, F.W., Wender, R., Rabinowitz, C. & Gonnella, J.S. 2011, 'Physician's empathy and clinical outcomes for diabetic patients', *Academic Medicine*, vol. 86, no. 3, pp. 359-364.
- Hojat, M., Mangione, S., Nasca, T.J., Cohen, M., J.M., Gonnella, J.S., Erdmann, J.B., Veloski, J. & Magee, M. 2001, 'The Jefferson Scale of Physician Empathy: Development and preliminary psychometric data', *Education and Psychological Measurement*, vol. 61, no. 2, pp. 349-365.
- Hojat, M., Mangione, S., Nasca, T.J., Rattner, S., Erdmann, J.B., Gonnella, J.S. & Magee, M. 2004, 'An empirical study of decline in empathy in medical school', *Medical Education*, vol. 38, no. 9, pp. 934-941.
- Hojat, M., Vergare, M., Maxwell, K., Brainard, G., Herrine, S.K. & Isenberg, G.A. 2009b, 'The devil is in the third year: A longitudinal study of erosion of empathy in medical school', *Academic Medicine*, vol. 84, no. 9, pp. 1182-1191.
- Holbrook, H. & Cennamo, K. 2014, 'Effects of high fidelity virtual training simulators on learners' self-efficacy', *International Journal of Gaming and Computer-Mediated Simulations (IJGCMS)*, vol. 6, no. 2, pp. 38-52.
- Holt, L. & Tickle, A. 2014, 'Exploring the experience of hearing voices from a first person perspective: A meta-ethnographic synthesis', *Psychology and Psychotherapy: Theory, Research and Practice*, vol. 87, no. 3, pp. 278-297.
- Howick, J. & Rees, S. 2017, 'Overthrowing barriers to empathy in healthcare: Empathy in the age of the internet', *The Royal Society of Medicine*, viewed 25 July 2017, [10.1177/0141076817714443](https://doi.org/10.1177/0141076817714443)
- Hsu, L., Chang, W. & Hsieh, S. 2015, 'The effects of scenario-based simulation course training on nurses' communication competence and self-efficacy: A randomized controlled trial', *Journal of Professional Nursing*, vol. 31, no. 1, pp. 37-49.
- Hsu, L., Huang, Y. & Hsieh, S. 2014, 'The effects of scenario-based communication training on nurses' communication competence and self-efficacy and myocardial infarction knowledge', *Patient Education and Counseling*, vol. 95, no. 3, pp. 356-364.
- Hurley, J. 2008, 'The necessity, barriers and ways forward to meet user-based needs for emotionally intelligent nurses', *Journal of Psychiatric and Mental Health Nursing*, vol. 15, no. 5, pp. 379-385.
- Hyland, T. 2009, 'Mindfulness and the therapeutic function of education', *Journal of Philosophy of Education*, vol. 43, no. 1, pp. 119-131.

- IBM. 2013, '*IBM SPSS Statistics for Windows*', version 22.0 edn, IBM Corporation, Armonk.
- Intervoice. 2017, viewed 6 January 2017, <http://www.intervoiceonline.org/>
- Jarvis, P. 2006, *Towards a comprehensive theory of human learning*, Routledge, London.
- Jefferson Medical College (JMC). 2009, *Jefferson scale of empathy: Health professions student version (HPS-version)*, Jefferson Medical College, Philadelphia.
- Jenner, J., Rutten, S., Beuckens, J., Boonstra, N. & Sytema, S. 2008, 'Positive and useful auditory vocal hallucinations: Prevalence, characteristics, attributions, and implications for treatment', *Acta Psychiatrica Scandinavica*, vol. 118, no. 3, pp. 238-245.
- Johns, L., Kompus, K., Connell, M., Humpston, C., Lincoln, T., Longden, E., Preti, A., Alderson-Day, B., Badcock, J., Cella, M., Fernyhough, C., McCarthy-Jones, S., Peters, E., Raballo, A., Scott, J., Siddi, S., Sommer, I. & Larøi, F. 2014, 'Auditory verbal hallucinations in persons with and without a need for care', *Schizophrenia Bulletin*, vol. 40, no. 4, pp. S255–S264.
- Johns, L. & van Os, J. 2001, 'The continuity of psychotic experiences in the general population', *Clinical Psychology Review*, vol. 21, no. 8, pp. 1125-1141.
- Johnson, R.B., Onwuegbuzie, A.J. & Turner, L.A. 2007, 'Towards a definition of mixed methods research', *Journal of Mixed Methods Research*, vol. 1, no. 2, pp. 112-133.
- Jones, D.W. 2004, 'Families and serious mental illness: Working with loss and ambivalence', *British Journal of Social Work*, vol. 34, no. 7, pp. 961-979.
- Jones, M. & Coffey, M. 2012, 'Voice-hearing: A secondary analysis of talk by people who hear voices', *International Journal of Mental Health Nursing*, vol. 21, no. 1, pp. 50-59.
- Jones, N., Marino, C.K. & Hansen, M.C. 2016, 'The hearing voices movement in the United States: Findings from a national survey of group facilitators', *Psychosis*, vol. 8, no. 2, pp. 106-117.
- Jones, N. & Shattell, M. 2013, 'Engaging with voices: Rethinking the clinical treatment of psychosis', *Issues in Mental Health Nursing*, vol. 34, no. 7, pp. 562-563.
- Jones, N. & Shattell, M. 2016, 'Not what the textbooks describe: Challenging clinical conventions about psychosis', *Issues in Mental Health Nursing*, vol. 37, no.10, pp. 769-772.
- Kaite, C.P., Karanikola, M., Merkouris, A. & Papathanassoglou, E.D.E. 2015, 'An ongoing struggle with the self and illness: A meta-synthesis of the studies of

- the lived experience of severe mental illness', *Archives of Psychiatric Nursing*, vol. 29, no. 6, pp. 458-473.
- Kalhovde, A., Estad, I. & Talseth, A. 2013, 'Understanding the experiences of hearing voices and sounds others do not hear', *Qualitative Health Research*, vol. 23, no. 11, pp. 1470-1479.
- Kameg, K., Clochesy, J., Mitchell, A.M. & Suresky, J. 2010, 'The impact of high fidelity human simulation on self-efficacy of communication skills', *Issues in Mental Health Nursing*, vol. 31, no. 5, pp. 315-323.
- Kameg, K., Mitchell, A.M., Clochesy, J., Howard, V.M. & Suresky, J. 2009, 'Communication and human patient simulation in psychiatric nursing', *Issues in Mental Health Nursing*, vol. 30, no. 8, pp. 503-508.
- Kamp, A. & Dybbroe, B. 2016, 'Struggles of professionals and emotional labour in standardized mental health care', *Nordic Journal of Working Life Studies*, vol. 6, no. s1, pp. 67-86.
- Karimi, L., Leggat, S.G., Donohue, L., Farrell, G. & Couper, G.E. 2014, 'Emotional rescue: the role of emotional intelligence and emotional labour on well-being and job stress among community nurses', *Journal of Advanced Nursing*, vol. 70, no. 1, pp. 176-186.
- Karlsson, L.B. 2008, 'More real than reality': a study of voice hearing', *International Journal of Social Welfare*, vol. 17, no. 4, pp. 365-373.
- Katz, J., Medoff, D., Fang, L.J. & Dixon, L.B. 2015, 'The relationship between the perceived risk of harm by a family member with mental illness and the family experience', *Community Mental Health Journal*, vol. 51, no. 7, pp. 790-799.
- Kay, G., Kendall, E. & Dark, F. 2017, 'Are hearing voices networks compatible with cognitive behavioural therapy for psychosis?', *Australian Social Work*, vol. 70, no. 3, pp. 312-323.
- Kelly, M.A., Berragan, E., Husebo, S.E. & Orr, F. 2016, 'Simulation in nursing education. International perspectives and contemporary scope of practice', *Journal of Nursing Scholarship*, vol. 48, no. 3, pp. 312-321.
- Kepler, B.B., Lee, H., Kane, I. & Mitchell, A.M. 2016, 'Voice simulation in nursing education', *Nurse Educator*, vol. 41, no. 2, pp. 66-69.
- Kidd, L., Tusaie, K.R., Morgan, K.I., Preebe, L. & Garrett, M. 2015, 'Mindful teaching practice: Lessons learned through a hearing voices simulation', *Issues in Mental Health Nursing*, vol. 36, no. 2, pp. 112-117.
- Kiosses, V.N., Karathanos, V.T. & Tatsioni, A. 2016, 'Empathy promoting interventions for health professionals: A systematic review of RCTs', *Journal of Compassionate Health Care*, vol. 3, no. 7, viewed 6 January 2017,

<http://dx.doi.org/10.1186/s40639-016-0024-9>

- Kolb, D.A. 1984, *Experiential learning: Experience as the source of learning and development*, Prentice Hall, Englewood Cliffs.
- Kolb, D.A. 2015, *Experiential learning: Experience as the source of learning and development*, 2nd edn, Pearson Education, Upper Saddle River.
- Kolb, A.Y. & Kolb, D.A. 2009, 'Experiential learning theory: A dynamic approach to management learning, education, and development', in S.J. Armstrong, & C.V. Fukami (eds), *The SAGE handbook of management learning, education, and development*, chp 3, SAGE Publications, Thousand Oaks, pp. 42-68, viewed 10 January 2017, <http://dx.doi.org/10.4135/9780857021038.n3>
- Kompus, K., Loberg, E., Posserud, M. & Lundervold, A. 2015, 'Prevalence of auditory hallucinations in Norwegian Adolescents: Results from a population-based study', *Scandinavian Journal of Psychology*, vol. 56, no. 4, pp. 391-396.
- Kråkvik, B., Larøi, F., Kalhovde, A.M., Hugdahl, K., Kompus, K., Salvesen, Ø., Stiles, T.C. & Vedul-Kjelsås, E. 2015, 'Prevalence of auditory verbal hallucinations in a general population: A group comparison study', *Scandinavian Journal of Psychology*, vol. 56, no. 5, pp. 508-515.
- Kottsieper, P. 2009, 'Experiential knowledge of serious mental health problems: One clinician and academic's perspective', *Journal of Humanistic Psychology*, vol. 49, no. 2, pp. 174-192.
- Lam, T.C.M., Kolomitro, K. & Alamparambil, F.C. 2011, 'Empathy training: Methods, evaluation, practices and validity', *Journal of Multidisciplinary Evaluation*, vol. 7, no. 16, pp. 162-200.
- Lane, D. 2010, 'Tukey's honestly significant difference (HSD)', in N.J. Salkind (ed.), *Encyclopedia of research design*, SAGE Publications, Thousand Oaks, pp. 1566-1571, viewed 18 August 2015, <http://dx.doi.org/10.4135/9781412961288.n478>.
- Lasater, K. 2007, 'Clinical judgment development: Using simulation to create an assessment rubric', *Journal of Nursing Education*, vol. 46, no. 11, pp. 496-503.
- Leavy, P. 2017, *Research Design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*, Guildford Press, New York.
- Leudar, I. & Thomas, P. 2000, *Voices of reason, voices of insanity. Studies of verbal hallucinations*, Routledge, London.
- Liamputtong, P. 2014, 'Experiential knowing', in D. Coghlan & M. Brydon-Miller (eds), *The SAGE encyclopedia of action research*, SAGE Publications, Thousand Oaks, pp. 323-325.

- Loannidou, F. & Konstankikaki, V. 2008, 'Empathy and emotional intelligence: What is it really about?', *International Journal of Caring Sciences*, vol. 1, no. 3, pp. 118-123.
- Lonergan, A. 2017, 'The meaning of voices in understanding and treating psychosis: Moving towards intervention informed by collaborative formulation', *Europe's Journal of Psychology*, vol. 13, no. 2, pp. 352 -365.
- Longden, E., Read, J. & Dillon, J. 2017, 'Assessing the impact and effectiveness of Hearing Voices Network self-help groups', *Community Mental Health Journal*, viewed 16 July 2017, <http://dx.doi.org/10.1007/s10597-017-0148-1>
- Lusk, M.J. & Fater, M.K. 2013, 'Postsimulation debriefing to maximize clinical judgment development', *Nurse Educator*, vol. 38, no. 1, pp. 16-19.
- Maciocha, A. 2012, 'T-tests and ANOVA', in H.X. Chen (ed.), *Approaches to quantitative research. A guide for dissertation students*, Oaktree Press, Cork, pp. 4-5f.
- Mackay, C. & Pakenham, K. 2012, 'A stress and coping model of adjustment to caring for an adult with mental illness', *Community Mental Health Journal*, vol. 48, no. 4, pp. 450–462.
- Mark, M.M. 2015, 'Mixed and multimethods in predominantly quantitative studies, especially experiments and quasi-experiments' in S.N. Hesse-Biber & R.B. Johnson (eds), *The Oxford handbook of multimethod and mixed methods research inquiry*, pp. 21-41, Oxford University Press, New York.
- Martin, C.T. & Chandra, N. 2016, 'Mental health clinical simulation: Therapeutic communication', *Clinical Simulation in Nursing*, vol. 12, no. 6, pp. 209-214.
- Martin, P.J. 2000, 'Hearing voices and listening to those that hear them', *Journal of Psychiatric and Mental Health Nursing*, vol. 7, no. 2, pp. 135–141.
- Mawson, K. 2014, 'Use of media technology to enhance the learning of student nurses in regards to auditory hallucinations', *International Journal of Mental Health Nursing*, vol. 23, no. 2, pp. 135-144.
- Mayer, J.D., Caruso, D.R. & Salovey, P. 2000, 'Emotional intelligence meets traditional standards for an intelligence', *Intelligence*, vol. 27, no. 4, pp. 267-298.
- Mayer, J.D. & Salovey, P. 1995, 'Emotional intelligence and the construction and regulation of feelings', *Applied and Preventive Psychology*, vol. 4, no. 3, pp. 197-208.
- Mayer, J. D. & Salovey, P. 1997, 'What is emotional intelligence?', in P. Salovey & D. Sluyter (eds), *Emotional development and emotional intelligence: Educational implications*, pp. 3-31, Basic Books, New York.

- McAllister, M. 2011, 'STAR: A transformative learning framework for nurse educators', *Journal of Transformative Education*, vol. 9, no. 1, pp. 42-58.
- McAllister, M. 2015, 'Exploring transformative learning and the courage to teach a values based curriculum', *Nurse Education in Practice*, vol. 15, no. 6, pp. 480-484.
- McCann, T.V., Lu, S. & Berryman, C. 2009, 'Mental health literacy of Australian Bachelor of Nursing students: A longitudinal study', *Journal of Psychiatric and Mental Health Nursing*, vol. 16, no. 1, pp. 61-67.
- McCann, T.V., Bamberg, J. & McCann, F. 2015, 'Family carers' experience of caring for an older parent with severe and persistent mental illness', *International Journal of Mental Health Nursing*, vol. 24, no. 3, pp. 203–212.
- McCarthy-Jones, S., Castro Romero, M., McCarthy-Jones, R., Dillon, J., Cooper-Rompato, C., Kieran, K., Kaufman, M. & Blackman, S. 2015, 'Hearing the unheard: An interdisciplinary, mixed methodology study of women's experiences of hearing voices (Auditory verbal hallucinations)', *Frontiers of Psychiatry*, vol. 6, article 181, viewed 12 December 2016, <http://dx.doi.org/10.3389/fpsy.2015.00181>.
- McCarthy-Jones, S., Smailes, D., Corvin, A., Gill, M., Morris, D.W., Dinan, T.G., Murphy, K.C., O'Neill, F.A., Waddington, J.L., Australian Schizophrenia Research Bank., Donohoe, G. & Dudley, R. 2017, 'Occurrence and co-occurrence of hallucinations by modality in schizophrenia-spectrum disorders', *Psychiatry Research*, vol. 252, pp. 154-160, viewed 29 May 2017, <http://dx.doi.org/10.1016/j.psychres.2017.01.102>
- McGrath, J.J., Saha, S., Al-Hamzawi, A., Alonso, J., Bromet, E.J., Bruffaerts, R., Caldas-de-Almeida, J.M., Chiu, W.T., de Jonge, P., Fayyad, J., Florescu, S., Gureje, O., Haro, J.M., Hu, C., Kovess-Masfety, V., Lepine, J.P., Lim, C.C., Mora, M.E., Navarro-Mateu, F., Ochoa, S., Sampson, N., Scott, K., Viana, M.C. & Kessler, R.C. 2015, 'Psychotic experiences in the general population: A cross-national analysis based on 31 261 respondents from 18 countries', *JAMA Psychiatry*, vol. 72, no. 7, pp. 697-705.
- McKenna, L., Boyle, M., Brown, T., Williams, B., Molloy, A., Lewis, B. & Molloy, L. 2012, 'Levels of empathy in undergraduate nursing students', *International Journal of Nursing Practice*, vol. 18, no. 3, pp. 246-251.
- McLean, A. 1995, 'Empowerment and the psychiatric consumer/ex-patient movement in the United States: Contradictions, crisis and change', *Social Science in Medicine*, vol. 40, no. 8. pp. 1053-1071.

- McMillan, L.R. & Shannon, D.M. 2011, 'Psychometric analysis of the JSPE Nursing Student Version R: Comparison of senior BSN students and medical students attitudes toward empathy in patient care', *International Scholarly Research Network, ISRN Nursing*, vol. 2011, Article ID 726063, viewed 20 December 2012, <http://dx.doi.org/10.5402/2011/726063>.
- McQueen, A.C.H. 2004, 'Emotional intelligence in nursing work', *Journal of Advanced Nursing*, vol. 47, no. 1, pp. 101-108.
- Mercer, S.W. & Reynolds, W.Y. 2002, 'Empathy and quality of care', *British Journal of General Practice*, vol. 52, supplement, s9-s12.
- Merriam, S.B., Cafferella, R.S. & Baumgartner, L.M. 2012, *CourseSmart: Learning in adulthood: A comprehensive guide*, 3rd edn, Jossey-Bass, San Francisco.
- Merryman, M.B. 2010, 'Effects of simulated learning and facilitated debriefing on student understanding of mental illness', *Occupational Therapy in Mental Health*, vol. 26, no. 1, p p. 18-31.
- Miguel, C.S., Rogan, F., Kilstoff, K. & Brown, D. 2006, 'Clinically speaking: A communication skills program for students from non-English speaking backgrounds', *Nurse Education in Practice*, vol. 6, no. 5, pp. 268–274.
- Morgan, V.A., Waterreus, A., Jablensky, A., Mackinnon, A., McGrath, J.J., Carr, V., Bush, R., Castle, D., Cohen, M., Harvey, C., Galletly, C., Stain, H.J., Neil, A., McGorry, P., Hocking, B., Shah, S. & Saw, S. 2011, *People living with psychotic illness 2010. Report on the second Australian national survey*, Department of Health and Ageing, Canberra.
- Morse, J.M., Anderson, G., Bottorf, J.L., Yonge, O., O'Brien, B., Solberg, S.M. & Hunter McIlveen, K. 1992, 'Exploring empathy: A conceptual fit for nursing practice?', *IMAGE: Journal of Nursing Scholarship*, vol. 24, no. 4, pp. 273-280.
- Morse, J.M., Bottorf, J., Anderson, G., O'Brien, B. & Solberg, S. 2006, 'Beyond empathy: expanding expressions of caring', *JAN*, vol. 53, no. 1, pp. 75-90.
- National Collaborating Centre for Mental Health. 2009, *Schizophrenia: The NICE guideline on core interventions in the treatment and management of schizophrenia in adults in primary and secondary care (National Clinical Practice Guideline)* (updated edition), Royal College of Psychiatrists and British Psychological Society, London.
- National Health and Medical Research Council. 2007, *National statement on ethical conduct on human research*, Australian Government, Canberra.
- Neumann, M., Bensing, J., Mercer, S. & Ernstmann, N. 2009, 'Analyzing the "nature" and "specific effectiveness" of clinical empathy: A theoretical overview and

- contribution towards a theory-based research agenda', *Patient Education and Counseling*, vol. 74, no. 3, pp. 339-346.
- Neumann, M., Edelhäuser, F., Tauschel, D., Fischer, M.R., Wirtz, M., Woopen, C., Haramati, A. & Scheffer, C. 2011, 'Empathy decline and its reasons: A systematic review of studies with medical students and residents', *Academic Medicine*, vol. 86, no. 8, pp. 996-1009.
- Norgaard, B., Ammentorp, J. & Kofoed, P.E. 2013, 'Long term follow-up on health care professionals' self-efficacy after communication skills training', *Journal of Nursing Education and Practice*, vol. 3, no. 10, pp. 91-98.
- Norgaard, B., Ammentorp, J., Kyvik, K.O. & Kofoed, P.E. 2012a, 'Communication skills training increases self-efficacy of health care professionals', *Continuing Education in the Health Professions*, vol. 32, no. 2, pp. 90-97.
- Norgaard, B., Kofoed, P.E., Kyvik, K.O. & Ammentorp J. 2012b, 'Communication skills training for health care professionals improves the adult orthopaedic patient's experience of quality of care', *Scandinavian Journal of Caring Science*, vol. 26, no. 4, pp. 698-704.
- Nunes, P., Williams, S., Bidyadhar, S. & Stevenson, K. 2011, 'A study of empathy decline in students from five health disciplines during their first year of training', *International Journal of Medical Education*, vol. 2, pp. 12-17.
- Nursing and Midwifery Board of Australia. 2016, 'Registered nurse standards for practice', viewed 4 July 2016, <http://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/Professional-standards.aspx>
- Ohayon, M.M. 2000, 'Prevalence of hallucinations and their pathological associations in the general population', *Psychiatry Research*, vol. 97, no. 2, pp. 153-164.
- Orr, F., Kellehear, K., Armari, E., Pearson, A. & Holmes, D. 2013, 'The distress of voice-hearing: The use of simulation for awareness, understanding and communication skill development in undergraduate nursing education', *Nurse Education in Practice*, vol. 13, no. 6, pp. 529-535.
- Ouzouni, C. & Nakakis, K. 2012, 'An exploratory study of student nurses' empathy', *Health Science Journal*, vol. 6, no. 3, pp. 534-552.
- Pallant, J. 2013, *SPSS survival manual. A step by step guide to data analysis using IBM SPSS*, 5th edn, Allen & Unwin, Sydney.
- Parle, M., Maguire, P. & Heaven, C. 1997, 'The development of a training model to improve health professionals' skills, self-efficacy and outcome expectancies when communicating with cancer patients', *Soc Sci Med*, vol. 44, no. 2, pp. 231-240.

- Perlick, D.A., Kalvin, C., Huntington, B., Holman, C.S., Nelson, A.H., Mattias, K., Selzer, J., Wilber, C.H. & Corrigan, P.W. 2011, 'In our own voice-family companion: Reducing self-stigma of family members of persons with serious mental illness', *Psychiatric Services*, vol. 62, no. 12, pp. 1456-1462.
- Petrucci, C., La Cerra, C., Aloisio, F., Montanari, P. & Lancia, L. 2016, 'Empathy in health professional students: A comparative cross-sectional study', *Nurse Education Today*, vol. 41, pp. 1-5.
- Pike, T. & O'Donnell, V. 2010, 'The impact of clinical simulation on learner self-efficacy in pre-registration nursing education', *Nurse Education Today*, vol. 30, no. 5, pp. 405-410.
- Place, C., Foxcroft, R. & Shaw, J. 2011, 'Telling stories and hearing voices: Narrative work with voice hearers in acute care', *Journal of Psychiatric and Mental Health Nursing*, vol. 18, no. 9, pp. 837-842.
- Poore, J. A., Cullen, D.L. & Schaar, G.L. 2014, 'Simulation-based interprofessional education guided by Kolb's experiential learning theory', *Clinical Simulation in Nursing*, vol. 10, no. 5, pp. e241-e247, viewed 12 January 2017, DOI: <http://dx.doi.org/10.1016/j.ecns.2014.01.004>
- Powers, B.E. & Knapp, T.R. 2011, *Dictionary of nursing theory and research*, 4th edn, Springer Publishing, New York.
- Rae, J. & Green, B. 2016, 'Portraying reflexivity in health services research', *Qualitative Health Research*, vol. 26, no. 11, pp. 1543-1549.
- Reynolds, W. 2000, *The measurement and development of empathy in nursing*, Ashgate Publishing, Aldershot.
- Richardson, M., Cobham, V., McDermott, B. & Murray, J. 2013, 'Youth mental illness and the family: Parents' loss and grief', *Journal of Child and Family Studies*, vol. 22, no. 5, pp. 719-736.
- Richardson, M., Cobham, V., Murray, J. & McDermott, B. 2011, 'Parents' grief in the context of adult child mental illness: A qualitative review', *Clinical Child and Family Psychology Review*, vol. 14, no. 1, pp. 28-43.
- Roberts, M. 2010, 'Emotional intelligence, empathy and the educative power of poetry: A Deleuzo-Guattarian perspective', *Journal of Psychiatric and Mental Health Nursing*, vol. 17, no. 3, pp. 236-241.
- Rogers, C. 1975, 'Empathic: an unappreciated way of being', *The Counselling Psychologist*, vol. 5, no. 2, pp. 2-10.
- Rogers, C. 1951, *Client-centered therapy: Its current practice, implications and theory*, Houghton Mifflin, Boston.

- Rolbin, C. & della Chiesa, B. 2010, "We share the same biology..." Cultivating cross-cultural empathy and global ethics through multilingualism', *Mind, Brain and Education*, vol. 4, no. 4, pp. 196-207.
- Romme, M.A. 1998, 'Listening to the voice hearers', *Journal of Psychosocial Nursing*, vol. 36, no. 9, pp. 40-44.
- Romme, M.A.J. & Escher, A.D.M.A.C. 1989, 'Hearing voices', *Schizophrenia Bulletin*, vol. 15, no. 2, pp. 209-216.
- Romme, M. & Escher, S. 2000, *Making sense of voices: A guide for mental health professionals working with voice-hearers*, Mind Publications, London.
- Romme, M., Escher, S., Dillon, J., Corstens, D. & Morris, M. 2009, *Living with voices: 50 stories of recovery*, PCCS Books, Ross-on-Wye.
- Romme, M.A., Honig, A., Noorthoorn, E.O. & Escher, A.D. 1992, 'Coping with hearing voices: An emancipatory approach', *The British Journal of Psychiatry*, vol. 161, pp. 99-103.
- Romme, M. & Morris, M. 2007, 'The harmful concept of schizophrenia', *Mental Health Nursing*, vol. 27, no. 2, pp. 8-12.
- Romme, M. & Morris, M. 2013, 'The recovery process with hearing voices: Accepting as well as exploring their emotional background through a supported process', *Psychosis*, vol. 5, no. 3, pp. 259-269.
- Rowe, A.D., Fitness, J. & Wood, L.N. 2013, 'University student and lecturer perceptions of positive emotions in learning', *International Journal of Qualitative Studies in Education*, vol. 28, no. 1, pp. 1-20.
- Rowe, J. 2012, 'Great expectations: A systematic review on the literature on the role of family carers in severe mental illness, and their relationships and engagement with professionals', *Journal of Psychiatric and Mental Health Nursing*, vol. 19, no.1, pp. 70-82.
- Sadock, B.J., Sadock, V.A. & Riuz, P. 2014, *Kaplan and Sadock's synopsis of psychiatry: Behavioural sciences/clinical psychiatry*, 11th edn, Lippincott Williams and Wilkins, Baltimore.
- Salovey, P. & Mayer, J.D. 1990, 'Emotional intelligence', *Imagination Cognition, & Personality*, vol. 9, no. 3, pp. 185-211.
- Sapey, B. & Bullimore, P. 2013, 'Listening to voice hearers', *Journal of Social Work*, vol. 13, no. 6, pp. 616-632.
- Sandelowski, M. & Barrosa, J. 2002, 'Finding the findings in qualitative studies', *Journal of Nursing Scholarship*, vol. 34, no. 3, pp. 213-219.
- Sandelowski, M. & Leeman, J. 2012, 'Writing usable qualitative health research findings', *Qualitative Health Research*, vol. 22, no. 10, pp. 1404-1413.

- Schnackenberg, J. & Martin, C. 2014, 'The need for experience focused counselling (EFC) with voice hearers in training and practice: A review of the literature', *Journal of Psychiatric and Mental Health Nursing*, vol. 21, no. 5, pp. 391-402.
- Schuwirth, L. 2013, 'Emotions in learning is more than merely 'learning of emotions'', *Medical Education*, vol. 47, no. 1, pp. 14-15.
- Shapiro, D. 2009, *Experiential knowledge: The knowledge of "what it's like"*, PhD thesis, University of Minnesota, USA.
- Sharp, S., McAlliser, M. & Broadbent, M. 2016, 'The vital blend of clinical competence and compassion: How patients experience person-centred care', *Contemporary Nurse*, vol. 52, no. 2-3, pp. 300-312.
- Shaw, J.A. 2016, 'Reflexivity and the "acting subject": Conceptualizing the unit of analysis in qualitative health research', *Qualitative Health Research*, vol. 26, no. 13, pp. 1735-1744.
- Sheehan, C.A., Perrin, K.O., Potter, M.L., Kazanowski, M.K. & Bennett, L.A. 2013, 'Engendering empathy in Baccalaureate nursing students', *International Journal of Caring Sciences*, vol. 6, no. 3, pp. 456-464.
- Shensul, J. 2012, 'Methodology, methods and tools in qualitative research', in S. Lapan., M. Quartaroli. & F. Riemer, (eds), *Qualitative research: An introduction to methods and designs*, Jossey-Bass, San Francisco, pp. 69-103.
- Sideras, S., McKenzie, G., Noone, J., Dieckmann, N. & Allen, T.L. 2015, 'Impact of a simulation on nursing students' attitudes toward schizophrenia, *Clinical Simulation in Nursing*, vol. 11, no. 2, pp. 134-141.
- Silverman, D. 2011, *Interpreting qualitative data: A guide to the principles of qualitative research*, 4th edn, SAGE Publications, London.
- Simons, L. & Lathlean, J. 2010, 'Mixed methods', in K. Gerrish and A. Lacey, (eds), *The research process in nursing*, 6th edn, Wiley- Blackwell, Oxford, pp. 331-342.
- Skoy, E.T., Eukel, H.N., Frenzel, J.E., Werremeyer, A. & McDaniel, B. 2016, 'Use of an auditory hallucination simulation to increase student pharmacist empathy for patients with mental illness', *American Journal of Pharmaceutical Education*, vol. 80, no. 8, pp. 1-6.
- Slomic, M., Bjørg, C., Soberg, H.L. & Sveen, U. 2016, 'User involvement and experiential knowledge in interprofessional rehabilitation; A grounded theory study', *BMC Health Services Research*, vol.16, no. 1, viewed 4 February 2017, <http://dx.doi.org/10.1186/s12913-016-1808-5>

- Snowden, A., Stenhouse, R., Young, J., Carver, H., Carver, F. & Brown, N. 2015, 'The relationship between emotional intelligence, previous caring experience and mindfulness in student nurses and midwives: A cross sectional analysis', *Nurse Education Today*, vol. 35, no. 1, pp. 152-158.
- Song, Y., Yun, S.Y., Kim, S., Ahn, E. & Jung, M.S. 2015, 'Role of self-directed learning in communication competence and self-efficacy', *Journal of Nursing Education*, vol. 54, no. 10, pp. 559-564.
- Stayt, L.C. 2009, 'Death, empathy and self preservation: The emotional labour of caring for families of the critically ill in adult intensive care', *Journal of Clinical Nursing*, vol. 18, no. 9, pp.1267-75.
- Stenhouse, R.C. 2011, 'They all said you could come and speak to us': Patients' expectations and experiences of help on an acute psychiatric inpatient ward', *Journal of Psychiatric and Mental Health Nursing*, vol. 18, no. 1, pp. 74-80.
- Stephens, J.R., Farhall, J., Farnan, S. & Ratcliff, K.M. 2011, 'An evaluation of Well Ways: A family education programme for carers of people with a mental illness', *Australian and New Zealand Journal of Psychiatry*, vol. 45, no.1, pp. 45-53.
- Styron, T., Utter, L. & Davidson, L. 2017, 'The hearing voices network: Initial lessons and future directions for mental health professionals and systems of care', *Psychiatric Quarterly*, pp. 1-7, viewed 2 May 2017, <http://dx.doi.org/10.1007/s11126-017-9491-1>
- Sulzer, S.H., Feinstein, N.W. & Wendland, C.L. 2016, 'Assessing empathy development in medical education: A systematic review', *Medical Education*, vol. 50, no. 3, pp. 300-310.
- Taylor, G. & Murray, C. 2012, 'A qualitative investigation into non-clinical voice hearing: What factors may protect against distress?', *Mental Health, Religion & Culture*, vol. 15, no.4, pp. 373-388.
- Tien, A.Y. 1991, 'Distributions of hallucinations in the population', *Social Psychiatry Psychiatric Epidemiology*, vol. 26, no. 6, pp. 287-292.
- Topping, A. 2010, 'The quantitative-qualitative continuum', in K. Gerrish and A. Lacey, (eds), *The research process in nursing*, 6th edn, Wiley- Blackwell, Oxford, pp. 129-141.
- Treanor, L., Lobban, F. & Barrowclough, C. 2013, 'Relatives' responses to psychosis: An exploratory investigation of low expressed emotion relatives', *Psychology and Psychotherapy: Theory, Research and Practice*, vol. 86, no. 2, pp. 197-211.

- van der Gaag, M., Valmaggia, L.R. & Smit, F. 2014, 'The effects of individually tailored formulation-based cognitive behavioural therapy in auditory hallucinations and delusions: A meta-analysis', *Schizophrenia Research*, vol. 156, no. 1, pp. 30-37.
- van der Sanden, R.L.M., Pryor, J.B., Stutterheim, S.E., Kok, G. & Bos, A.E.R. 2016, 'Stigma by association and family burden among family members of people with mental illness: The mediating role of coping', *Social Psychiatry and Psychiatric Epidemiology*, vol. 51, no. 9, pp. 1233-1245.
- van Dusseldorp, L.R.L.C., van Meijel, B.K.G. & Derksen, J.J.L. 2010, 'Emotional intelligence of mental health nurses', *Journal of Clinical Nursing*, vol. 20, no. 3-4, pp. 555-562.
- van Os, J., Hansenn, M., Bijl, R. & Ravelli, A. 2000, 'Strauss (1969) revisited: A psychosis continuum in the general population?', *Schizophrenia Research*, vol. 45, no. 1, pp. 11-20.
- Vaughn, J., Lister, M. & Shaw, J.R. 2016, 'Piloting augmented reality technology to enhance realism in clinical simulation', *Computers, Informatics, Nursing*, vol. 34, no. 9, pp. 402-405.
- Vella, S. & Pai, N. 2013, 'The measurement of burden of care in serious mental illness: A qualitative review', *Australian & New Zealand Journal of Psychiatry*, vol. 47, no. 3, pp. 222-234.
- Verdoux, H. & van Os, J. 2002, 'Psychotic symptoms in non-clinical populations and the continuum of psychosis', *Schizophrenia Research*, vol. 54, no. 1-2, pp. 59-65.
- Wabed, A. & Tang, X. 2010, 'Analysis of variance (ANOVA)', in N.J. Salkind (ed.), *Encyclopedia of research design*, SAGE Publications, Inc., Thousand Oaks, pp. 27-30.
- Waltz, C.F., Strickland, O.L. & Lenz, E.R. 2010, *Measurement in nursing and health research*, 4th edn, Springer Publishing Company, New York.
- Ward, J. 2016, 'The empathy enigma: Does it still exist? Comparison of empathy using students and standardized actors', *Nurse Educator*, vol. 41, no. 3, pp. 134-138.
- Ward, J., Cody, J., Schaal, M. & Hojat, M. 2012, 'The empathy enigma: An empirical study of decline in empathy among undergraduate nursing students', *Journal of Professional Nursing*, vol. 28, no. 1, pp. 34-40.
- Ward, J., Schaal, M., Sullivan, J., Bowen, M.E., Erdmann, J.B. & Hojat, M. 2009, 'Reliability and validity of the Jefferson Scale of Empathy in undergraduate nursing students', *Journal of Nursing Measurement*, vol. 17, no. 1, pp. 73-88.

- Wasserman, S., de Mamani, A.W. & Suro, G. 2012, 'Shame and guilt/self-blame as predictors of expressed emotion in family members of patients with schizophrenia', *Psychiatry Research*, vol. 196, no.1, pp. 27-31.
- Watkins, J. 2008, *Hearing voices: A common human experience*, Michelle Anderson Publishing, South Yarra.
- Weiland, D., Levine, C. & Smith, J. 2014, 'Hearing distressing voices clinical simulation: Life changing experiences of psychiatric-mental health nursing students', *Journal of Psychosocial Nursing and Mental Health Services*, vol. 52, no. 10, pp. 42-51.
- Williams, B., Brown, T., McKenna, L., Palermo, C., Morgan, P., Nestel, D., Brightwell, R., Gilbert-Hunt, S., Stagnitti, K., Olausson, A. & Wright, C. 2015, 'Student empathy levels across 12 medical and health professions: An interventional study', *Journal of Compassionate Health Care*, vol. 2, no. 4, viewed 10 January 2016, <http://dx.doi.org/10.1186/s40639-015-0013-4>
- Wilson, S., Prescott, J. & Becket, G. 2012, 'Empathy levels in first- and third-year students in health and non-health disciplines', *Journal of Pharmaceutical Education*, vol. 76, no. 2, pp. 1-24.
- Wolfe, P. 2006, 'The role of meaning and emotion in learning', *New Directions for Adult and Continuing Education*, vol. 2006, no. 110, pp. 35-41.
- Woods, A., Jones, N., Anderson-Day, B., Callard, F. & Fernyhough, C. 2015, 'Experiences of hearing voices: Analysis of a novel phenomenological survey', *Lancet Psychiatry*, vol. 2, no. 4, pp. 323-331.
- World Health Organisation (WHO). 2004, *Prevention of mental disorders. Effective interventions and policy options. Summary report*, WHO, Geneva.
- World Health Organisation (WHO). 2013, *Mental health action plan 2013-2020*, WHO, Geneva.