



***EFFECTS OF SELF-HELP MINDFULNESS-BASED  
PSYCHOEDUCATIONAL PROGRAM FOR CAREGIVER WELLBEING OF  
DISABLED ELDERLY***

**MOHAN A/L S. RAMASAMY**

**IPPM 2020 3**



**EFFECTS OF SELF-HELP MINDFULNESS-BASED  
PSYCHOEDUCATIONAL PROGRAM FOR CAREGIVER WELLBEING OF  
DISABLED ELDERLY**

By

**MOHAN A/L S. RAMASAMY**

**Thesis Submitted to the School of Graduate Studies, Universiti Putra  
Malaysia, in Fulfilment of the Requirements for the Degree of  
Doctor of Philosophy**

**October 2019**

## COPYRIGHT

All material contained within the thesis, including without limitation text, logos, icons, photographs and all other artwork, is copyright material of Universiti Putra Malaysia unless otherwise stated. Use may be made of any material contained within the thesis for non-commercial purposes from the copyright holder. Commercial use of material may only be made with the express, prior, written permission of Universiti Putra Malaysia.

Copyright © Universiti Putra Malaysia



## DEDICATION

This thesis is dedicated to my beloved wife, children and grandchildren and especially both my late father and mother

Thank you for your love, patience, vision, determination and support during my journey to achieve this dream together with me.



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in  
fulfilment of the requirement for the degree of Doctor of Philosophy

**EFFECTS OF SELF-HELP MINDFULNESS-BASED  
PSYCHOEDUCATIONAL PROGRAM FOR CAREGIVER WELLBEING OF  
DISABLED ELDERLY**

By

**MOHAN A/L S. RAMASAMY**

**October 2019**

**Chairman : Associate Professor Rahimah Ibrahim, PhD**  
**Institute : Malaysian Research Institute on Aging**

In recent years, the number of informal caregivers provided unpaid support for disabled dependent elderly at home has increased and is likely to continue to increase due to aging of the Malaysian population. The provision of this support, however, comes at a cost to the caregivers' health and wellbeing. Efforts have been made to alleviate these consequences through various forms of psycho-educational programs aimed to enable the caregivers to meet these demands. The reported success of these psycho-educational programs is varied in regards to their effectiveness; an argument supported by literature review papers on the subject that questions the methodologies and evaluations of these programs. There is a need to explore the ways to decrease caregivers' perceived stress and to promote positive reappraisal outcomes like mindfulness, self-compassion and satisfaction with life of informal caregivers by means of a robust design and evaluation. This thesis reports a study, the aim of which is to provide information about how to reduce the negative effects of the carer role whilst enhancing the positive effects using a self-help mindfulness-based psycho-educational program developed using lived experience. The self-help mindfulness-based psycho-educational program was developed and piloted with those caring for a disabled dependent elderly. This was achieved in three stages: (i) qualitative interviews with caregivers to explore and understand the role, (ii) developing the intervention program informed by qualitative findings, and finally by (iii) randomized evaluation of the intervention program. Effectiveness of the intervention program was determined using positive reappraisal outcomes like mindfulness, self-compassion and satisfaction with life, the results of which were compared to a control group who did not take part in the intervention program. The results indicated that self-compassion, satisfaction with life and mindfulness significantly higher following the mindfulness-based psycho-education training program as an intervention for the treatment group compared to the control group. There was also significant difference between the groups in caregiver

role strain. This study demonstrates that a mindfulness-based psycho-education training program may be a viable option to facilitate caregivers' well-being. This mindfulness-based psycho-education training program requires less financial and time resources compared to other typical stress reduction programs and is potentially more agreeable to caregivers' schedules. This study recommended that the future research should include an active control condition and explore whether similar findings can be extended to clinical populations. The training effects were also persistent after three months from the last intervention session. In contributing to existing research, the use of hermeneutic phenomenology provided new insight in to the experiences of those providing care. The outcome of the intervention pilot shows positive potential for the use of interventions beyond psychoeducation alone and the use of a self-care approach.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia  
sebagai memenuhi keperluan untuk Ijazah Doktor Falsafah

## **KESAN PROGRAM PENDIDIKAN PSIKO BANTUAN DIRI BERASAKAN KESEDARAN UNTUK PENJAGA WARGA EMAS YANG KURANG UPAYA**

Oleh

**MOHAN A/L S. RAMASAMY**

**Oktober 2019**

**Pengerusi : Profesor Madya Rahimah Ibrahim, PhD**  
**Institut : Institut Penyelidikan Penuaan Malaysia**

Beberapa tahun kebelakangan ini, bilangan penjaga dikalangan ahli keluarga memberikan sokongan tidak berbayar untuk menjaga warga emas yang lumpuh dan bergantung di rumah telah meningkat dan dijangka terus meningkat berikutan penuaan penduduk Malaysia. Walau bagaimanapun penyediaan sokongan seperti ini, akan memudaratkan kesihatan dan kesejahteraan penjaga ketika memenuhi tuntutan peranan penjagaan. Berbagai usaha telah dibuat untuk mengurangkan kesan-kesan ini melalui pelbagai bentuk program psiko-pendidikan yang bertujuan untuk membolehkan para penjaga memenuhi permintaan ini. Kejayaan yang dilaporkan dalam program-program pendidikan psiko ini adalah berbeza dengan keberkesanannya; hujah yang disokong oleh ulasan karya terpilih mengenai subjek yang menyoal metodologi dan penilaian program-program ini. Terdapat keperluan untuk diterokai cara untuk mengurangkan ketegangan peranan penjaga dan untuk menggalakkan hasil *reappraisal* positif seperti kesedaran, belas kasihan diri dan kepuasan dengan kehidupan penjaga dengan cara reka bentuk dan penilaian yang lebih mantap. Tesis ini melaporkan satu kajian, matlamatnya adalah untuk memberikan maklumat tentang bagaimana untuk mengurangkan kesan negatif penjaga sambil meningkatkan kesan positif menggunakan program psiko-pendidikan berasaskan bantuan sendiri yang dibangunkan menggunakan pengalaman hidup. Program Pendidikan Psiko dibangunkan dan dinilai bersama penjaga warga emas yang lumpuh dan bergantung. Ini dicapai dalam tiga peringkat: (i) wawancara kualitatif bersama penjaga untuk meneroka dan memahami peranan penjaga, (ii) membangunkan program intervensi yang dimaklumkan oleh penemuan kualitatif dan akhirnya dengan (iii) menilai secara rawak program intervensi. Keberkesanan program intervensi ditentukan dengan menggunakan *reappraisal* positif seperti kesedaran, belas kasihan diri dan kepuasan dengan kehidupan penjaga, hasilnya dibanding dengan kumpulan kawalan yang tidak mengambil bahagian dalam program intervensi.

Keputusan menunjukkan bahawa tahap belas kasihan diri, tahap kepuasan hidup dan tahap Kesedaran meningkat dengan ketara berikutan program latihan pendidikan psiko berdasarkan Kesedaran sebagai intervensi bagi kumpulan rawatan berbanding kumpulan kawalan. Terdapat juga perbezaan yang signifikan antara kumpulan dalam tahap ketegangan peranan pengasuh. Kajian ini menunjukkan bahawa program latihan pendidikan psiko berdasarkan Kesedaran mungkin pilihan yang berdaya maju untuk memudahkan kesejahteraan hidup pengasuh. Program latihan pendidikan psiko berdasarkan Kesedaran memerlukan kurang sumber kewangan dan masa berbanding dengan program pengurangan tekanan biasa yang lain, serta latihan ini juga lebih bersesuaian dengan jadual harian para pengasuh. Kajian ini mencadangkan agar penyelidikan masa depan harus merangkumi keadaan kawalan yang aktif dan meneroka sama ada penemuan yang sama dapat diperluaskan kepada populasi klinikal. Kesan latihan juga dikekalkan tiga bulan selepas fasa intervensi yang terakhir. Sebagai menyumbang kepada penyelidikan sedia ada, penggunaan fenomenologi hermeneutik telah memberikan pandangan baru dalam pengalaman mereka yang memberi penjagaan. Hasil daripada penilaian intervensi menunjukkan potensi positif bukan hanya terhadap Pendidikan Psiko, bahkan terhadap penggunaan pendekatan bantuan sendiri tersedut.



## **ACKNOWLEDGEMENTS**

All praise and thanks are due to GOD the Almighty who bestowed me with mindfulness, will, and strength, during the inception of my Ph.D. degree until I successfully accomplished.

I would like to thank my wife and children, for their total support regarding my research in mindfulness Psychoeducation. They have encouraged me to take risk and move forward so that I can pursue goals that feel meaningful to me.

My sincere gratitude and appreciation are extended to my three-committee members, without their help this work would have never been accomplished. First and foremost, I would like to extend my deepest thanks to my principal supervisor, Associate Professor Dr. Rahimah Ibrahim for her guidance, support and encouragement. I am also indebted to my first co-supervisor, Dr. Zainal Bin Madon for his sincere advice and expert guidance which inspired me to become a good researcher. My sincere utmost gratitude and appreciation to my second co-supervisor Dr. Zarinah Binti Arshat, for her precious guidance and useful critique of my work.

My appreciation goes to the Captains and crewmembers of the Malaysian Parkinson's Disease Association (MPDA), Alzheimer's Disease Foundation Malaysia (ADFM) and family members of University of Third Age (U3A) Kuala Lumpur/Selangor, who provided the facilities and assistance during sampling and intervention. Special thanks to MyAgeing's Training and Education Resources on Ageing (TERA) Unit and everyone from the Malaysian Research Institute on Ageing (MyAgeing) for helping me directly or indirectly in my study.

Finally, this thesis is dedicated to the loving memory of my very dear late father and late mother for the vision and determination to educate me. This piece of victory is dedicated to both of you.

**MOHAN S. RAMASAMY**

This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy.

The members of the Supervisory Committee were as follows:

**Rahimah Ibrahim, PhD**

Associate Professor  
Faculty of Human Ecology  
Universiti Putra Malaysia  
(Chairman)

**Zainal bin Madon, PhD**

Associate Professor  
Faculty of Human Ecology  
Universiti Putra Malaysia  
(Member)

**Zarinah binti Arshat, PhD**

Associate Professor  
Faculty of Human Ecology  
Universiti Putra Malaysia  
(Member)

---

**ZALILAH MOHD SHARIFF, PhD**  
Professor and Dean  
School of Graduate Studies  
Universiti Putra Malaysia

Date: 12 March 2020

## Declaration by graduate student

I hereby confirm that:

- this thesis is my original work;
- quotations, illustrations and citations have been duly referenced;
- this thesis has not been submitted previously or concurrently for any other degree at any other institutions;
- intellectual property from the thesis and copyright of thesis are fully-owned by Universiti Putra Malaysia, as according to the Universiti Putra Malaysia (Research) Rules 2012;
- written permission must be obtained from supervisor and the office of Deputy Vice-Chancellor (Research and Innovation) before thesis is published (in the form of written, printed or in electronic form) including books, journals, modules, proceedings, popular writings, seminar papers, manuscripts, posters, reports, lecture notes, learning modules or any other materials as stated in the Universiti Putra Malaysia (Research) Rules 2012;
- there is no plagiarism or data falsification/fabrication in the thesis, and scholarly integrity is upheld as according to the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) and the Universiti Putra Malaysia (Research) Rules 2012. The thesis has undergone plagiarism detection software.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name and Matric No.: Mohan a/I S. Ramasamy (GS38706)

## Declaration by Members of Supervisory Committee

This is to confirm that:

- the research conducted and the writing of this thesis was under our supervision;
- supervision responsibilities as stated in the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) are adhered to.

Signature: \_\_\_\_\_

Name of Chairman of

Supervisory Committee: Associate Professor Dr. Rahimah Ibrahim

Signature: \_\_\_\_\_

Name of Member of

Supervisory Committee: Associate Professor Dr. Zainal bin Madon

Signature: \_\_\_\_\_

Name of Member of

Supervisory Committee: Dr. Zarinah binti Arshat

## TABLE OF CONTENTS

		Page
<b>ABSTRACT</b>		i
<b>ABSTRAK</b>		iii
<b>ACKNOWLEDGEMENTS</b>		v
<b>APPROVAL</b>		vi
<b>DECLARATION</b>		viii
<b>LIST OF TABLES</b>		xiv
<b>LIST OF FIGURES</b>		xv
<b>LIST OF APPENDICES</b>		xvi
<b>LIST OF ABBREVIATIONS</b>		xvii
<b>CHAPTER</b>		
<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
	1.1 Background of the Study	1
	1.2 Problem Statement	3
	1.3 Research Objective	5
	1.4 Research Hypotheses	6
	1.5 Significance of the Study	6
	1.5.1 Contribution to disabled dependent elderly Caregivers	6
	1.5.2 Contribution to Counselling Psychology Practice	6
	1.5.3 Contribution to Literatures	7
	1.5.4 Contribution to Methodology	7
	1.6 Definition of Concepts	7
	1.6.1 Caregiver role strain	7
	1.6.2 Mindfulness	8
	1.6.3 Self-Compassion	9
	1.6.4 Satisfaction with Life	9
	1.6.5 Caregiver of disabled dependent elderly	10
	1.6.6 Need	11
	1.6.7 Mindfulness Based Psycho-Educational Program	11
	1.7 Assumptions of the Study	11
	1.8 Chapter Summary	13
	1.9 Structure of the Thesis	13
<b>2</b>	<b>LITERATURE REVIEW</b>	<b>15</b>
	2.1 Introduction	15
	2.2 The Role of a Caregiver	17
	2.2.1 Caregiver role strain	19
	2.2.2 Psychological Aspects of Caregiver Role Strain	22
	2.2.3 Effect of Caregiver Role Strain on the Care recipient	23

2.2.4	Related Risk Factors of Caregiver Role Strain	24
2.2.5	Related Protective Factors of Caregiver Role Strain	24
2.2.6	Outcome of successful coping	25
2.2.7	Social network theories among Caregivers	26
2.2.8	The Nature of Choice theory in Caregiving	28
2.2.9	Cognitive Behavior Therapy (CBT)	29
2.3	Modified Caregiver Strain Index (MCSI)	31
2.4	Mindfulness	33
2.4.1	Mindfulness and Caregiver Role Strain	36
2.4.2	Mindful Attention Awareness Scale	38
2.5	Self-Compassion	39
2.5.1	Self-Compassion Scale-Short Form	42
2.6	Satisfaction with life	43
2.6.1	Satisfaction with Life Scale	47
2.7	Signified Development and Application of Mindfulness among Caregivers	48
2.7.1	Caregiver Mental Health Interventions	50
2.7.2	Barriers to services available to Caregivers	52
2.7.3	Mindfulness and Therapy	52
2.7.4	Mindfulness Based Stress Reduction (MBSR)	53
2.7.5	Mindfulness Based Cognitive Therapy (MBCT)	54
2.7.6	Acceptance and Commitment Therapy (ACT)	54
2.7.7	Loving-Kindness Meditation (LKM)	55
2.7.8	Potential Barriers to using Mindfulness as an intervention	55
2.8	Assessment of Caregiver Needs	56
2.8.1	Research rationale: The Need for a Multicomponent Self-Care/help Intervention and Pilot Developed Using Lived Experience.	57
2.8.2	Rationale for Utilising Lived Experience	58
2.8.3	Rationale for Piloting Developed Intervention and Feasibility	59
2.8.4	Why a Mixed Methods	60
2.8.5	Self-help	61
2.9	Theoretical Framework based on the Empirical Literature	62
2.9.1	Introduction	62
2.9.2	Self-Help as an Intervention Strategy	62
2.9.3	Multi-component self-help Intervention	64
2.10	Conceptual Framework of the Study	76
2.11	Chapter Summary	78

<b>3</b>	<b>METHODOLOGY</b>	<b>79</b>
3.1	Introduction	79
3.2	Ethical Consideration	79
3.3	Research Design	79
3.4	Lived Experience	82
3.5	Gadamerian Hermeneutic Phenomenology	82
	3.5.1 Intentionality	82
	3.5.2 Historicity	82
	3.5.3 The Hermeneutic Circle	83
	3.5.4 Fusion of Horizons	83
	3.5.5 Refutation of Bracketing	83
	3.5.6 Universality	84
3.6	Stage One Procedure: Diagnosis Identification of Caregiver Needs and Coping Behaviours	85
	3.6.1 Study Design	85
	3.6.2 Study location	85
	3.6.3 Sample Population	85
	3.6.4 Sample and Procedures	86
	3.6.5 Data Collection and Analysis	86
3.7	Stage Two – Construction of the Program	91
	3.7.1 Developing a Program Proposal	91
	3.7.2 Validation of the Program	92
	3.7.3 Formalizing the Program	94
3.8	Stage Three – Randomized Evaluation of the Program	94
	3.8.1 Research design	95
	3.8.2 Location of the Study	96
3.9	Subjects of the study	96
	3.9.1 Power Analysis	96
	3.9.3 Inclusion Criteria	97
	3.9.4 Exclusion Criteria	99
3.10	Data Collection Procedure	100
3.11	Instrumentation	102
	3.11.1 Screening Instrument	102
	3.11.2 Measurements	103
	3.11.3 Instrument Translation Procedure	106
3.12	The Intervention	111
	3.12.1 The Intervention Procedure	112
	3.12.2 Control Group Activity	114
	3.12.3 Follow-up Session	115
3.13	Outcome Measure	115
3.14	Remuneration	115
3.15	Participants Retention	116
3.16	Statistical Analysis	116
3.17	Study Delimitation	118
3.18	Chapter Summary	118
<b>4</b>	<b>RESULTS AND DISCUSSION</b>	<b>120</b>
4.1	Introduction	120
	4.1.1. Results	120
4.2	Sociodemographic Characteristic at Baseline	121

4.3	The Modified Caregiver Strain Index (MCSI) on role strain	122
4.3.1	Within-subject effect	122
4.3.2	Between-subject effect	123
4.3.3	Within-between-subject effect	123
4.3.4	Mean plot	124
4.4	Mindful Attention Awareness Scale (MAAS) on Mindfulness	124
4.4.1	Within-subject effect	124
4.4.2	Between-subject effect	125
4.4.3	Within-between-subject effect	126
4.4.4	Mean plot	127
4.5	Self-Compassion Scale Short-Form (SCS-SF) on self-compassion	127
4.5.1	Within-subject effect	128
4.5.2	Between-subject effect	129
4.5.3	Within-between-subject effect	129
4.5.4	Mean plot	130
4.6	Satisfaction with Life Scale (SWLS) on satisfaction with life	130
4.6.1	Within-subject effects	130
4.6.2	Between-subject effect	131
4.6.3	Within-between-subject effect	132
4.6.4	Mean plot	133
4.7	Training Effects on levels of caregiver role strain	133
4.8	Training Effects on levels of mindfulness	134
4.9	Training Effects on levels of Self-Compassion	136
4.10	Training Effects on level of Satisfaction with Life	138
4.11	Finding and Discussion	140
4.12	Strengths of the study	143
4.13	Chapter Summary	145
<b>5</b>	<b>SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS FOR FUTURE RESEARCH</b>	<b>146</b>
5.1	Introduction	146
5.2	Summary	146
5.3	Study Implications	148
5.3.1	Knowledge Implication	148
5.3.2	Theoretical Implications of the Study	149
5.3.3	Practical Implications of the Study	150
5.3.4	Implications for Policy	151
5.4	Study Limitations	152
5.5	Conclusions	153
5.6	Recommendations for future research	154
	<b>REFERENCES</b>	<b>156</b>
	<b>APPENDICES</b>	<b>191</b>
	<b>BIODATA OF STUDENT</b>	<b>230</b>
	<b>LIST OF PUBLICATIONS</b>	<b>231</b>



## LIST OF TABLES

Table		Page
4.1	Sociodemographic Comparison Of Control Versus Intervention At Baseline	121
4.2	Summary of Within-Subject Effect for MCSI Score	122
4.3	Summary of Between-Subject Effect for MCSI Score	123
4.4	Summary of Within-Between-Subject Effect for MCSI	123
4.5	Summary of Within Subject Effect for MAAS Score	125
4.6	Summary of Between Subject Effect for MAAS Score	125
4.7	Summary of Within-Between Subject Effect for MAAS	126
4.8	Summary of Within-Subject Effect for SCS-SF Score	128
4.9	Summary of Between Subject Effect for SCS-SF	129
4.10	Summary of Within-Between-Subject Effect for SCS	129
4.11	Summary of Within Subject Effect for SWLS Score	131
4.12	Summary of Between-Subject Effect for SWLS Score	131
4.13	Summary of Within-Between-Subject Effect for SWLS Score	132

## LIST OF FIGURES

Figure		Page
2.1	Conceptual Framework for the Program Development and Evaluation	77
3.1	Model Depicting the Sequential Exploratory Design of The Study And the Three Stages	81
3.2	Consort Flow Diagram of Mindfulness Based Psychoeducation for Caregivers	100
3.3	Intervention Sessions and Activities	114
3.4	The Intervention Timeline	117
3.5	The Study Steps	119
4.1	Mean Plot for MCSI Score	124
4.2	Mean Plot for MAAS Score	127
4.3	Mean Plot for SCS-SF Score	130
4.4	Mean plot for SWLS score	133

## LIST OF APPENDICES

Appendix		Page
A	Flyers	191
B	Screening Checklist (English And Malay)	192
C	Confidential	195
D	Informed Consent Form	196
E	Modified Caregiver Strain Index (MCSI) English Version	199
F	Stages of Cross-Cultural Translation Model	213
G	Verification of Editing From English To Bahasa Melayu From The Institut Terjemahan & Buku Malaysia	214
H	Approval Letter from The UPM Ethics Committee For Research Involving Humans	215
I	Stage One Interview Prompts	216
J	Individual Interpretations For Each Participant	217
K	Letter of Acceptance And Invitation of Journal Paper	227
L	Live Well, Care Well Book Written and Published by The Researcher	229

## LIST OF ABBREVIATIONS

ADFM	Alzheimer's Disease Foundation Malaysia
ANOVA	Analysis of variance
CONSORT	Consolidated Standards of Reporting Trials
GLM	Generalized Linear Model
MAAS	Mindfulness Attention Awareness Scale
MBPE	Mindfulness based Psychoeducation Training Program
MCIS	Modified Caregivers Strain Index
MPDA	Malaysian Parkinson's Disease Association
RCT	Randomized Controlled Trials
SCS	Self-Compassion Scale
SCS-SF	Self-Compassion Scale-Short-Form
SWLS	Satisfaction with Life Scale
U3A	University of the Third Age

# CHAPTER 1

## INTRODUCTION

### 1.1 Background of the Study

This chapter provides background information of the study and identifies the focus of the investigation. Family members and friends who provide care for someone with specific health problems, chronic diseases or other disabilities without any salary or financial compensation are called informal caregivers (Whitebird, Kreitzer, Crain, Lewis & Hanson, 2013). It describes the extent of issues that informal caregivers are confronted with in their day to day life in caring for the disabled dependent elderly, the relevance of various policies to that effect, including the research questions to be addressed and significant of the research. Justification is given for the decision to adopt a mixed method design for the study. To achieve the overall aim the study comprised of three stages that were followed to provide the context.

Family caregivers of the disabled dependent elderly are growing in number and the care they are called upon to deliver in Malaysia is becoming increasingly demanding and complex. Empirical research shows that the caregiving situation can have a significant impact on the health of these caregivers often on account of stress, physical and psychological exhaustion, and a sense of being overwhelmed. Known as informal caregivers, they face a multitude of psychosocial detriments in response to their role (Steele, Maruyama & Glaynker, 2010). Increased longevity and reduced mortality are associated with the increase of technological advances of curative and preventive medicine. Aging is a complex process of biological evolution of living organisms, as well as psychological and social development of human beings. This is a normal, universal, gradual and irreversible process, in which there is deterioration of endogenous functional abilities of the body; with an increasing tendency among elderly people whom, despite living longer, present an association with chronic diseases (Brandon, 2013). Therefore, it is assumed that the elderly progressively lose functional abilities, thus favouring the limitations from the emergence of chronic non-transmittable diseases or conditions and its consequences, or the cognitive and functional losses of advancing age, which require home care and change the daily lives of various family members (Brown, Chen & Smith, 2012). The family has long been the primary care provider for elderly in need of assistance (Takagi, Davey & Wagner, 2013).

In Malaysia, it is estimated that around 50,000 people suffer from Alzheimer's disease, while patients with Parkinson's disease are believed to number around 15,000 to 20,000 people. As of 2005, it was reported that 0.063% of the population suffered from some form of dementia. This number is expected to reach 0.454% by 2050 due to our ageing population (Rajiah, Maharajan &

Yeen, 2017; Razali, Ahmad & Abd Rahman, 2011). However, the statistics may be skewed because many people still go undiagnosed. This may be due to a lack of awareness among Malaysians regarding mental health issues. Many also believe that dementia and Parkinson's are simply a natural part of growing old, and opt to deal with it on their own rather than seek help with managing it (Anand, Dhikav, Sachdeva & Mishra, 2016; Razali, Ahmad & Abd Rahman, 2011).

According to the World Bank classification, Malaysia is an upper-middle-income and developing economy situated in the East Asia and Pacific region. Its population consists mainly of ethnic Malays (47%), followed by Chinese (25%), Indians (7%) and indigenous tribal groups (11%) (World Bank List of Economies, 2014). Population projections predict that the number of people aged 60 years and above will form nearly 11% of the national population by 2020, and this figure will double by 2040 (Department of Statistics Malaysia [DOSM], 2012; 2014). In a review, according to Selvaratnam & Tin (2007), the total dependency ratio of the elderly expected to increase from 12.1% (2010) to 16.5% (2020). As such, it was expected that the prevalence of people with cognitive impairment and the number of disabled dependent elderly will be increasing as well. Thus, leading to increased responsibilities, including forcing family members into the caregiver role strain of providing care for ailing family members (Yahaya & Abdullah, 2010). Due to the emotionally challenging and time-consuming nature of caregiving, adult caregivers are at risk for experiencing mental health symptoms such as stress, depression, and anxiety. According to Bradley-Bursack (2016) an Agingcare.com expert, author of the book title "Minding Our Elders" and caregiver herself, mentioned that a caregiver is a person who takes on at least some part of the responsibility for the welfare of someone sick, elderly or disabled dependent. Many of the families with disabled dependent elderly with limitations in daily activities experience such psychological distress that they require any form of perspective self-reliant therapeutic intervention (Brown, Chen, & Smith, 2012). In this context, informal caregivers are the individuals who perform elderly care in their own family (Brandon, 2013).

There are many types of services available to caregivers to alleviate caregiver role strain (Lopez-Hartmann, Maja; Wens, Johan; Verhoeven, Veronique & Remmen, 2012). Traditional services offered to caregivers include respite care, educational programs, in-home individual counselling and support groups (Lopez-Hartmann, Wens & Verhoeven, 2012). Multi- component self-help intervention programs and support groups are one of the most researched services for caregivers and have been shown to be helpful in promoting balance between personal and caregiving time, self-help, coping strategies and shared experiences (Alzheimer's Association and National Alliance for Caregiving, 2014).

Therefore, the present study aimed to develop and evaluate a multi-component self-help intervention program (called Self-help mindfulness- based psycho-educational) informed by lived experiences, for caregivers of disabled

dependent elderly to help alleviate symptoms of caregiver role strain and to promote positive reappraisal outcomes like mindfulness, self-compassion and satisfaction with life. The study was carried out in three stages with each stage informing the subsequent stage. They can be reductively be understood as: Stage 1: undertaking a qualitative exploration to gain an understanding of lived experience of an intercept population, Stage 2: the development of a multicomponent intervention informed by the results from Stage 1 qualitative exploration of lived experience, and Stage 3: Randomized Evaluation of the developed intervention program.

## 1.2 Problem Statement

Critical reviews regarding caregiver intervention research (Talley & Montgomery, 2013) have highlighted mixed success in the alleviation of caregiving role consequences and have emphasised the benefits of robust studies whereby the processes of recruitment, retention and acceptability can be further understood. It has also been indicated that the very perspectives of how and what self-help psychoeducational interventions target can greatly affect the effectiveness of intervention program assistance (Peters, Fitzpatrick, Doll, Playford & Jenkinson, 2011). There are implications within the literature that we are facing a growing aging population globally. Malaysia, like any other country in the world, faces a growing number of people reaching old age (Nikmat & Almashoor, 2015). In a review, based on the Department of Statistic Malaysia, 70% of the whole population in Malaysia is coming from the ages between 15-64 years old (see, Department of Statistics Malaysia, 2012). In another review, based on the statistics released by the United Nations, Department of Economic and Social Affairs (UNDESA), Population Division, 8.5 percent of the Malaysian population is now aged 60 years and above and it has also predicted that this percentage would increase to 23.1 in 2050 and to 34.8 in 2100 (United Nations Statistics Division, 2013). In Malaysia, since the Malaysian government discharged long-stay mental health service users into the community, family caregivers have been regarded as being responsible for looking after their relatives. In a review, as the number of elderly people with chronic diseases will increase, health-related costs will also increase. Therefore, responsibility for care is shifting from healthcare providers to patients and their families. Patients are staying at home instead of in hospitals. Traditionally, Malaysian families choose to look after their ill members at home and see that the hospital as a last choice (Deva, 2006), as cited in Yahaya and Abdullah, (2010) are giving care to a family member or friend for an average of eleven hours each week. There is a problem with how, at certain stage, being a caregiver and at the same time managing their own life and family, caregiving is challenging and demanding (Francine Ducharme, 2014). While many family caregivers find their role to be deeply satisfying, many also neglect their own health in order to meet the needs of chronically ill family members. They can experience severe stress, and research indicates that caregivers often have health problems take more medications than non-caregivers and experience depression (Francine Ducharme, 2014).

The other gap in the literature is the lack of attention to the needs of family or informal caregivers' in intervention program. In a systematic review, Cagle (2012) demonstrated that the information needs of disabled dependent elderly and their carers' were not being met and further study was needed to determine specific educational needs of disabled dependent elderly and carers. Curry and Walker (2006) also identified the mismatch between intervention program and the caregivers needs as a gap in the intervention studies. Likewise, in a systematic review, Gupta (2011) found a need for more psycho-educational interventional studies due to the discrepancy of the findings that may results from a failure of intervention program to address caregivers needs. Therefore, setting extensive psycho-educational intervention program based on the special needs of family caregivers appear as a vital issue for research, as well as an essential subject for policy makes in Malaysia (Hamid, Krishnaswamy, Abdullah & Momtaz, 2011).

These papers question the reliance upon health-related outcomes without consideration of wellbeing, the use of singular component interventions that may not fully accomplish what complex interventions could do, and reliance upon unjustified measurement tools that can lead to false positive or even false negative results. This self-help multi-component intervention project reported in this thesis has been shaped by these recommendations for future caregiver intervention research to produce a multi-component self-hep intervention program that was piloted, to further understand the potential positive indications of intervention assistance with those who care for disabled dependent elderly relative. That is why mindfulness based psycho- educational program (a multi-component self-hep intervention program) for informal caregivers are interesting to investigate: they give new opportunities for global access of health services and medical care, especially for disabled dependent elderly with chronic diseases and their informal caregivers (Kuyken, Watkins, Holden, White, Taylor, Byford, 2010). Cagle (2012) showed that there is insufficient information of family caregivers' coping skills, the theoretical concepts and frameworks supporting coping, and its impact on caregivers. They emphasized the need to additionally study the link between theoretical concepts of effective coping and outcomes using standardized measures. They also lay stress on a need to examine the processes involved in the implementing the intervention using multi method designs that include both qualitative and quantitative approaches. In view of the existing gaps, this research was designed to develop and evaluate a self-help multi-component psycho-educational intervention program for caregivers of disabled dependent elderly at baseline and at consequent assessments.

Based on the background and statement of the problem this study was designed to answer the following research questions;

To achieve the main objective of the study, the following general research question was propounded:

To what extent does the development of a self-help mindfulness-based psycho-educational intervention program improve caregiver role strain, mindfulness,



self-compassion and satisfaction with life among caregivers of disabled dependent elderly?

Besides the above general research question, the following specific research questions were posed:

This aim led to the stage one (the qualitative phase) research question: What are the most significant needs, problems and coping behaviours (via live experiences) of those who provide care for a disabled dependent elderly relative?

The findings elicited from this research question contributed to the Stage Two, (an intermediary developmental phase) of the intervention question: How can a self-help mindfulness-based psycho-educational intervention program be developed to the needs of informal caregivers of disabled dependent elderly?

The aim of Stage Three, (the quantitative phase), involved implementation and piloting of the developed intervention gauging effectiveness to enhance the understanding of how best to assist those caring for disabled dependent elderly relatives through self-help multi-component program module. This aim led to the research question below.

Does the self-help mindfulness-based psycho-educational program show a significant difference in care-role strain, self-compassion, satisfaction with life and mindfulness between intervention and control groups from baseline to three months later?

### **1.3 Research Objective**

The purpose of this research was to develop and to evaluate a self-help mindfulness-based psycho-educational program to examine its effects on care-role strain, self-compassion, satisfaction with life and mindfulness among caregivers of disabled dependent elderly.

The specific objectives of this program are as follows:

1. To explore the needs and coping behaviours of those who provide care for a disabled dependent elderly relative.
2. To develop a self-help mindfulness-based psycho-educational program tailored to the needs of caregivers of disabled dependent elderly relative.
3. To evaluate the effects of self-help mindfulness-based psycho-educational program on care-role strain, self-compassion, satisfaction with life among caregivers of disabled dependent elderly.

## **1.4 Research Hypotheses**

To achieve research objectives, the hypotheses of the study was developed as follows:

H1: The results of the intervention group will differ significantly from those of a control group, from baseline to 3 months later. *(and that the difference will be caused by the independent variable (or variables) under investigation).*

## **1.5 Significance of the Study**

### **1.5.1 Contribution to disabled dependent elderly Caregivers**

In Mindfulness Based Intervention (MBI), instructors provide guided training on mindfulness exercises, including body scan, stretching, and mindful sitting. An inquiry into participant needs is followed by an exploration of their personal experiences. New insights and understandings about participants' reactions to stress are addressed. It can improve their attention, promote tolerance of unpleasant sensations and feelings, and facilitate cognitive changes and effective coping, and all these benefits may be helpful in supporting the caregivers in managing the caregiving burden. A recent review suggests the mindfulness role of adaptive emotion regulation that MBI can reduce intensity of emotional distress, enhance emotional recovery, reduced negative self-referential processing, and promote the engagement in goal-directed behaviours (Roemer, Williston & Rollins, 2015). The researcher declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest, as this intervention program can be a self-care/help program for the caregivers' community in the society.

### **1.5.2 Contribution to Counselling Psychology Practice**

Although the use of mindfulness is increasing in other areas of applied psychology, counselling psychology in Malaysia has yet to embrace it in practice. This research introduces counselling psychologists to the burgeoning field of mindfulness psychology and to the possibilities that it offers to their discipline. A background on the Western scientific study and application of mindfulness provides a theoretical foundation to those unfamiliar with the topic. We then discuss the application of mindfulness technologies to various forms of service provision in the professional practice of counselling psychology. The innovative and novel avenues that mindfulness psychology in this research offers can be integrated into existing counselling psychology professional practice, and service provision in Malaysia.

### **1.5.3 Contribution to Literatures**

Since very little research has been conducted on the topic of family caregivers in Malaysia, this study potentially adds new knowledge and perspective to the literature with regard to disabled dependent elderly caregivers, who have gained less attention. In Malaysia there is no special centre to support family caregivers of disabled dependent elderly; therefore, this study can be a starting point for organizing dependent elderly caregivers supporting groups to help the dependent elderly and their relatives in the community. This study may also help to approve and establish the effects of mindfulness-based psycho-educational interventional programs in the literatures which have already had contradictory results.

### **1.5.4 Contribution to Methodology**

Recently, the use of Phenomenology as a research method which is to fully describe a person's lived experience of an event or experience. It stresses that only those that have experienced phenomena can communicate them to the outside world. Lived experience, as it is explored and understood in qualitative research, is a representation and understanding of a researcher or research subject's human experiences, choices, and options and how those factors influence one's perception of knowledge. Lived experience is defined by Given (2008) as representation and understanding of a research participants' experiences, choices, options, and how these factors influence one's perception of knowledge. Phenomenology is the philosophical study of observed unusual people or events as they appear without any further study or explanation. Hence, this study which adapted the Phenomenology as a research methodology will add knowledge to the methodological literature.

## **1.6 Definition of Concepts**

In accordance with the study aims and scope and based on their implication in the current study, the definitions of the study concepts were presented in the following order: i) conceptual, and ii) operational definitions.

### **1.6.1 Caregiver role strain**

Caregiver role strain encompasses the difficulties assuming and functioning in the caregiver role as well as associated alterations in the caregiver's emotional and physical health that can occur when care demands exceed resources. Caregiver strain, an evolving term, occurs when caregivers perceive difficulty performing roles or feel overwhelmed by their tasks (Godwin, Swank, Vaeth, & Ostwald, 2013; Kao, Lynn, & Crist, 2011).

Caregiver role strain in this study entails the difficulties assuming and functioning in the caregiver role as well as associated alterations in the caregiver's emotional and physical health that can occur when care demands exceed resources. Caregivers experience differing challenges during different phases of the disabled dependent elderly that can significantly impact their functioning and quality of life. The Modified Caregiver Strain Index (MCSI) is a measurement tool that can be used to quickly screen for caregiver strain with long term family caregivers. It is a 13-question tool that measures strain related to care provision for the current study.

### **1.6.2 Mindfulness**

Mindfulness is an intentionally focused awareness—a way of paying attention on purpose in the present moment, non-judgmentally (Birtwell, Kelly, Williams, van Marwijk, Armitage, Sheffield, 2019; Kabat-Zinn, 2017b). It has been described as a 'journey of self-development, self-discovery, learning, and healing' (Kabat-Zinn, 2017a). Mindfulness may occur formally while doing an activity, such as yoga, or while being, such as sitting in mindfulness meditation practice. It may also occur informally in activities of daily living, such as while eating, showering, walking, or speaking (Birtwell et al., 2019). By developing mindfulness, we increase the ability to stay connected with ourselves and our own goals, without letting emotions or negative thoughts interfere. In the nutshell, mindfulness is a state of heightened awareness of the "here and now" moment in terms of our thoughts, actions, feelings and emotions.

Mindfulness begins by bringing clear awareness to current experiences, like observing and attending to the changing field of thoughts, feelings, and sensations from moment to moment – by regulating the focus of attention. This leads to a feeling of being very alert to what is occurring in the here and now moment (Birtwell et al., 2019). In this study it is described as a feeling of being fully present and live in the moment. It is crucial that caregivers learn how to calm their minds in order to be more centred and focused, and to be more self-aware of their emotions so they can work with them to build richer relationships with the care-recipients. Like everything in life, the more you practice and apply what you learn, the more you will get out of the training program, but the results are definitely worth the effort. Mindfulness guides caregivers to focus on and acknowledge feelings but to do so in a non-judgmental and non-self-critical way.

Based on the nature and the aims of the current study, mindfulness defined as a state of heightened awareness of the "here and now" moment in terms of our thoughts, actions, feelings and emotions in a non-judgmental and non-self-critical way, which is measured with the Mindful Attention Awareness Scale (MAAS) a 15-item scale.

### 1.6.3 Self-Compassion

"Self-compassion entails being kind and understanding toward oneself in instances of pain or failure rather than being harshly self-critical; perceiving one's experiences as part of the larger human experience rather than seeing them as isolating; and holding painful thoughts and feelings in mindful awareness rather than over-identifying with them" (Neff & Germer, 2017). In this sense self-compassion has been described as a more adaptive way of relating to the self (Neff & McGehee, 2010; Neff, Marissa & Knox, 2017). Self-compassion in this study entails: (a) being kind and understanding toward oneself in times of pain or failure, (b) perceiving one's own suffering as part of a larger human experience, and (c) holding painful feelings and thoughts in mindful awareness. Self-compassion also has roots in Buddhist teachings, which suggest that compassion (toward self or others) involves awareness of suffering and distress and a desire to alleviate it. It includes an openhearted willingness to face suffering, rather than denying or turning away from it, and the recognition that failings and misfortunes are universal human experiences (Baer & Lykins, 2012).

In accordance with the current study nature, self-compassion is defined as the concept which is measured with the Self-Compassion Scale-Short Form (SCS-SF).

### 1.6.4 Satisfaction with Life

Satisfaction with life is a construct that emerged within subjective well-being and its cognitive components such as life (Diener & Biswas-Diener, 2019; Diener, Lucas & Oishi, 2018). Subjective well-being has been conceptualized as containing two separate, but related components: an affective (feeling) component and a cognitive (thinking) component (Diener, Biswas-Diener, 2018; Heintzelman, & Diener, 2018). Satisfaction with life as a whole must be satisfaction not only with that which is, but also with that which was and that which will be, not only with the present, but also with the past and the future (Krys, Uchida, Oishi & Diener, 2018). Barker (2014a) said, financial income and education are shown to increase life-satisfaction, but this is mainly because they are so highly valued in the world we live in today. Build relationships with loved ones, create achievable goals for yourself, and put yourself in situations where you can exercise your personal strengths and abilities; it will help you experience greater feelings of satisfaction. If you can do these things, you can benefit yourself and those around you. Life satisfaction is being happy about your life. It is the happiness that exists when we talk about the past and the big picture (Barker, 2014a; Krys, Uchida, Oishi & Diener, 2018). Satisfaction in this study entails a state of mind. It is an evaluative appraisal of something. The term refers to both 'contentment' and 'enjoyment'. As such it covers cognitive-appraisals as well as affective-appraisals. Satisfaction can be both short term and stable through time. Satisfaction of Life in this study is the degree to which a person positively evaluates the overall quality of his/her life as-a-whole. In

other words, how much the person likes the life he/she leads? Quality of life is a measure of an individual's ability to function physically, emotionally and socially within his/her environment at a level consistent with his/her own expectations.

In the current study, the satisfaction with life is the concept which is measured with the Satisfaction with Life Scale (SWLS).

### **1.6.5 Caregiver of disabled dependent elderly**

Elderly people's ability to function independently is important, as physical disability and functional limitation have profound public health implications with increased utilization of health care and a need for supportive services and long-term care (Apinonkul, Soonthornhada, Vapattanawong, Aekplakorn & Jagger, 2015). Physical disability and functional limitation are common among older people, leading to adverse consequences such as dependency and institutionalization (Gill, Gahbauer & Allore, 2006; Xue, 2011). Persons who is old, having physical disability and functional limitation, cannot care for themselves and depend on others to meet their most basic needs (Ponce et al., 2011). Malaysian who is 60 years or more cannot care for themselves (disabled) and dependent on others to meet their most basic needs and daily activities.

Caregiver is defined as the family member, friend or neighbour, who spends the most time providing unpaid care to the disable dependent elderly person and who is perceived by themselves and others as the principal person responsible for caring for them (Barbosa, Figueiredo, Sousa & Demain, 2011a). Caregivers of disabled dependent elderly can be classified into formal and informal. Formal caregivers are professionals paid for that job. The informal caregivers can be a relative, friend, neighbour or someone who provides care for another person with disability/dependency and is not paid for that (Alves, Paul, Duarte, Azevedo & Teixeira, 2016). Caregivers of disable dependent elderly can simply help in shopping, housekeeping and/or in more complex tasks like bathing or feeding. The degree of dependence of the care recipient can affect the type, number and intensity of the performed tasks. This interaction becomes more difficult depending on the context of caregiving (e.g. formal or informal caregiving, living conditions, and monetary resources), (Ponce et al., 2011). Informal caregivers have some specificities/problems that require particular interventions to help them to deal with their needs (Alves et al., 2016; Savundranayagam, Montgomery, Kosloski & Little, 2011; Silva, Teixeira, Teixeira & Freitas, 2013). Caregiver in this study entails any community-dwelling individual who has the responsibility to care for disable dependent elderly as a result of family relationship or who has assumed the responsibility for care of the person voluntarily, by contract or as a result of the ties of friendship.

Caregivers in this study includes, but is not limited to, relatives, household members, guardians, neighbours, friends and volunteers, who has assumed the responsibility for an elderly's essential food, shelter, transportation, personal care or health care needs. Thus, this study defined caregiver of disable dependent elderly as individuals age above 21 years old and meet all inclusion criteria of the current study.

#### **1.6.6 Need**

The needs of family caregivers often go unnoticed. The definition of family needs as (Silva et al., 2013) defined is “a requirement that, if unmet, produces distress”.

In this study need is a perceived deficiency in the area of education and psychological support in the caring process identified by family caregivers of disable dependent elderly through a qualitative approach by semi-structured interviews.

#### **1.6.7 Mindfulness Based Psycho-Educational Program**

Program emphasizes both the provision of information and a mindfulness psychology/counselling approach to decrease caregiver distress (care-role strains). Although not explicated as such, these program aim to address caregivers as both clients and care providers (Mearns & Thorne, 2013).

In this study, in accordance to the caregivers' needs, a multi-component psycho-educational program model was constructed, tested, and implemented through four individual educational sessions and one family meeting.

### **1.7 Assumptions of the Study**

The following anticipated assumptions were:

In accordance with the philosophical assumptions underpinning Gadamer's hermeneutics and phenomenology (Regan, 2012), which forms the qualitative part of the mixed methods design, the researcher has to declare their presuppositions and fore understanding which they interpreted and understood the lived experiences of those they interacted with. The researcher has an academic background in counselling and psychology with research experiences with older adults and youths in relation to coping skills. He has occupational experience working with families as a community caregiver and

support group facilitator for disabled dependent elderly with mental health conditions.

Through this, the researcher has developed an understanding of recovery in the common neurodegenerative diseases and witnessed the day to day experiences of those who care for an elderly relative diagnosed with a multifactorial-diseases like Alzheimer's disease (AD) and Parkinson's disease (PD) at home. Having facilitated a support group for disabled dependent elderly, the researcher has experience of the range of behaviours and personal experiences but not their families or care givers. Previously having been in a counselling role, the researcher brings the skillset of listening to and deeply understanding a speaker to aid the hermeneutic process, by both eliciting more lived experiences through verbal interaction and demonstrating understanding of others lived experiences through empathy. As the researcher has worked with others for most of his life, he regards human experience to be implicitly multifaceted and unique; and human consciousness as so complex that it may only be truly expressed by a shared understanding of personal expression, through the selection of words to portray experience.

With limited experience with qualitative methods prior to the study at hand, the engagement with and selection of phenomenology was shaped through reviews of language, the benefit in true understanding of another person, the sharing of personal experience and an appreciation of the spoken word. From this background, the researcher brings to this research the pre-conceptions and understandings on the phenomenon being examined in this thesis.

This study was carried out in three stages with each stage informing the subsequent stage:

Stage One of the research study explored the lived experiences of those who provide care for disabled dependent elderly. The information was attained using a phenomenological approach to help provide data that is information rich, pertaining to the experiences of the target population, and used in conjunction with caregiver intervention research literature, to design a robust multi-component program.

Stage Two, the development of a robust self-help mindfulness-based psycho-educational program was undertaken which was informed by the outcome results of Stage One. An evaluation of the intervention was developed, with consideration of feasibility trials, and also limitations and suggestions from previous caregiver intervention research literature.

In Stage three, a longitudinal pilot evaluation of the program developed and evaluated in accordance with Stage Two was undertaken. Participants engaging with the intervention for three months were assessed on care role



strain, mindfulness, self-compassion and satisfaction with life outcome measures at pre- and post-intervention phase. Involvement and interaction with each component were evaluated using direct and accurate measurements to reflect engagement. The results provide findings that will illuminate how to effectively negate the impacts of the informal caregiving role and provide feasibility data for larger scale interventions.

## **1.8 Chapter Summary**

In brief, this chapter has set out the context of the study and how the thesis is structured.

## **1.9 Structure of the Thesis**

The research consists of five chapters that covered all the project and the details of the thesis structure are presented as follows:

### **Chapter 1**

Chapter 1 gives background information to the research study, the extent of the problem to be explored, definition of terms, the significant and the assumptions of the study, and finally the structure of how the thesis is presented.

### **Chapter 2**

Chapter 2 presents an overview of literature search strategy for previous research studies with informal caregivers, gaps identified in existing literature evidence, and the relevance for developing a multicomponent self-help program informed by lived experiences, rationale for piloting, in order to set the context of the research study, theoretical framework and conceptual framework of the study is also presented in this chapter.

### **Chapter 3**

Chapter 3 gives an overview of the research design and methods, the rationale for adopting a mixed method research methodology and design, explains the development of the self-help mindfulness based psycho-educational program, including the scope and flow of the connection between the three different stages of the study, the rationale for feasibility evaluation of the developed program and related ethical and methodological legitimization issues.

## **Chapter 4**

Chapter 4 presents the combined results of Stage 1 (qualitative) and Stage 3 (quantitative). Stage 1 results show the themes and their supporting verbatim direct quotes to illustrate and give a description of the common features of the informal carers' experience. The quantitative statistical analysis is presented in tables illustrating the acceptability, meaningfulness and effectiveness of the developed program and the justification of the quantitative results.

## **Chapter 5**

Chapter 5 provides a discussion drawing on the synthesis of the overall qualitative and quantitative results and linking this to existing and relevant literature, provides information on the original contribution made to knowledge, reflection on the study, appraisal of the limitations and strengths of the study, overall insights provided from the study, relevant implications for policy, practice and future research, conclusion and recommendations of the study. Finally, each participant's historical background and interpretation of narratives for Stage 1 of the study are located in appendix J.

## REFERENCES

- Abdel-Khalek, A. M. (2010). Quality of life, subjective well-being, and religiosity in Muslim college students. *Quality of Life Research, 19*(8), 1133-1143.
- Aboulafia-Brakha, T., Suchecki, D., Gouveia-Paulino, F., Nitrini, R., & Ptak, R. (2014). Cognitive-behavioural group therapy improves a psychophysiological marker of stress in caregivers of patients with Alzheimer's disease. *Aging & mental health, 18*(6), 801-808.
- Adelman, R. D., Tmanova, L. L., Delgado, D., Dion, S., & Lachs, M. S. (2014). Caregiver burden: a clinical review. *Jama, 311*(10), 1052-1060.
- Ain, Q. U., Dar, N. Z., Ahmad, A., Munzar, S., & Yousafzai, A. W. (2014). Caregiver stress in stroke survivor: data from a tertiary care hospital-a cross sectional survey. *BMC psychology, 2*(1), 49. <https://doi.org/doi:10.1186/s40359-014-0049-9>
- Alipah, B., Tutiiryani, D., Ainsah, O., & Osman, C. B. (2010). Depressive disorders and family functioning among the caregivers of patients with schizophrenia. *East Asian Archives of Psychiatry, 20*(3), 101.
- Allen, S. M., Lima, J. C., Goldscheider, F. K., & Roy, J. (2012). Primary caregiver characteristics and transitions in community-based care. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 67*(3), 362-371.
- Alsubaie, M., Abbott, R., Dunn, B., Dickens, C., Keil, T. F., Henley, W., & Kuyken, W. (2017). Mechanisms of action in mindfulness-based cognitive therapy (MBCT) and mindfulness-based stress reduction (MBSR) in people with physical and/or psychological conditions: a systematic review. *Clinical Psychology Review, 55*, 74-91. <https://doi.org/10.1016/j.cpr.2017.04.008>
- Alves, S., Teixeira, L., Azevedo, M. J., Duarte, M., & Paul, C. (2016). Effectiveness of a psychoeducational programme for informal caregivers of older adults. *Scandinavian journal of caring sciences, 30*(1), 65-73. <https://doi.org/doi:10.1111/scs.1222>
- Ampalam, P., Gunturu, S., & Padma, V. (2012). A comparative study of caregiver burden in psychiatric illness and chronic medical illness. *Indian journal of psychiatry, 54*(3), 239.
- Anand, K. S., Dhikav, V., Sachdeva, A., & Mishra, P. (2016). Perceived caregiver stress in Alzheimer's disease and mild cognitive impairment: A case control study. *Annals of Indian Academy of Neurology, 19*(1), 58.
- Apinonkul, B., Soonthorndhada, K., Vapattanawong, P., Aekplakorn, W., & Jagger, C. (2015). Gender differences in health expectancies across the disablement process among older Thais. *PLoS One, 10*(3), e0121310. <https://doi.org/doi:10.1371/journal.pone.0121310>

- Applebaum, M. (2012). Phenomenological psychological research as science. *Journal of Phenomenological Psychology, 43*(1), 36-72.
- Arai, Y., & Zarit, S. H. (2014). Determining a cutoff score of caregiver burden for predicting depression among family caregivers in a large population-based sample. *International journal of geriatric psychiatry, 29*(12), 1313-1315.
- Arnsberger, P., Lynch, U., & Li, F. (2012). The effects of caregiving on women's self-assessed health status: An international comparison. *Health Care for Women International, 33*(10), 878-895.
- Ayala, G. X., & Elder, J. P. (2011). Qualitative methods to ensure acceptability of behavioral and social interventions to the target population. *Journal of Public Health Dentistry, 71*, S69-S79.
- Baer, R. A., Lykins, E. L., & Peters, J. R. (2012). Mindfulness and self-compassion as predictors of psychological wellbeing in long-term meditators and matched nonmeditators. *The Journal of Positive Psychology, 7*(3), 230-238. <https://doi.org/doi:10.1080/17439760.2012.674548>
- Barbosa, A., Figueiredo, D., Sousa, L., & Demain, S. (2011). Coping with the caregiving role: Differences between primary and secondary caregivers of dependent elderly people. *Aging & Mental Health, 15*(4), 490-499.
- Barnard, L. K., & Curry, J. F. (2011). Self-compassion: Conceptualizations, correlates, & interventions. *Review of general psychology, 15*(4), 289-303.
- Bartholomaeus, J. D., Van Agteren, J. E., Iasiello, M. P., Jarden, A., & Kelly, D. (2019). Positive Aging: The Impact of a Community Wellbeing and Resilience Program. *Clinical gerontologist, 42*(4), 377-386. <https://doi.org/10.1080/07317115.2018.1561582>,
- Beaton, D. E., Bombardier, C., Guillemin, F., & Ferraz, M. B. (2000). Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine, 25*(24), 3186-3191. <https://doi.org/doi:10.1097/00007632-200012150-00014>
- Beaumont, E. A., Jenkins, P., & Galpin, A. J. (2012). 'Being kinder to myself': a prospective comparative study, exploring post-trauma therapy outcome measures, for two groups of clients, receiving either cognitive behaviour therapy or cognitive behaviour therapy and compassionate mind training. *Counselling Psychology Review, 27*(1), 31-43.
- Behr, D., & Shishido, K. (2016). 19 The Translation of Measurement Instruments for CrossCultural Surveys. *The SAGE handbook of survey methodology*.
- Bergen-Cico, D., Possemato, K., & Cheon, S. (2013). Examining the efficacy of a brief mindfulness-based stress reduction (Brief MBSR) program on psychological health. *Journal of American College Health, 61*(6), 348-360.

- Berk, L., Berk, M., Dodd, S., Kelly, C., Cvetkovski, S., & Jorm, A. F. (2013). Evaluation of the acceptability and usefulness of an information website for caregivers of people with bipolar disorder. *BMC medicine*, *11*(1), 162. <https://doi.org/http://www.biomedcentral.com/17417015/11/162>.
- Bester, E., Naidoo, P., & Botha, A. (2016). The role of mindfulness in the relationship between life satisfaction and spiritual wellbeing amongst the elderly. *Social Work*, *52*(2), 245-266. <https://dx.doi.org/10.15270/52-2-503>
- Binding, L. L., & Tapp, D. M. (2008). Human understanding in dialogue: Gadamer's recovery of the genuine. *Nursing Philosophy*, *9*(2), 121-130.
- Birnie, K., Speca, M., & Carlson, L. E. (2010). Exploring self-compassion and empathy in the context of mindfulness-based stress reduction (MBSR). *Stress and Health*, *26*(5), 359-371. <https://doi.org/10.1002/smi.1305>
- Birtwell, K., Williams, K., van Marwijk, H., Armitage, C. J., & Sheffield, D. (2019). An exploration of formal and informal mindfulness practice and associations with wellbeing. *Mindfulness*, *10*(1), 89-99. <https://doi.org/https://doi.org/10.1007/s12671-018-0951-y>
- Bluth, K. (2017). *The self-compassion workbook for teens: Mindfulness and compassion skills to overcome self-criticism and embrace who you are*. New Harbinger Publications.
- Boehm, J. K., Winning, A., Segerstrom, S., & Kubzansky, L. D. (2015). Variability modifies life satisfaction's association with mortality risk in older adults. *Psychological science*, *26*(7), 1063-1070. <https://doi.org/doi:10.1177/0956797615581491>
- Bögels, S. M., Helleman, J., van Deursen, S., Römer, M., & van der Meulen, R. (2014). Mindful parenting in mental health care: effects on parental and child psychopathology, parental stress, parenting, coparenting, and marital functioning. *Mindfulness*, *5*(5), 536-551.
- Bohlmeijer, E., Prenger, R., Taal, E., & Cuijpers, P. (2010). Meta-analysis on the effectiveness of mindfulness-based stress reduction therapy on mental health of adults with a chronic disease: What should the reader not make of it?. *Journal of psychosomatic research*, *6*(69), 614-615. <https://doi.org/10.1007/s12671-013-0209-7>
- Bohlmeijer, E., Prenger, R., Taal, E., & Cuijpers, P. (2010). The effects of mindfulness-based stress reduction therapy on mental health of adults with a chronic medical disease: a meta-analysis. *Journal of psychosomatic research*, *68*(6), 539-544.
- Bortz, J. & Döring, N. (2016). *Research Methods and Evaluation in the Social and Human Sciences* (5th ed.). Berlin, Heidelberg: Springer.
- Bratt, A., & Fagerström, C. (2019). Self-compassion in old age: confirmatory factor analysis of the 6-factor model and the internal consistency of the

Self-compassion scale-short form. *Aging & mental health*, 1-7.  
<https://doi.org/10.1080/13607863.2019.1569588>

- Brazier, C. (2013). Roots of mindfulness. *European Journal of Psychotherapy & Counselling*, 15(2), 127-138.
- Brown, A. P., Marquis, A., & Guiffrida, D. A. (2013). Mindfulness-based interventions in counseling. *Journal of Counseling & Development*, 91(1), 96-104.
- Brown, J. W., Chen, S. L., & Smith, P. (2013). Evaluating a community-based family caregiver training program. *Home Health Care Management & Practice*, 25(2), 76-83.
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of personality and social psychology*, 84(4), 822.
- Brown, K. W., Coogle, C. L., & Wegelin, J. (2016). A pilot randomized controlled trial of mindfulness-based stress reduction for caregivers of family members with dementia. *Aging & mental health*, 20(11), 1157-1166. <https://doi.org/10.1080/13607863.2015.1065790>.
- Brown, K. W., West, A. M., Loverich, T. M., & Biegel, G. M. (2011). Assessing adolescent mindfulness: Validation of an Adapted Mindful Attention Awareness Scale in adolescent normative and psychiatric populations. *Psychological assessment*, 23(4), 1023. <https://doi.org/doi:10.1037/a0021338>
- Brown, R. M., & Brown, S. L. (2014). Informal caregiving: A reappraisal of effects on caregivers. *Social Issues and Policy Review*, 8(1), 74-102. <https://doi.org/doi:10.1111/sipr.12002>
- Bullis, J. R., Bøe, H. J., Asnaani, A., & Hofmann, S. G. (2014). The benefits of being mindful: Trait mindfulness predicts less stress reactivity to suppression. *Journal of Behavior Therapy and Experimental Psychiatry*, 45(1), 57-66. <https://doi.org/10.1016/j.jbtep.2013.07.006>
- Bursack, C. (2016). I, caregiver: Do robots have a place in elder care.
- Buyck, J. F., Bonnaud, S., Boumendil, A., Andrieu, S., Bonenfant, S., Goldberg, M., ... & Ankri, J. (2011). Informal caregiving and self-reported mental and physical health: results from the Gazel Cohort Study. *American Journal of Public Health*, 101(10), 1971-1979.
- Cahn, B. R., & Polich, J. (2006). Meditation states and traits: EEG, ERP, and neuroimaging studies. *Psychological bulletin*, 132(2), 180. <https://doi.org/10.1037/0033-2909.132.2.180>
- Cameron, R. (2011). Extending the Mixed Methods Research (MMR) Notation System. <https://doi.org/https://ssrn.com/abstract=1869425> or <http://dx.doi.org/10.2139/ssrn.1869425>

- Campos, D., Cebolla, A., Quero, S., Bretón-López, J., Botella, C., Soler, J., ... & Baños, R. M. (2016). Meditation and happiness: Mindfulness and self-compassion may mediate the meditation–happiness relationship. *Personality and Individual Differences*, 93, 80-85.
- Carmody, J., & Baer, R. A. (2008). Relationships between mindfulness practice and levels of mindfulness, medical and psychological symptoms and well-being in a mindfulness-based stress reduction program. *Journal of behavioral medicine*, 31(1), 23-33.
- Casado, B. L., van Vulpen, K. S., & Davis, S. L. (2011). Unmet needs for home and community-based services among frail older Americans and their caregivers. *Journal of Aging and Health*, 23(3), 529-553. <https://doi.org/10.1177/0898264310387132>
- Cassie, K. M., & Sanders, S. (2008). Chapter 12; familial caregivers of older adults. *Journal of gerontological social work*, 50(S1), 293-320.
- Černetič, M. (2016). The relationship between anxiety and mindfulness: The role of mindfulness facets, implicit anxiety, and the problem of measuring anxiety by self-report. *psihologija*, 49(2), 169-183. <https://doi.org/10.2298/PSI1602169C>.
- Chambers, R., Lo, B. C. Y., & Allen, N. B. (2008). The impact of intensive mindfulness training on attentional control, cognitive style, and affect. *Cognitive therapy and research*, 32(3), 303-322. <https://doi.org/10.2298/PSI1602169C>.
- Chan, W. C. H., Chan, C. L., & Suen, M. (2013). Validation of the Chinese version of the Modified Caregivers Strain Index among Hong Kong caregivers: an initiative of medical social workers. *Health & social work*, 38(4), 214-221.
- Chang, H. Y., Chiou, C. J., & Chen, N. S. (2010). Impact of mental health and caregiver burden on family caregivers' physical health. *Archives of gerontology and geriatrics*, 50(3), 267-271.
- Chen, L. F., Liu, J., Zhang, J., & Lu, X. Q. (2016). Non-pharmacological interventions for caregivers of patients with schizophrenia: A meta-analysis. *Psychiatry research*, 235, 123-127. <https://doi.org/10.1016/j.psychres.2015.11.037>
- Cheung, F., & Lucas, R. E. (2014). Assessing the validity of single-item life satisfaction measures: Results from three large samples. *Quality of Life research*, 23(10), 2809-2818. <https://doi.org/doi:10.1007/s11136-014-0726-4>
- Chiesa, A., & Serretti, A. (2011). Mindfulness based cognitive therapy for psychiatric disorders: a systematic review and meta-analysis. *Psychiatry research*, 187(3), 441-453.

- Chiesa, A., Anselmi, R., & Serretti, A. (2014). Psychological mechanisms of mindfulness-based interventions: what do we know?. *Holistic nursing practice*, 28(2), 124-148. <https://doi.org/doi:10.1097/HNP.000000000000017>
- Chiu, M. Y., Wei, G. F., Lee, S., Choovanichvong, S., & Wong, F. H. (2013). Empowering caregivers: impact analysis of FamilyLink education Programme (FLEP) in Hong Kong, Taipei and Bangkok. *International Journal of Social Psychiatry*, 59(1), 28-39.
- Cho, E. (2007). A proposed theoretical framework addressing the effects of informal caregivers on health-related outcomes of elderly recipients in home health care. *Asian Nursing Research*, 1(1), 23-34.
- Choi, N. G., Burr, J. A., Mutchler, J. E., & Caro, F. G. (2007). Formal and informal volunteer activity and spousal caregiving among older adults. *Research on aging*, 29(2), 99-124. Retrieved from <https://doi.org/10.1177/0164027506296759>
- Cohen, L., Manion, L., & Morrison, K. (2002). *Research methods in education*. Routledge.
- Collard, P., Avny, N., & Boniwell, I. (2008). Teaching mindfulness based cognitive therapy (MBCT) to students: The effects of MBCT on the levels of mindfulness and subjective well-being. *Counselling Psychology Quarterly*, 21(4), 323-336.
- Collins, R. N., & Kishita, N. (2018). The effectiveness of mindfulness-and acceptance-based interventions for informal caregivers of people with dementia: a meta-analysis. *The Gerontologist*, 59(4), e363-e379.
- Cooper, C., Katona, C., Orrell, M., & Livingston, G. (2008). Coping strategies, anxiety and depression in caregivers of people with Alzheimer's disease. *International Journal of Geriatric Psychiatry: A journal of the psychiatry of late life and allied sciences*, 23(9), 929-936.
- Cooper, D. L., Powe, B. D., & Smith, T. (2013). Social support provided by and strain experienced by African-American cancer caregivers. *Supportive Care in Cancer*, 21(10), 2719-2725. <https://doi.org/doi:10.1007/s00520-013-1849-9>
- Cooper, D. L., Powe, B. D., & Smith, T. (2013). Social support provided by and strain experienced by African-American cancer caregivers. *Supportive Care in Cancer*, 21(10), 2719-2725.
- Craig, P., Dieppe, P., Macintyre, S., Michie, S., Nazareth, I., & Petticrew, M. (2008). Developing and evaluating complex interventions: the new Medical Research Council guidance. *Bmj*, 337, a1655.
- Crane, C., Crane, R. S., Eames, C., Fennell, M. J., Silverton, S., Williams, J. M. G., & Barnhofer, T. (2014). The effects of amount of home meditation practice in Mindfulness Based Cognitive Therapy on hazard of relapse to



depression in the Staying Well after Depression Trial. *Behaviour research and therapy*, 63, 17-24.

Creswell, J. D., Irwin, M. R., Burklund, L. J., Lieberman, M. D., Arevalo, J. M., Ma, J., ... & Cole, S. W. (2012). Mindfulness-based stress reduction training reduces loneliness and pro-inflammatory gene expression in older adults: a small randomized controlled trial. *Brain, behavior, and immunity*, 26(7), 1095-1101.

Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.

Csikszentmihalyi, M. *Flow: The Psychology of Optimal Experience*, 2008.

Cullen, M. (2011). Mindfulness-based interventions: An emerging phenomenon. *Mindfulness*, 2(3), 186-193.

Curry, L. A., Nembhard, I. M., & Bradley, E. H. (2009). Qualitative and mixed methods provide unique contributions to outcomes research. *Circulation*, 119(10), 1442-1452.

Curry, L. C., Walker, C., & Hogstel, M. O. (2006). Educational needs of employed family caregivers of older adults: Evaluation of a workplace project. *Geriatric Nursing*, 27(3), 166-173.

Damianakis, T., Climans, R., & Marziali, E. (2008). Social workers' experiences of virtual psychotherapeutic caregivers groups for Alzheimer's, Parkinson's, stroke, frontotemporal dementia, and traumatic brain injury. *Social Work with Groups*, 31(2), 99-116.

Dane, E. (2011). Paying attention to mindfulness and its effects on task performance in the workplace. *Journal of management*, 37(4), 997-1018.

Davis, L., & Kurzban, S. (2012). Mindfulness-based treatment for people with severe mental illness: A literature review. *American Journal of Psychiatric Rehabilitation*, 15(2), 202-232. Retrieved from <http://dx.doi.org/10.1080/15487768.2012.679578>

del Mar Salinas-Jiménez, M., Artés, J., & Salinas-Jiménez, J. (2010). Income, motivation, and satisfaction with life: An empirical analysis. *Journal of Happiness Studies*, 11(6), 779-793.

Del-Pino-Casado, R., Frías-Osuna, A., & Palomino-Moral, P. A. (2011). Subjective burden and cultural motives for caregiving in informal caregivers of older people. *Journal of Nursing Scholarship*, 43(3), 282-291.

Denno, M. S., Gillard, P. J., Graham, G. D., DiBonaventura, M. D., Goren, A., Varon, S. F., & Zorowitz, R. (2013). Anxiety and depression associated

with caregiver burden in caregivers of stroke survivors with spasticity. *Archives of physical medicine and rehabilitation*, 94(9), 1731-1736.

- Dermody, G., & Fritz, R. (2019). A conceptual framework for clinicians working with artificial intelligence and health-assistive Smart Homes. *Nursing inquiry*, 26(1), e12267. <https://doi.org/doi: 10.1111/nin.12267>.
- Desrosiers, A., Vine, V., Klemanski, D. H., & Nolen-Hoeksema, S. (2013). Mindfulness and emotion regulation in depression and anxiety: common and distinct mechanisms of action. *Depression and anxiety*, 30(7), 654-661. <https://doi.org/10.1002/da.22124>.
- Deva, P. (2006). Psychiatric rehabilitation and its present role in developing countries. *World Psychiatry*, 5(3), 164.
- Deveau, R., & McGill, P. (2014). Leadership at the front line: Impact of practice leadership management style on staff experience in services for people with intellectual disability and challenging behaviour. *Journal of Intellectual and Developmental Disability*, 39(1), 65-72.
- Diener, E. (2009). *Assessing well-being: The collected works of Ed Diener* (Vol. 331). New York, NY: Springer.
- Diener, E., & Biswas-Diener, R. (2019). Well-being interventions to improve societies. *Global Happiness Council, Global Happiness and Well-being Policy Report*, 95-110.
- Diener, E., & Chan, M. Y. (2011). Happy people live longer: Subjective well-being contributes to health and longevity. *Applied Psychology: Health and Well-Being*, 3(1), 1-43.
- Diener, E., & Chan, M. Y. (2011). Happy people live longer: Subjective well-being contributes to health and longevity. *Applied Psychology: Health and Well-Being*, 3(1), 1-43.
- Diener, E., Biswas-Diener, R., & Lyubchik, N. (2018). Social well-being: Research and policy recommendations. *Global Happiness*. <https://doi.org/doi:10.1007/s11205-012-0076-y>
- Diener, E., Inglehart, R., & Tay, L. (2013). Theory and validity of life satisfaction scales. *Social Indicators Research*, 112(3), 497-527. <https://doi.org/doi:10.1007/s11205-012-0076-y>
- Diener, E., Lucas, R. E., & Oishi, S. (2018). Advances and open questions in the science of subjective well-being. *Collabra. Psychology*, 4(1). <https://doi.org/doi: http://doi.org/10.1525/collabra.115>
- Dierckx de Casterlé, B., Verhaeghe, S. T., Kars, M. C., Coolbrandt, A., Stevens, M., Stubbe, M., ... & Grypdonck, M. (2011). Researching lived experience in health care: Significance for care ethics. *Nursing ethics*, 18(2), 232-242.

- Dimidjian, S., & Segal, Z. V. (2015). Prospects for a clinical science of mindfulness-based intervention. *American Psychologist*, *70*(7), 593. <https://doi.org/10.1037/a0039589>
- Drentea, P., & Goldner, M. A. (2006). Caregiving outside of the home: The effects of race on depression. *Ethnicity and Health*, *11*(1), 41-57.
- Duarte, J., & Pinto-Gouveia, J. (2017). Mindfulness, self-compassion and psychological inflexibility mediate the effects of a mindfulness-based intervention in a sample of oncology nurses. *Journal of Contextual Behavioral Science*, *6*(2), 125-133.
- Ducharme, F. (2014). Psychoeducational interventions for family caregivers of seniors across their life trajectory: An evidence-based research program to inform clinical practice. *Advances in Geriatrics*, 2014. <https://doi.org/https://doi.org/10.1155/2014/316203>
- Dzuka, J., & Dalbert, C. (2006). The belief in a just world and subjective well-being in old age. *Aging and Mental Health*, *10*(5), 439-444.
- Eberth, J., & Sedlmeier, P. (2012). The effects of mindfulness meditation: a meta-analysis. *Mindfulness*, *3*(3), 174-189. Retrieved from <https://doi.org/10.1007/s12671-012-0101-x>.
- Eldridge, S., & Kerry, S. (2012). *A practical guide to cluster randomised trials in health services research* (Vol. 120). John Wiley & Sons.
- Epiphaniou, E., Hamilton, D., Bridger, S., Robinson, V., Rob, G., Beynon, T., ... & Harding, R. (2012). Adjusting to the caregiving role: the importance of coping and support. *International journal of palliative nursing*, *18*(11), 541-545.
- Epstein-Lubow, G., McBee, L., Darling, E., Arney, M., & Miller, I. W. (2011). A pilot investigation of mindfulness-based stress reduction for caregivers of frail elderly. *Mindfulness*, *2*(2), 95-102.
- Erber, J. T. (2013). *Aging & older adulthood*. West Sussex, United Kingdom: John Wiley & Sons.
- Ergas, O. (2016). Educating the wandering mind: Pedagogical mechanisms of mindfulness for a curricular blind spot. *Journal of Transformative Education*, *14*(2), 98-119.
- Eriksson, T., Germundsjö, L., Åström, E., & Rönnlund, M. (2018). Mindful Self-Compassion Training to Reduce Stress and Burnout Symptoms among practicing psychologists: A Randomized Controlled Trial of a Brief Web-Based Intervention. *Frontiers in psychology*, *9*, 2340. <https://doi.org/doi:10.3389/fpsyg.2018.02340>
- Estabrooks, P. A., & Allen, K. C. (2013). Updating, employing, and adapting: a commentary on what does it mean to “employ” the RE-AIM

model. *Evaluation & the health professions*, 36(1), 67-72.  
<https://doi.org/10.1177/0163278712460546>.

Evans, A., Radford, S., Teasdale, J. D., & Dalgleish, T. (2010). How does mindfulness-based cognitive therapy work? *q. Behaviour Research and Therapy*, 48, 1105e1112.

Evans, S., Ferrando, S., Carr, C., & Haglin, D. (2011). Mindfulness-based stress reduction (MBSR) and distress in a community-based sample. *Clinical psychology & psychotherapy*, 18(6), 553-558.

Fact Sheet: Alzheimer's Disease Caregivers. (2018). Alzheimer's Association. Fact Sheet: Alzheimer's Disease Caregivers. Retrieved from [http://act.alz.org/site/DocServer/caregivers\\_fact\\_sheet.pdf?docID=3022](http://act.alz.org/site/DocServer/caregivers_fact_sheet.pdf?docID=3022).

Farrand, P., & Woodford, J. (2013). Impact of support on the effectiveness of written cognitive behavioural self-help: a systematic review and meta-analysis of randomised controlled trials. *Clinical Psychology Review*, 33(1), 182-195.

Feeney, B. C., & Collins, N. L. (2015). A new look at social support: A theoretical perspective on thriving through relationships. *Personality and Social Psychology Review*, 19(2), 113-147.  
<https://doi.org/https://doi.org/10.1177/1088868314544222>

Fletcher, B. S., Miaskowski, C., Given, B., & Schumacher, K. (2012). The cancer family caregiving experience: an updated and expanded conceptual model. *European Journal of Oncology Nursing*, 16(4), 387-398. <https://doi.org/doi:10.1016/j.ejon.2011.09.001>

Fortney, L., Luchterhand, C., Zakletskaia, L., Zgierska, A., & Rakel, D. (2013). Abbreviated mindfulness intervention for job satisfaction, quality of life, and compassion in primary care clinicians: a pilot study. *The Annals of Family Medicine*, 11(5), 412-420. Retrieved from doi: 10.1370/afm.1511

Foster, S. L., & Lloyd, P. J. (2007). Positive psychology principles applied to consulting psychology at the individual and group level. *Consulting Psychology Journal: Practice and Research*, 59(1), 30.

Fox, S., & Brenner, J. (2012). Family caregivers online. *Washington, DC: Pew Internet & American Life Project*.

Fredrickson, B. L., Cohn, M. A., Coffey, K. A., Pek, J., & Finkel, S. M. (2008). Open hearts build lives: positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of personality and social psychology*, 95(5), 1045.

Fulton, P. R. (2014). Contributions and challenges to clinical practice from Buddhist psychology. *Clinical Social Work Journal*, 42(3), 208-217.  
<https://doi.org/10.1007/s10615-013-0469-7>

- Galanakis, M., Lakioti, A., Pezirkianidis, C., Karakasidou, E., & Stalikas, A. (2017). Reliability and validity of the Satisfaction with Life Scale (SWLS) in a Greek sample. *International Journal of Humanities and Social Studies*, 5(2), 120-127.
- Galeazzi, A., & Meazzini, P. (2004). Mind and Behavior. *Giunti Editore*.
- Gallagher-Thompson, D., Gray, H. L., Dupart, T., Jimenez, D., & Thompson, L. W. (2008). Effectiveness of cognitive/behavioral small group intervention for reduction of depression and stress in non-Hispanic White and Hispanic/Latino women dementia family caregivers: Outcomes and mediators of change. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 26(4), 286. <https://doi.org/doi:10.1007/s10942-008-0087-4>
- García, A. A. (2011). Cognitive interviews to test and refine questionnaires. *Public Health Nursing*, 28(5), 444-450.
- García, O., & Kleyn, T. (Eds.). (2016). *Translanguaging with multilingual students: Learning from classroom moments*. Routledge.
- García, O., Johnson, S. I., Seltzer, K., & Valdés, G. (2017). *The translanguaging classroom: Leveraging student bilingualism for learning*. Philadelphia, PA: Caslon.
- Garcia-Campayo, J., Navarro-Gil, M., Andrés, E., Montero-Marin, J., López-Artal, L., & Demarzo, M. M. P. (2014). Validation of the Spanish versions of the long (26 items) and short (12 items) forms of the Self-Compassion Scale (SCS). *Health and quality of life outcomes*, 12(1), 4.
- Garlo, K., O'Leary, J. R., Van Ness, P. H., & Fried, T. R. (2010). Burden in caregivers of older adults with advanced illness. *Journal of the American Geriatrics Society*, 58(12), 2315-2322.
- Ge, J., Wu, J., Li, K., & Zheng, Y. (2019). Self-compassion and Subjective Well-being Mediates the Impact of Mindfulness on Balanced Time Perspective in Chinese College Students. *Frontiers in psychology*, 10, 367. <https://doi.org/doi:10.3389/fpsyg.2019.00367>
- Germer, C. K., & Neff, K. D. (2013). Self-compassion in clinical practice. *Journal of clinical psychology*, 69(8), 856-867.
- Gerrish, K., & Lacey, A. (2010). *The research process in nursing*. John Wiley & Sons.
- Gethin, R. (2011). On some definitions of mindfulness. *Contemporary Buddhism*, 12(01), 263-279.
- GHOLAMZADEH, S. (2013). DEVELOPMENT AND EVALUATION OF A PSYCHO-EDUCATIONAL INTERVENTION PROGRAM TO ENHANCE THE PSYCHOLOGICAL WELL-BEING OF DAUGHTER AND DAUGHTER-IN-LAW CAREGIVERS OF STROKE SURVIVORS.

- Gholamzadeh, S., Hamid, T. A., Basri, H., Ibrahim, R., & Sharif, F. (2013). Mediators of the effect of the psycho-educational intervention on the psychological well-being of caregiving daughters and daughter in-laws of stroke survivors. *Journal of Nursing Education and Practice*, 3(10), 75.
- Giles, D. (2011). Relationships always matter: Findings from a phenomenological research inquiry. *Australian Journal of Teacher Education*, 36(6), 6. <https://doi.org/http://dx.doi.org/10.14221/ajte>
- Gill, T. M., Gahbauer, E. A., Allore, H. G., & Han, L. (2006). Transitions between frailty states among community-living older persons. *Archives of internal medicine*, 166(4), 418-423.
- Given, L. M. (Ed.). (2008). *The Sage encyclopedia of qualitative research methods*. Sage publications. <https://doi.org/10.4135/9781412963909>
- Gjersing, L., Caplehorn, J. R., & Clausen, T. (2010). Cross-cultural adaptation of research instruments: language, setting, time and statistical considerations. *BMC medical research methodology*, 10(1), 13.
- Godwin, K. M., Swank, P. R., Vaeth, P., & Ostwald, S. K. (2013). The longitudinal and dyadic effects of mutuality on perceived stress for stroke survivors and their spousal caregivers. *Aging & mental health*, 17(4), 423-431. <https://doi.org/doi:10.1080/13607863.2012.756457>
- Golden, M. A., & Lund, D. A. (2009). Identifying themes regarding the benefits and limitations of caregiver support group conversations. *Journal of Gerontological Social Work*, 52(2), 154-170.
- Goldstein, E. (2015). *Uncovering happiness: Overcoming depression with mindfulness and self-compassion*. Simon and Schuster.
- Graessel, E., Berth, H., Lichte, T., & Grau, H. (2014). Subjective caregiver burden: validity of the 10-item short version of the Burden Scale for Family Caregivers BSFC-s. *BMC geriatrics*, 14(1), 23.
- Gratz, K. L., & Tull, M. T. (2010). Emotion regulation as a mechanism of change in acceptance-and mindfulness-based treatments. *Assessing mindfulness and acceptance processes in clients: Illuminating the theory and practice of change*, 107-133.
- Greeson, J. M., Juberg, M. K., Maytan, M., James, K., & Rogers, H. (2014). A randomized controlled trial of Koru: A mindfulness program for college students and other emerging adults. *Journal of American College Health*, 62(4), 222-233.
- Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of psychosomatic research*, 57(1), 35-43.
- Gruber, J. (2014). Hermeneutic Availability and Respect for Alterity. *Philosophy Today*, 58(1), 23-38.

- Guay, C., Auger, C., Demers, L., Mortenson, W. B., Miller, W. C., Gélinas-Bronsard, D., & Ahmed, S. (2017). Components and outcomes of internet-based interventions for caregivers of older adults: systematic review. *Journal of medical Internet research*, 19(9), e313.
- Guevara, R., Lucrecia, S., Carvajal, Beatriz, Díaz, R., & Johanna. L. (2011). Telephone support: an intervention strategy for family caregivers of people with chronic disease. *Rev. Industrial University of Santander. Salud [Online]*, 43(2), 191–201. Retrieved from [http://www.scielo.org.co/scielo.php?script=sci\\_arttext&pid=S0121-08072011000200010&lng=en&tlng=es](http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0121-08072011000200010&lng=en&tlng=es)
- Gupta, S. K. (2011). Intention-to-treat concept: a review. *Perspectives in clinical research*, 2(3), 109.
- Hamid, T. A., Krishnaswamy, S., Abdullah, S. S., & Momtaz, Y. A. (2010). Sociodemographic risk factors and correlates of dementia in older Malaysians. *Dementia and geriatric cognitive disorders*, 30(6), 533-539. <https://doi.org/doi:10.1159/000321672>. e-ISSN: 1421-9824 (Online)
- Harkness, J., Pennell, B. E., & Schoua-Glusberg, A. (2004). Survey questionnaire translation and assessment. *Methods for testing and evaluating survey questionnaires*, 546, 453-473.
- Hassed, C., & Chambers, R. (2014). *Mindful Learning: Reduce stress and improve brain performance for effective learning* (Vol. 3). Exisle Publishing.
- Headey, B. (2014). Bottom-Up Versus Top-Down Theories of Life Satisfaction. *Encyclopedia of Quality of Life and Well-Being Research*, 423-426.
- Heath, P. J., Brenner, R. E., Vogel, D. L., Lannin, D. G., & Strass, H. A. (2017). Masculinity and barriers to seeking counseling: The buffering role of self-compassion. *Journal of counseling psychology*, 64(1), 94. <https://doi.org/10.1037/cou0000185>
- Heffernan, M., Quinn Griffin, M. T., McNulty, S. R., & Fitzpatrick, J. J. (2010). Self-compassion and emotional intelligence in nurses. *International journal of nursing practice*, 16(4), 366-373.
- Heintzelman, S. J., & Diener, E. (2019). Subjective well-being, social interpretation, and relationship thriving. *Journal of Research in Personality*, 78, 93-105.
- Hempel, S., Taylor, S. L., Marshall, N. J., Miake-Lye, I. M., Beroes, J. M., Shanman, R., ... & Shekelle, P. G. (2014). *Evidence map of mindfulness*. Department of Veterans Affairs, Health Services Research & Development Service.
- Hempel, S., Taylor, S. L., Marshall, N. J., Miake-Lye, I. M., Beroes, J. M., Shanman, R., ... & Shekelle, P. G. (2014). *Evidence map of mindfulness*.

- Hendrix, C. C., Landerman, R., & Abernethy, A. P. (2013). Effects of an individualized caregiver training intervention on self-efficacy of cancer caregivers. *Western journal of nursing research*, 35(5), 590-610.
- Hering, A., Rendell, P. G., Rose, N. S., Schnitzspahn, K. M., & Kliegel, M. (2014). Prospective memory training in older adults and its relevance for successful aging. *Psychological research*, 78(6), 892-904. <https://doi.org/doi: 10.1007/s00426-014-0566-4>.
- Herrero, J., & Meneses, J. (2006). Short Web-based versions of the perceived stress (PSS) and Center for Epidemiological Studies-Depression (CESD) Scales: A comparison to pencil and paper responses among Internet users. *Computers in Human Behavior*, 22(5), 830-846.
- Ho, S. C., Chan, A., Woo, J., Chong, P., & Sham, A. (2009). Impact of caregiving on health and quality of life: a comparative population-based study of caregivers for elderly persons and noncaregivers. *Journals of Gerontology Series A: Biomedical Sciences and Medical Sciences*, 64(8), 873-879.
- Hoang, D. T. (2016). BOOK REVIEW: Csikszentmihalyi, M.(2008). *Flow: The Psychology of Optimal Experience*. New York, NY: HarperCollins. 336 pp. ISBN 978-0-06-133920-2. In *FIRE: Forum for International Research in Education* (Vol. 3, No. 1, p. 7). <http://dx.doi.org/10.18275/fire201603011100>
- Hofmann, S. G., Grossman, P., & Hinton, D. E. (2011). Loving-kindness and compassion meditation: Potential for psychological interventions. *Clinical psychology review*, 31(7), 1126-1132.
- Hollis-Walker, L., & Colosimo, K. (2011). Mindfulness, self-compassion, and happiness in non-meditators: A theoretical and empirical examination. *Personality and Individual differences*, 50(2), 222-227. Retrieved from <http://dx.doi.org/10.1016/j.paid.2010.09.033>
- Holloway, I., & Galvin, K. (2016). *Qualitative research in nursing and healthcare*. John Wiley & Sons.
- Hölzel, B. K., Lazar, S. W., Gard, T., Schuman-Olivier, Z., Vago, D. R., & Ott, U. How does mindfulness meditation work. *Proposing mechanisms of action from a conceptual and neural perspective*, 537-559.
- Honea, N. J., Brintnall, R., Given, B., Sherwood, P., Colao, D. B., Somers, S. C., & Northouse, L. L. (2008). Putting Evidence Into Practice®: Nursing Assessment and Interventions to Reduce Family Caregiver Strain and Burden. *Clinical journal of oncology nursing*, 12(3).
- Hong, S. I. (2009). Understanding patterns of service utilization among informal caregivers of community older adults. *The Gerontologist*, 50(1), 87-99.



- Hong, S. I., Hasche, L., & Lee, M. J. (2011). Service use barriers differentiating care-givers' service use patterns. *Ageing & Society*, 31(8), 1307-1329.
- Hoppes, S., Bryce, H., Hellman, C., & Finlay, E. (2012). The effects of brief mindfulness training on caregivers' well-being. *Activities, Adaptation & Aging*, 36(2), 147-166.
- Hosseini, M. A., Mohammadzaheri, S., Fallahi Khoshkenab, M., Mohammadai Shahbolaghi, F., Reza Soltani, P., & Sharif Mohseni, M. (2016). Effect of Mindfulness Program on Caregivers' Strain on Alzheimer's Disease Caregivers. *Iranian Journal of Ageing*, 11(3), 448-455.
- Hou, R. J., Wong, S. Y. S., Yip, B. H. K., Hung, A. T., Lo, H. H. M., Chan, P. H., ... & Mercer, S. W. (2014). The effects of mindfulness-based stress reduction program on the mental health of family caregivers: a randomized controlled trial. *Psychotherapy and psychosomatics*, 83(1), 45-53. <https://doi.org/10.1159/000353278>
- Hudson, P. L., Lobb, E. A., Thomas, K., Zordan, R. D., Trauer, T., Quinn, K., ... & Summers, M. (2012). Psycho-educational group intervention for family caregivers of hospitalized palliative care patients: pilot study. *Journal of palliative medicine*, 15(3), 277-281.
- Hui, D., Zhukovsky, D. S., & Bruera, E. (2015). Which treatment is better? Ascertain patient preferences with crossover randomized controlled trials. *Journal of pain and symptom management*, 49(3), 625-631. <https://doi.org/http://dx.doi.org/10.1016/j.pupt.20>
- Huynh-Hohnbaum, A. L. T., Villa, V. M., Aranda, M. P., & Lambrinos, J. (2008). Evaluating a multicomponent caregiver intervention. *Home health care services quarterly*, 27(4), 299-325.
- Hwang, W. C. (2011). Cultural adaptations: A complex interplay between clinical and cultural issues. *Clinical Psychology: Science and Practice*, 18(3), 238-241.
- Innes, K. E., Selfe, T. K., Brown, C. J., Rose, K. M., & Thompson-Heisterman, A. (2012). The effects of meditation on perceived stress and related indices of psychological status and sympathetic activation in persons with Alzheimer's disease and their caregivers: a pilot study. *Evidence-Based Complementary and Alternative Medicine*, 2012. <https://doi.org/10.1155/2012/927509>.
- Irwin, S. O. N. (2012). Speaking Hermeneutically: Understanding in the Conduct of a Life. *Rhetoric & Public Affairs*, 15(3), 555-558.
- Jalaludin, M. Y., Fuziah, M. Z., Hadhrami, M. H., Janet, Y. H., Jamaiyah, H., & Adam, B. M. (2013). Reliability and validity of the Malay translated version of diabetes quality of life for youth questionnaire. *Malaysian family physician: the official journal of the Academy of Family Physicians of Malaysia*, 8(1), 12.

- Jayakrishnan, K. (2014). A correlative study to assess the psychological wellbeing and self-esteem among adult children of mentally ill parent/s in selected hospital of udupi district. *Nitte University Journal of Health Science*, 4(3).
- Jennings, L. A., Reuben, D. B., Evertson, L. C., Serrano, K. S., Ercoli, L., Grill, J., ... & Wenger, N. S. (2015). Unmet needs of caregivers of individuals referred to a dementia care program. *Journal of the American Geriatrics Society*, 63(2), 282-289. <https://doi.org/doi: 10.1111/jgs.13251>
- Jermann, F., Billieux, J., Larøi, F., d'Argembeau, A., Bondolfi, G., Zermatten, A., & Van der Linden, M. (2009). Mindful Attention Awareness Scale (MAAS): Psychometric properties of the French translation and exploration of its relations with emotion regulation strategies. *Psychological assessment*, 21(4), 506.
- Jing, Z., Jiwen, S., & Yue, W. (2017). Mindfulness in the Workplace: A Literature Review and Prospects. *Foreign Economics & Management*, 39(08), 56-70.
- Johannesen, M., & LoGiudice, D. (2013). Elder abuse: A systematic review of risk factors in community-dwelling elders. *Age and ageing*, 42(3), 292-298.
- Johns, S. A., Brown, L. F., Beck-Coon, K., Monahan, P. O., Tong, Y., & Kroenke, K. (2015). Randomized controlled pilot study of mindfulness-based stress reduction for persistently fatigued cancer survivors. *Psycho-Oncology*, 24(8), 885-893.
- Johns, S. A., Brown, L. F., Beck-Coon, K., Talib, T. L., Monahan, P. O., Giesler, R. B., ... & Wagner, C. D. (2016). Randomized controlled pilot trial of mindfulness-based stress reduction compared to psychoeducational support for persistently fatigued breast and colorectal cancer survivors. *Supportive care in cancer*, 24(10), 4085-4096.
- Jones, F. W., Strauss, C., & Cavanagh, K. (2016). Self-Help mindfulness-based cognitive therapy. In *Mindfulness-Based Cognitive Therapy* (pp. 113-121). Springer, Cham.
- Jowell, R., Roberts, C., Fitzgerald, R., & Eva, G. (Eds.). (2007). *Measuring attitudes cross-nationally: Lessons from the European Social Survey*. Sage.
- Kabat-Zinn, J. (2013a). Full-catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness. In Bantam (Rev. ed.). New York, NY: Bantam.
- Kabat-Zinn, J. (2013b). Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain and Illness. New York: NY: Bantam Books.
- Kabat-Zinn, J. (2017). Common obstacles to practice. *Mindfulness*, 8(6), 1713-1715. <https://doi.org/https://doi.org/10.1007/s12671-017-0820-0>

- Kabat-Zinn, J. (2017). Supports for your practice. *Mindfulness*, 8(6), 1716-1719. Retrieved from <https://doi.org/10.1007/s12671-017-0818-7>
- Kabat-Zinn, J., & Hanh, T. N. (2013). Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness. New York, USA: Bantam.
- Kachan, D., Olano, H., Tannenbaum, S. L., Annane, D. W., Mehta, A., Arheart, K. L., ... & Lee, D. J. (2017). Peer Reviewed: Prevalence of Mindfulness Practices in the US Workforce: National Health Interview Survey. *Preventing chronic disease*, 14. <https://doi.org/doi:10.5888/pcd14.160034>
- Kafle, N. P. (2011). Hermeneutic phenomenological research method simplified. *Bodhi: An interdisciplinary journal*, 5(1), 181-200.
- Kanmani, T. R., Thimmappur, R. M., Birudu, R., Reddy, K., & Raj, P. (2019). Burden and psychological distress of intensive care unit caregivers of traumatic brain injury patients. *Indian journal of critical care medicine: peer-reviewed, official publication of Indian Society of Critical Care Medicine*, 23(5), 220.
- Kannan, P., Chapple, C. M., Miller, D., Claydon-Mueller, L., & Baxter, G. D. (2019). Effectiveness of a treadmill-based aerobic exercise intervention on pain, daily functioning, and quality of life in women with primary dysmenorrhea: A randomized controlled trial. *Contemporary clinical trials*, 81, 80-86.
- Kao, H. F. S., Lynn, M. R., & Crist, J. D. (2013). Testing of applicability of Mutuality Scale with Mexican American caregivers of older adults. *Journal of Applied Gerontology*, 32(2), 226-247. <https://doi.org/doi:10.1177/0733464811416>
- Karakasidou, E., & Stalikas, A. (2017). The Effectiveness of a Pilot Self-Compassion Program on Well Being Components. *Psychology*, 8(04), 538. Retrieved from <https://doi.org/10.4236/psych.2017.84034>.
- Katz, M. H. (2010). *Evaluating clinical and public health interventions: A practical guide to study design and statistics*. Cambridge University Press.
- Kelly, D. H., McGinley, J. L., Huxham, F. E., Menz, H. B., Watts, J. J., Iansek, R., ... & Morris, M. E. (2012). Health-related quality of life and strain in caregivers of Australians with Parkinson's disease: An observational study. *BMC neurology*, 12(1), 57.
- Kempton, M. J., Salvador, Z., Munafò, M. R., Geddes, J. R., Simmons, A., Frangou, S., & Williams, S. C. (2011). Structural neuroimaging studies in major depressive disorder: meta-analysis and comparison with bipolar disorder. *Archives of general psychiatry*, 68(7), 675-690.

- Keng, S. L., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. *Clinical psychology review, 31*(6), 1041-1056.
- Khalaila, R. (2015). The relationship between academic self-concept, intrinsic motivation, test anxiety, and academic achievement among nursing students: Mediating and moderating effects. *Nurse Education Today, 35*(3), 432-438. doi: 10.1016/j.nedt.2014.11.001
- Khalaila, R. (2015). The relationship between academic self-concept, intrinsic motivation, test anxiety, and academic achievement among nursing students: Mediating and moderating effects. *Nurse Education Today, 35*(3), 432-438. <https://doi.org/10.1016/j.nedt.2014.11.001>
- Khoury, B., Lecomte, T., Fortin, G., Masse, M., Therien, P., Bouchard, V., ... & Hofmann, S. G. (2013). Mindfulness-based therapy: a comprehensive meta-analysis. *Clinical psychology review, 33*(6), 763-771.
- Khoury, B., Sharma, M., Rush, S. E., & Fournier, C. (2015). Mindfulness-based stress reduction for healthy individuals: A meta-analysis. *Journal of psychosomatic research, 78*(6), 519-528. <https://doi.org/10.1016/j.jpsychores.2015.03.009>.
- Kietzman, K. G., Benjamin, A. E., & Matthias, R. E. (2013). Whose choice? Self-determination and the motivations of paid family and friend caregivers. *Journal of Comparative Family Studies, 44*(4), 519-540.
- Kim, H., & Rose, K. (2011). Sleep disturbances in family caregivers: An overview of the state of the science. *Archives of Psychiatric Nursing, 25*(6), 456-468.
- Kim, H., & Rose, K. M. (2014). Concept analysis of family homeostasis. *Journal of advanced nursing, 70*(11), 2450-2468. <https://doi.org/10.1111/jan.12496>.
- Kim, H., Chang, M., Rose, K., & Kim, S. (2012). Predictors of caregiver burden in caregivers of individuals with dementia. *Journal of advanced nursing, 68*(4), 846-855.
- Kim, Y., & Schulz, R. (2008). Family caregivers' strains: comparative analysis of cancer caregiving with dementia, diabetes, and frail elderly caregiving. *Journal of Aging and Health, 20*(5), 483-503.
- Kolmer, D. B. G., Tellings, A., Gelissen, J., Garretsen, H., & Bongers, I. (2008). Ranked motives of long-term care providing family caregivers. *Scandinavian journal of caring sciences, 22*(1), 29-39.
- Kong, F., & You, X. (2013). Loneliness and self-esteem as mediators between social support and life satisfaction in late adolescence. *Social Indicators Research, 110*(1), 271-279.

- Kong, F., & Zhao, J. (2013). Affective mediators of the relationship between trait emotional intelligence and life satisfaction in young adults. *Personality and Individual Differences, 54*(2), 197-201.
- Kong, F., Zhao, J., & You, X. (2012). Social support mediates the impact of emotional intelligence on mental distress and life satisfaction in Chinese young adults. *Personality and Individual Differences, 53*(4), 513-517.
- Konjengbam, S., Bimol, N., Singh, A. J., Singh, A. B., Devi, E. V., & Singh, Y. M. (2007). Disability in ADL Among the Ederly in an Urban Area of Manipur. *IJPMR, 18*(2), 41-43.
- Kotera, Y., Green, P., & Van Gordon, W. (2018). Mental wellbeing of caring profession students: relationship with caregiver identity, self-compassion, and intrinsic motivation. *Mindfulness & Compassion*.
- Krys, K., Uchida, Y., Oishi, S., & Diener, E. (2019). Open society fosters satisfaction: Explanation to why individualism associates with country level measures of satisfaction. *The Journal of Positive Psychology, 14*(6), 768-778. <https://doi.org/doi:10.1080/17439760.2018>
- Kuzuya, M., Enoki, H., Hasegawa, J., Izawa, S., Hirakawa, Y., Shimokata, H., & Akihisa, I. (2011). Impact of caregiver burden on adverse health outcomes in community-dwelling dependent older care recipients. *The American Journal of Geriatric Psychiatry, 19*(4), 382-391.
- Kwok, T., Au, A., Bel Wong, I. I., Mak, V., & Ho, F. (2014). Effectiveness of online cognitive behavioral therapy on family caregivers of people with dementia. *Clinical interventions in aging, 9*, 631.
- Lai, P. S. M. (2013). Validating instruments of measure: Is it really necessary?. *Malaysian family physician: the official journal of the Academy of Family Physicians of Malaysia, 8*(1), 2.
- Lam, L. C., Lee, J. S., Chung, J. C., Lau, A., Woo, J., & Kwok, T. C. (2010). A randomized controlled trial to examine the effectiveness of case management model for community dwelling older persons with mild dementia in Hong Kong. *International Journal of Geriatric Psychiatry: A journal of the psychiatry of late life and allied sciences, 25*(4), 395-402.
- Lee, Y., & Zurlo, K. A. (2014). Spousal caregiving and financial strain among middle-aged and older adults. *The International Journal of Aging and Human Development, 79*(4), 302-321. <https://doi.org/10.1177/0091415015574181>
- Leech, N. L., & Onwuegbuzie, A. J. (2009). A typology of mixed methods research designs. *Quality & quantity, 43*(2), 265-275.
- Leiknes, I., Lien, U. T., & Severinsson, E. (2015). The Relationship between Caregiver Burden, Demographic Variables, and the Clinical Characteristics of Patients with Parkinson's Disease—A systematic Review of Studies Using Various Caregiver Burden Instruments. *Open*

*Journal of Nursing*, 5(10), 855-877.

- Leon, A. C., Davis, L. L., & Kraemer, H. C. (2011). The role and interpretation of pilot studies in clinical research. *Journal of psychiatric research*, 45(5), 626-629.
- Lepma, M. (2012). Loving-kindness meditation and counseling. *Journal of Mental Health Counseling*, 34(3), 197-204.
- Lewis, C., Pearce, J., & Bisson, J. I. (2012). Efficacy, cost-effectiveness and acceptability of self-help interventions for anxiety disorders: systematic review. *The British journal of psychiatry*, 200(1), 15-21.
- Liao, P. A., Chang, H. H., & Sun, L. C. (2012). National Health Insurance program and life satisfaction of the elderly. *Aging & mental health*, 16(8), 983-992.
- Lindsay, E. K., & Creswell, J. D. (2015). Back to the basics: How attention monitoring and acceptance stimulate positive growth. *Psychological Inquiry*, 26(4), 343-348.
- Lindsay, E. K., & Creswell, J. D. (2017). Mechanisms of mindfulness training: Monitor and Acceptance Theory (MAT). *Clinical Psychology Review*, 51, 48-59. <https://doi.org/doi:10.1016/j.cpr.2016.10.011>
- Littlewood, D., Kyle, S. D., Pratt, D., Peters, S., & Gooding, P. (2017). Examining the role of psychological factors in the relationship between sleep problems and suicide. *Clinical psychology review*, 54, 1-16. <https://doi.org/10.1016/j.cpr.2017.03.009>
- Litwak, E. (1985). *Helping the elderly*. New York: Guilford Press.
- Liu, S., Liu, Y., & Ni, Y. (2018). A Review of Mindfulness Improves Decision Making and Future Prospects. *Psychology*, 9(02), 229. <https://doi.org/doi:10.4236/psych.2018.92015>
- Lloyd, J., Muers, J., Patterson, T. G., & Marczak, M. (2019). Self-compassion, coping strategies, and caregiver burden in caregivers of people with dementia. *Clinical gerontologist*, 42(1), 47-59. <https://doi.org/DOI:10.1080/07317115.2018.1461162>
- Lobban, F., Solis-Trapala, I., Tyler, E., Chandler, C., Morriss, R. K., & ERP Group. (2013). The role of beliefs about mood swings in determining outcome in bipolar disorder. *Cognitive therapy and research*, 37(1), 51-60.
- Loewe, N., Bagherzadeh, M., Araya-Castillo, L., Thieme, C., & Batista-Foguet, J. M. (2014). Life domain satisfactions as predictors of overall life satisfaction among workers: Evidence from Chile. *Social indicators research*, 118(1), 71-86. <https://doi.org/doi:10.1007/s11205-013-0408-6>
- Lopez-Hartmann, M., Wens, J., Verhoeven, V., & Remmen, R. (2012). The

effect of caregiver support interventions for informal caregivers of community-dwelling frail elderly: a systematic review. *International journal of integrated care*, 12.

Lopez-Hartmann, M., Wens, J., Verhoeven, V., & Remmen, R. (2012). The effect of caregiver support interventions for informal caregivers of community-dwelling frail elderly: a systematic review. *International journal of integrated care*, 12(20), 133.

Losada-Baltar, A. (2017). Stress and Coping in Caregivers, Theories of. *Encyclopedia of Geropsychology*, 2268-2276.

Luberto, C. M., Magidson, J. F., & Blashill, A. J. (2017). A case study of individually delivered mindfulness-based cognitive behavioral therapy for severe health anxiety. *Cognitive and Behavioral Practice*, 24(4), 484-495.

Lui, M. H. L., Lee, D. T., Greenwood, N., & Ross, F. M. (2012). Informal stroke caregivers' self-appraised problem-solving abilities as a predictor of well-being and perceived social support. *Journal of clinical nursing*, 21(1-2), 232-242.

Lynch, S. H., & Lobo, M. L. (2012). Compassion fatigue in family caregivers: a Wilsonian concept analysis. *Journal of Advanced Nursing*, 68(9), 2125-2134.

MacBeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical psychology review*, 32(6), 545-552.

Mackay, C., & Pakenham, K. I. (2012). A stress and coping model of adjustment to caring for an adult with mental illness. *Community mental health journal*, 48(4), 450-462.

Mackenzie, C. S., Wiprzycka, U. J., Khatri, N., & Cheng, J. (2013). Clinically significant effects of group cognitive behavioral therapy on spouse caregivers' mental health and cognitive functioning: a pilot study. *Journal of gerontological social work*, 56(8), 675-692.

Mak, W. W., Chan, A. T., Cheung, E. Y., Lin, C. L., & Ngai, K. C. (2015). Enhancing Web-based mindfulness training for mental health promotion with the health action process approach: randomized controlled trial. *Journal of Medical Internet Research*, 17(1), e8. <https://doi.org/doi:10.2196/jmir.3746>

MALAYSIA, M. M. S. (2014). Department of Statistics, Malaysia.

Mandal, S. P., Arya, Y. K., & Pandey, R. (2012). Mental health and mindfulness: Mediation role of positive and negative affect. *SIS Journal of Projective Psychology and Mental Health*, 19(2), 150-159.

Margolis, S., Schwitzgebel, E., Ozer, D. J., & Lyubomirsky, S. (2019). A new measure of life satisfaction: the riverside life satisfaction scale. *Journal of*

- Marshall, C. & Rossman, G. B. (2010). *Designing Qualitative Research (5th ed.)*. Thousand Oaks, CA: Sage Publications.
- Martin, B. (2018). In-Depth: Cognitive Behavioral Therapy. *Journal of Psych. Central*. Retrieved from <https://psychcentral.com/lib/in-depth-cognitive-behavioral-therapy/>
- McCown, D., Reibel, D., & Micozzi, M. S. (2010). *Teaching mindfulness. A practical guide for clinicians and educators. US: Springer.*
- McCoy, C. E. (2017). Understanding the intention-to-treat principle in randomized controlled trials. *Western Journal of Emergency Medicine*, 18(6), 1075.
- McLennon, S. M., Habermann, B., & Rice, M. (2011). Finding meaning as a mediator of burden on the health of caregivers of spouses with dementia. *Aging & Mental Health*, 15(4), 522-530.
- Mearns, D., Thorne, B., & McLeod, J. (2013). *Person-centred counselling in action*. Sage.
- Miao, Y., & Wang, J. (2013). Mindfulness in the Field of Positive Psychology. *Psychological Counselors*, 8, 13-17.
- Micallef-Trigona, B. The Origins of Cognitive Behavioral Therapy. *Recuperado de: <https://psychcentral.com/lib/the-origins-of-cognitive-behavioral-therapy>.*
- Mohamed, S., Rosenheck, R., Lyketsos, C. G., & Schneider, L. S. (2010). Caregiver burden in Alzheimer disease: cross-sectional and longitudinal patient correlates. *The American Journal of Geriatric Psychiatry*, 18(10), 917-927.
- Momtaz, Y. A., Ibrahim, R., Hamid, T. A., & Yahaya, N. (2011). Sociodemographic predictors of elderly's psychological well-being in Malaysia. *Aging & mental health*, 15(4), 437-445.
- Montané, E., Vallano, A., Vidal, X., Aguilera, C., & Laporte, J. R. (2010). Reporting randomised clinical trials of analgesics after traumatic or orthopaedic surgery is inadequate: a systematic review. *BMC clinical pharmacology*, 10(1), 2.
- Moss, D., Waugh, M., & Barnes, R. (2008). A tool for life? Mindfulness as self-help or safe uncertainty. *International Journal of Qualitative Studies on Health and Well-being*, 3(3), 132-142.
- Mukaka, M. M. (2012). Statistics corner: a guide to appropriate use of correlation in medical research. *Malawi Medical Journal*, 24(3), 69-71.



- Muscroft, J., & Bowl, R. (2000). The impact of depression on caregivers and other family members: Implications for professional support. *Counselling Psychology Quarterly*, 13(1), 117-134.
- Myers, S. B., Sweeney, A. C., Popick, V., Wesley, K., Bordfeld, A., & Fingerhut, R. (2012). Self-care practices and perceived stress levels among psychology graduate students. *Training and Education in Professional Psychology*, 6(1), 55. <http://dx.doi.org/10.1037/a0026534>
- National Alliance for Caregiving. (2009). A focused look at those caring for someone age 50 and older. *Caregiving in the U.S.* [https://doi.org/Retrieved from http://www.caregiving.org/pdf/research/FINALRegularExSum50plus.pdf](https://doi.org/Retrieved%20from%20http://www.caregiving.org/pdf/research/FINALRegularExSum50plus.pdf)
- National Institute for Health and Clinical Excellence. (2009). *Depression: Management of depression in primary and secondary care*. London: Author.
- Nedeljkovic, M., Wirtz, P. H., & Ausfeld-Hafter, B. (2012). Effects of Taiji practice on mindfulness and self-compassion in healthy participants—a randomized controlled trial. *Mindfulness*, 3(3), 200-208. <https://doi.org/10.1007/s12671-012-0092-7>
- Neff, K. D.; Germer, C. (2017). Self-Compassion and Psychological Wellbeing. Oxford University Press. In *In J. Doty (Ed.) Oxford Handbook of Compassion Science, Ch. 27*. Oxford University Press.
- Neff, K. D., & Dahm, K. A. (2015). Self-compassion: What it is, what it does, and how it relates to mindfulness. In *Handbook of mindfulness and self-regulation* (pp. 121-137). Springer, New York, NY.
- Neff, K. D., & Faso, D. J. (2015). Self-compassion and well-being in parents of children with autism. *Mindfulness*, 6(4), 938-947. <https://doi.org/10.1007/s12671-014-0359-2>
- Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of clinical psychology*, 69(1), 28-44. <https://doi.org/doi:10.1002/jclp.21923>
- Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of clinical psychology*, 69(1), 28-44. <https://doi.org/10.1002/jclp.21923>
- Neff, K. D., & McGehee, P. (2010). Self-compassion and psychological resilience among adolescents and young adults. *Self and identity*, 9(3), 225-240. <https://doi.org/10.1080/15298860902979307>
- Neff, K. D. & Knox, M. (2017). *Self-Compassion*. (In V. Zeig). New York: Springer.
- Newing, H., Eagle, C.M. and Puri, R. K. (2011). *Conducting research in conversation: Social science methods and practice*. London: : Routledge.

- Nicolson, P. J., Hinman, R. S., Wrigley, T. V., Stratford, P. W., & Bennell, K. L. (2018). Self-reported Home Exercise Adherence: A Validity and Reliability Study Using Concealed Accelerometers. *Journal of orthopaedic & sports physical therapy*, 48(12), 943-950.
- Nikmat, A. W., & Almashoor, S. H. (2015). Older Adults With Cognitive Impairment Living In Malaysian Nursing Homes—Have We Met Their Needs?. *Sandeep Govil Case Reports*, 95, 84.
- O'Mathúna, D. P. (2012). *Ethical considerations in designing intervention studies*. In: Melnyk, B. M. and Morrison-Beedy, D. *Designing, conducting, analyzing, and funding intervention research*. New York.: Springer Publishing Company.
- O'connor, P. J., Martin, B., Weeks, C. S., & Ong, L. (2014). Factors that influence young people's mental health help-seeking behaviour: a study based on the Health Belief Model. *Journal of advanced nursing*, 70(11), 2577-2587. <https://doi.org/doi: 10.1111/jan.12423>
- Ogunlana, M. O., Dada, O. O., Oyewo, O. S., Odole, A. C., & Ogunsan, M. O. (2014). Quality of life and burden of informal caregivers of stroke survivors. *Hong Kong Physiotherapy Journal*, 32(1), 6-12. <https://doi.org/doi: 10.1016/j.hkpj.2013.11.003>
- Oken, B. S., Fonareva, I., Haas, M., Wahbeh, H., Lane, J. B., Zajdel, D., & Amen, A. (2010). Pilot controlled trial of mindfulness meditation and education for dementia caregivers. *The Journal of Alternative and Complementary Medicine*, 16(10), 1031-1038.
- Okoye, U. O., & Asa, S. S. (2011). Caregiving and stress: Experience of people taking care of elderly relations in South-Eastern Nigeria. *Arts and Social Sciences Journal*, 2011(29), 1-9.
- Onega, L. L. (2008). Helping those who help others: the Modified Caregiver Strain Index. *AJN The American Journal of Nursing*, 108(9), 62-69.
- Onega, L. L., Pierce, T. W., & Epperly, L. (2018). Bright Light Therapy to Treat Depression in Individuals with Mild/Moderate or Severe Dementia. *Issues in mental health nursing*, 39(5), 370-373. <https://doi.org/DOI: 10.1080/01612840.2018.1437648>
- Osman, A., Lamis, D. A., Bagge, C. L., Freedenthal, S., & Barnes, S. M. (2016). The mindful attention awareness scale: further examination of dimensionality, reliability, and concurrent validity estimates. *Journal of Personality Assessment*, 98(2), 189-199. <https://doi.org/DOI: 10.1080/00223891.2015.1095761>
- Öst, L. G. (2008). Efficacy of the third wave of behavioral therapies: A systematic review and meta-analysis. *Behaviour research and therapy*, 46(3), 296-321.
- Panno, A., Lauriola, M., & Figner, B. (2013). Emotion regulation and risk taking:

- Predicting risky choice in deliberative decision making. *Cognition & emotion*, 27(2), 326-334. <https://doi.org/10.1080/02699931.2012.707642>
- Park, E., Kim, H., & Steinhoff, A. (2016). Health-related internet use by informal caregivers of children and adolescents: an integrative literature review. *Journal of medical Internet research*, 18(3), e57. <https://doi.org/doi:10.2196/jmir.4124>
- Pendergrass, A., Malnis, C., Graf, U., Engel, S., & Graessel, E. (2018). Screening for caregivers at risk: Extended validation of the short version of the Burden Scale for Family Caregivers (BSFC-s) with a valid classification system for caregivers caring for an older person at home. *BMC health services research*, 18(1), 229. <https://doi.org/10.1186/s12913-018-3047-4>
- Pepin, R., Williams, A. A., Anderson, L. N., & Qualls, S. H. (2013). A preliminary typology of caregivers and effects on service utilization of caregiver counseling. *Aging & mental health*, 17(4), 495-507.
- Peters, M., Fitzpatrick, R., Doll, H., Playford, D., & Jenkinson, C. (2011a). Does self-reported well-being of patients with Parkinson's disease influence caregiver strain and quality of life?. *Parkinsonism & related disorders*, 17(5), 348-352.
- Peters, M., Fitzpatrick, R., Doll, H., Playford, D., & Jenkinson, C. (2011b). Does self-reported well-being of patients with Parkinson's disease influence caregiver strain and quality of life?. *Parkinsonism & related disorders*, 17(5), 348-352.
- Phang, C. K., Mukhtar, F., Ibrahim, N., & Mohd. Sidik, S. (2016). Mindful Attention Awareness Scale (MAAS): factorial validity and psychometric properties in a sample of medical students in Malaysia. *The Journal of Mental Health Training, Education and Practice*, 11(5), 305-316.
- Phillips, W. J., & Ferguson, S. J. (2012). Self-compassion: A resource for positive aging. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 68(4), 529-539. <https://doi.org/doi:10.1093/geronb/gbs091>
- Pierce, G. R., Sarason, I. G., & Sarason, B. R. (1991). General and relationship-based perceptions of social support: Are two constructs better than one?. *Journal of personality and social psychology*, 61(6), 1028.
- Pinquart, M., & Sörensen, S. (2011). Spouses, adult children, and children-in-law as caregivers of older adults: a meta-analytic comparison. *Psychology and aging*, 26(1), 1-14.
- Platt, F. W., Gaspar, D. L., Coulehan, J. L., Fox, L., Adler, A. J., Weston, W. W., ... & Stewart, M. (2001). "Tell me about yourself": the patient-centered interview. *Annals of Internal Medicine*, 134(11), 1079-1085.

- Ponce, C. C., Ordonez, T. N., Lima-Silva, T. B., Santos, G. D. D., Viola, L. D. F., Nunes, P. V., ... & Cachioni, M. (2011). Effects of a psychoeducational intervention in family caregivers of people with Alzheimer's disease. *Dementia & neuropsychologia*, 5(3), 226-237.
- Pope, N. D., Baldwin, P. K., & Lee, J. J. (2018). "I Didn't Expect to Learn as Much as I Did": Rewards of Caregiving in Young Adulthood. *Journal of Adult Development*, 25(3), 186-197.
- Quah, S. R. (2015). *Illness and caregiving in the family* (pp. 359-374). London, England: Routledge.
- Raes, F., Pommier, E., Neff, K. D., & Van Gucht, D. (2011). Construction and factorial validation of a short form of the self-compassion scale. *Clinical psychology & psychotherapy*, 18(3), 250-255.
- Rajiah, K., Maharajan, M. K., Yeen, S. J., & Lew, S. (2017). Quality of life and caregivers' burden of Parkinson's disease. *Neuroepidemiology*, 48(3-4), 131-137. <https://doi.org/doi: 10.1159/00>
- Ramírez, E., Ortega, A. R., Chamorro, A., & Colmenero, J. M. (2014). A program of positive intervention in the elderly: Memories, gratitude and forgiveness. *Aging & mental health*, 18(4), 463-470.
- Rapgay, L., & Bystrisky, A. (2009). Classical mindfulness: An introduction to its theory and practice for clinical application. *Longevity, Regeneration, and Optimal Health*, 77(72), 148-162.
- Rasmussen, M. K., & Pidgeon, A. M. (2011). The direct and indirect benefits of dispositional mindfulness on self-esteem and social anxiety. *Anxiety, Stress, & Coping*, 24(2), 227-233.
- Razali, R., Ahmad, F., Rahman, F. N. A., Midin, M., & Sidi, H. (2011). Burden of care among caregivers of patients with Parkinson disease: a cross-sectional study. *Clinical neurology and neurosurgery*, 113(8), 639-643.
- Regan, P. (2012). Hans-Georg Gadamer's philosophical hermeneutics: Concepts of reading, understanding and interpretation. *Meta: Research in hermeneutics, phenomenology, and practical philosophy*, 4(2), 286-303.
- Renz, S. M., Carrington, J. M., & Badger, T. A. (2018). Two strategies for qualitative content analysis: An intramethod approach to triangulation. *Qualitative health research*, 28(5), 824-831. <https://doi.org/10.1177/1049732317753586>
- Rezende, G., Gomes, C. A., Rugno, F. C., Eva, G., Lima, N. K. D. C., & De Carlo, M. M. R. P. (2017). Burden on family caregivers of the elderly in oncologic palliative care. *European Geriatric Medicine*, 8(4), 337-341.
- Robins, C. J., Keng, S. L., Ekblad, A. G., & Brantley, J. G. (2012). Effects of mindfulness-based stress reduction on emotional experience and expression: A randomized controlled trial. *Journal of clinical*

*psychology*, 68(1), 117-131.

- Roemer, L., Williston, S. K., and Rollins, L. G. (2015a). Mindfulness and emotion regulation. *Current Opinion in Psychology*, 3, 52–57. <https://doi.org/10.1016/j.copsyc.2015.02.006>
- Roemer, L., Williston, S. K., and Rollins, L. G. (2015b). Mindfulness and emotion regulation. *Cur. Opin. Psychol*, 3, 52–57. <https://doi.org/10.1016/j.copsyc.2015.02.006>
- Roth, D. L., Fredman, L., & Haley, W. E. (2015). Informal caregiving and its impact on health: A reappraisal from population-based studies. *The Gerontologist*, 55(2), 309-319. Retrieved from <https://doi.org/10.1093/geront/gnu177>
- Rothmann, S. (2013). Measuring happiness: Results of a cross-national study. In *Well-being research in South Africa*(pp. 175-197). Springer, Dordrecht.
- Rothmann, S. (2013a). Measuring happiness: Results of a cross-national study. In *Well-being research in South Africa*(pp. 175-197). Springer, Dordrecht.
- Rowe, J. (2012). Great expectations: a systematic review of 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*, 19(1), 70-82.
- Runcan, P. L., & Iovu, M. B. (2013). Emotional intelligence and life satisfaction in Romanian university students: The mediating role of self-esteem and social support. *Revista de cercetare si interventie sociala*, 40, 137-148.
- Rusner, M., Carlsson, G., Brunt, D. A., & Nyström, M. (2012). The paradox of being both needed and rejected: The existential meaning of being closely related to a person with bipolar disorder. *Issues in mental health nursing*, 33(4), 200-208.
- Ruths, F. A., de Zoysa, N., Frearson, S. J., Hutton, J., Williams, J. M. G., & Walsh, J. (2012). Mindfulness-Based Cognitive Therapy for Mental Health Professionals—a Pilot Study. *Mindfulness*, 4(4), 289-295.
- Saturni, S., Bellini, F., Braidò, F., Paggiaro, P. I. E. R., Sanduzzi, A., Scichilone, N., ... & Papi, A. (2014). Randomized controlled trials and real life studies. Approaches and methodologies: a clinical point of view. *Pulmonary pharmacology & therapeutics*, 27(2), 129-138. <https://doi.org/doi: http://dx.doi.org/10.1016/j.pupt>
- Savundranayagam, M. Y., Montgomery, R. J., Kosloski, K., & Little, T. D. (2011). Impact of a psychoeducational program on three types of caregiver burden among spouses. *International journal of geriatric psychiatry*, 26(4), 388-396.
- Schroevers, M. J., & Brandsma, R. (2010). Is learning mindfulness associated

with improved affect after mindfulness-based cognitive therapy?. *British Journal of Psychology*, 101(1), 95-107.

Schutte, N. S., & Malouff, J. M. (2011). Emotional intelligence mediates the relationship between mindfulness and subjective well-being. *Personality and Individual Differences*, 50(7), 1116-1119.

Segal, Z. V., & Teasdale, J. (2018). *Mindfulness-based cognitive therapy for depression*. Guilford Publications.

Segal, Z. V., Teasdale, J. D., and Williams, J. M. (2013a). *Mindfulness-Based Cognitive Therapy for Depression: A New Approach to Preventing Relapse*, (2nd Ed). New York, NY: Bantam: Guilford Press.

Segal, Z. V., Teasdale, J. D., and Williams, J. M. (2013b). *Mindfulness-Based Cognitive Therapy for Depression: A New Approach to Preventing Relapse* (2nd Ed). New York, NY: Bantam: Guilford Press.

Segal, Z., Williams, M., & Teasdale, J. (2002). Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse: Book review. Guilford Publications.

Selvaratnam, D. P., & Tin, P. B. (2007). Lifestyle of the elderly in rural and urban Malaysia. *Annals of the New York Academy of Sciences*, 1114(1), 317-325.

Sessford, J. D., Brawley, L. R., Cary, M. A., Flora, P. K., Blouin, J. E., Strachan, S. M., & Gyurcsik, N. C. (2019). Facing Multiple Barriers to Exercise: Does Stronger Efficacy Help Individuals with Arthritis?. *Applied Psychology: Health and Well-Being*, 11(1), 59-79.

Shah, A. J., Wadoo, O., & Latoo, J. (2010). Psychological distress in carers of people with mental disorders. *British Journal of Medical Practitioners*, 3(3).

Shalin, D. N. (2010). Hermeneutics and prejudice: Heidegger and Gadamer in their historical setting. *Russian Journal of Communication*, 3(1-2), 7-24.

Shapiro, S. L., Brown, K. W., & Biegel, G. M. (2007). Teaching self-care to caregivers: Effects of mindfulness-based stress reduction on the mental health of therapists in training. *Training and education in professional psychology*, 1(2), 105.

Sharp, K. (2012). A review of acceptance and commitment therapy with anxiety disorders. *International Journal of Psychology and Psychological Therapy*, 12(3), 359-372.

Shonin, E., Van Gordon, W., Slade, K., & Griffiths, M. D. (2013). Mindfulness and other Buddhist-derived interventions in correctional settings: A systematic review. *Aggression and Violent Behavior*, 18(3), 365-372.

Shroff, H. B. (2014). *Family resiliency, sense of coherence, social support and*

*psychosocial interventions: Reducing caregiver burden and determining the quality of life in persons with Alzheimer's disease.* Florida Atlantic University.

- Shulman, B., Dueck, R., Ryan, D., Breau, G., Sadowski, I., & Misri, S. (2018). Feasibility of a mindfulness-based cognitive therapy group intervention as an adjunctive treatment for postpartum depression and anxiety. *Journal of affective disorders, 235*, 61-67.
- Silva, A. L., Teixeira, H. J., Teixeira, M. J. C., & Freitas, S. (2013). The needs of informal caregivers of elderly people living at home: an integrative review. *Scandinavian journal of caring sciences, 27*(4), 792-803.
- Singh, N. N. (2016). Implementing evidence-based practices wisely. In *Handbook of evidence-based practices in intellectual and developmental disabilities* (pp. 1-7). Springer, Cham.
- Singh, N. N., Lancioni, G. E., Karazsia, B. T., Chan, J., & Winton, A. S. (2016). Effectiveness of caregiver training in mindfulness-based positive behavior support (MBPBS) vs. training-as-usual (TAU): a randomized controlled trial. *Frontiers in psychology, 7*, 1549. <https://doi.org/doi:10.3389/fpsyg.2016.01549>
- Sinha, P., Desai, N. G., Prakash, O., Kushwaha, S., & Tripathi, C. B. (2017). Caregiver burden in Alzheimer-type dementia and psychosis: A comparative study from India. *Asian journal of psychiatry, 26*, 86-91. <https://doi.org/10.1016/j.ajp.2017.01.002>
- Smith, G. R., Williamson, G. M., Miller, L. S., & Schulz, R. (2011). Depression and quality of informal care: A longitudinal investigation of caregiving stressors. *Psychology and aging, 26*(3), 584. <http://dx.doi.org/10.1037/a0022263>
- Smith, G. R., Williamson, G. M., Miller, L. S., & Schulz, R. (2011). Depression and quality of informal care: A longitudinal investigation of caregiving stressors. *Psychology and aging, 26*(3), 584.
- Song, G., Kong, F., & Jin, W. (2013). Mediating effects of core self-evaluations on the relationship between social support and life satisfaction. *Social Indicators Research, 114*(3), 1161-1169. <https://doi.org/http://dx.doi.org/10.1007/s11205-012-0195-5>
- Spinhoven, P., Huijbers, M. J., Ormel, J., & Speckens, A. E. (2017). Improvement of mindfulness skills during Mindfulness-Based Cognitive Therapy predicts long-term reductions of neuroticism in persons with recurrent depression in remission. *Journal of affective disorders, 213*, 112-117.
- Springer, J. (2012). Acceptance and commitment therapy: Part of the "Third Wave" in the behavioral tradition. *Journal of Mental Health Counseling, 34*(3), 205-212.

- StataCorp. (2017). *Stata Statistical Software: Release 15*. College Station, TX: StataCorp LLC. Stata Statistical Software: Release 15. College Station, TX: StataCorp LLC.
- Steele, A., Maruyama, N., & Galyner, I. (2010). Psychiatric symptoms in caregivers of patients with bipolar disorder: a review. *Journal of affective disorders*, 121(1-2), 10-21.
- Stjernswärd, S., & Hansson, L. (2017). User value and usability of a web-based mindfulness intervention for families living with mental health problems. *Health & social care in the community*, 25(2), 700-709. <https://doi.org/10.1111/hsc.12360>
- Stone, A. A., Schwartz, J. E., Broderick, J. E., & Deaton, A. (2010). A snapshot of the age distribution of psychological well-being in the United States. *Proceedings of the National Academy of Sciences*, 107(22), 9985-9990.
- Strine, T. W., Chapman, D. P., Balluz, L. S., Moriarty, D. G., & Mokdad, A. H. (2008). The associations between life satisfaction and health-related quality of life, chronic illness, and health behaviors among US community-dwelling adults. *Journal of community health*, 33(1), 40-50. <https://doi.org/doi:10.1007/s10900-007-9066-4>
- Subramaniam, M., Chong, S. A., Vaingankar, J. A., Abidin, E., Chua, B. Y., Chua, H. C., ... & Jeyagurunathana, A. (2015). Prevalence of dementia in people aged 60 years and above: results from the WiSE study. *Journal of Alzheimer's Disease*, 45(4), 1127-1138. <https://doi.org/doi:10.3233/JAD-142769>
- Suhaimi, A. S., Halimah, A., & Norma, M. (2012). Population Ageing and Social Protection in Malaysia. Presentation at International Conference on Population Aging: Issues and Challenges. Retrieved from [http://fep.um.edu.my/images/fep/SSRC Highlights/2. Population Ageing & Social Protection in Malaysia\(Halimah Awang\).pdf](http://fep.um.edu.my/images/fep/SSRC_Highlights/2_Population_Ageing_%26_Social_Protection_in_Malaysia(Halimah_Awang).pdf)
- Suikkanen, J. (2011). An improved whole life satisfaction theory of happiness. *International Journal of Wellbeing*, 1(1). <https://doi.org/doi:10.5502/ijw.v1i1.6>
- Sullivan, A. B., & Miller, D. (2015). Who is taking care of the caregiver?. *Journal of patient experience*, 2(1), 7-12. <https://doi.org/doi:10.1177/237437431500200103>
- Sun, P., Wang, S., & Kong, F. (2014). Core self-evaluations as mediator and moderator of the relationship between emotional intelligence and life satisfaction. *Social indicators research*, 118(1), 173-180. <http://dx.doi.org/10.1007/s11205-013-0413-9>
- Swami, V., & Chamorro-Premuzic, T. (2009). Psychometric evaluation of the Malay satisfaction with life scale. *Social Indicators Research*, 92(1), 25.



- Takagi, E., Davey, A., & Wagner, D. (2013). A national profile of caregivers for the oldest-old. *Journal of Comparative Family Studies*, 44(4), 473-490.
- Talley, R. C., & Montgomery, R. J. (2013). Caregiving: a developmental, life-long perspective. In *Caregiving Across the Lifespan* (pp. 3-10). Springer, New York, NY.
- Talley, R. C., & Montgomery, R. J. (2013). Caregiving: a developmental, life-long perspective. In *Caregiving Across the Lifespan* (pp. 3-10). Springer, New York, NY.
- Tang, Y. Y., Hölzel, B. K., & Posner, M. I. (2015). The neuroscience of mindfulness meditation. *Nature Reviews Neuroscience*, 16(4), 213-225.
- Tanji, H., Koyama, S., Wada, M., Kawanami, T., Kurita, K., Tamiya, G., ... & Gruber-Baldini, A. L. (2013). Comparison of caregiver strain in Parkinson's disease between Yamagata, Japan, and Maryland, The United States. *Parkinsonism & related disorders*, 19(6), 628-633.
- Taylor, B. L., Strauss, C., Cavanagh, K., & Jones, F. (2014). The effectiveness of self-help mindfulness-based cognitive therapy in a student sample: a randomised controlled trial. *Behaviour Research and Therapy*, 63, 63-69.
- Taylor, B. L., Strauss, C., Cavanagh, K., & Jones, F. (2014). The effectiveness of self-help mindfulness-based cognitive therapy in a student sample: a randomised controlled trial. *Behaviour Research and Therapy*, 63, 63-69.
- Teschendorf, B., Schwartz, C., Ferrans, C. E., O'mara, A., Novotny, P., & Sloan, J. (2007). Caregiver role stress: when families become providers. *Cancer Control*, 14(2), 183-189.
- Thabane, L., Ma, J., Chu, R., Cheng, J., Ismaila, A., Rios, L. P., ... & Goldsmith, C. H. (2010). A tutorial on pilot studies: the what, why and how. *BMC medical research methodology*, 10(1), 1. <https://doi.org/http://www.biomedcentral.com/1471-2288/10/1>.
- Thompson Jr, E. H., Futterman, A. M., Gallagher-Thompson, D., Rose, J. M., & Lovett, S. B. (1993). Social support and caregiving burden in family caregivers of frail elders. *Journal of Gerontology*, 48(5), S245-S254. Retrieved from <https://doi.org/10.1093/geronj/48.5.S245>
- Thornton, M., & Travis, S. S. (2003). Analysis of the reliability of the modified caregiver strain index. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 58(2), S127-S132. <https://doi.org/doi: 10.1093/geronb/58.2.S127>
- Thornton, M., & Travis, S. S. (2003). Analysis of the reliability of the modified caregiver strain index. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 58(2), S127-S132.
- Tkatch, R., Bazarko, D., Musich, S., Wu, L., MacLeod, S., Keown, K., ... & Wicker, E. (2017). A pilot online mindfulness intervention to decrease

caregiver burden and improve psychological well-being. *Journal of evidence-based complementary & alternative medicine*, 22(4), 736-743. <https://doi.org/10.1177/2156587217737204>

Topo, P. (2009). Technology studies to meet the needs of people with dementia and their caregivers: a literature review. *Journal of applied Gerontology*, 28(1), 5-37.

United Nations Statistics Division. (2013). *Demographic and Social Statistics*. Retrieved from <http://unstats.un.org/unsd/demographic/>

Uršič, N., Kocjančič, D., & Žvelc, G. (2019). Psychometric properties of the slovenian long and short version of the self-compassion scale. *Psihologija*, 52(2), 107-125. <https://doi.org/10.2298/PSI180408029U>

Vaingankar, J. A., Chong, S. A., Abdin, E., Picco, L., Jeyagurunathan, A., Zhang, Y., ... & Subramaniam, M. (2016). Care participation and burden among informal caregivers of older adults with care needs and associations with dementia. *International psychogeriatrics*, 28(2), 221-231. <https://doi.org/doi:10.1017/S104161021500160X>

Vallejo, M. A., Vallejo-Slocker, L., Fernández-Abascal, E. G., & Mañanes, G. (2018). Determining factors for stress perception assessed with the perceived stress scale (PSS-4) in Spanish and other European samples. *Frontiers in psychology*, 9, 37. <https://doi.org/doi:10.3389/fpsyg.2018.00037>

Van Dam, N. T., Sheppard, S. C., Forsyth, J. P., & Earleywine, M. (2011). Self-compassion is a better predictor than mindfulness of symptom severity and quality of life in mixed anxiety and depression. *Journal of anxiety disorders*, 25(1), 123-130. <https://doi.org/10.1016/j.janxdis.2010.08.011>

Van de Weijer-Bergsma, E., Formsma, A. R., de Bruin, E. I., & Bögels, S. M. (2012). The effectiveness of mindfulness training on behavioral problems and attentional functioning in adolescents with ADHD. *Journal of child and family studies*, 21(5), 775-787. <https://doi.org/doi:10.1007/s10826-011-9531-7>

Van Groenou, M. I. B., de Boer, A., & Iedema, J. (2013). Positive and negative evaluation of caregiving among three different types of informal care relationships. *European Journal of Ageing*, 10(4), 301-311.

Van Vugt, M. K., Hitchcock, P., Shahar, B., & Britton, W. (2012). The effects of mindfulness-based cognitive therapy on affective memory recall dynamics in depression: a mechanistic model of rumination. *Frontiers in human neuroscience*, 6, 257. <https://doi.org/10.3389/fnhum.2012.00257>

Van Wyk, H. (2011). *Die verband tussen weerbaarheidsfaktore en lewenstevredenheid by adolessente:'n kruiskulturele studie* (Doctoral dissertation, University of the Free State).

- Vazquez, C., Duque, A., & Hervás, G. (2013). Satisfaction with life scale in a representative sample of Spanish adults: validation and normative data. *The Spanish journal of psychology*, 16. <https://doi.org/DOI:https://doi.org/10.1017/sjp.2013.82>
- Vitaliano, P. P., Murphy, M., Young, H. M., Echeverria, D., & Borson, S. (2011). Does caring for a spouse with dementia promote cognitive decline? A hypothesis and proposed mechanisms. *Journal of the American Geriatrics Society*, 59(5), 900-908.
- Vyskocilova, J., & Prasko, J. (2012). Social skills training in psychiatry. *Acta Nerv Super Rediviva*, 54(4), 159-70.
- Wang, Y. N., Shyu, Y. I. L., Chen, M. C., & Yang, P. S. (2011). Reconciling work and family caregiving among adult-child family caregivers of older people with dementia: effects on role strain and depressive symptoms. *Journal of Advanced Nursing*, 67(4), 829-840.
- Wang, Y., & Jiang, C. (2016). The biological mechanism and effect on physical and mental health of mindfulness meditation. *Chinese Mental Health Journal*, 2, 105-8.
- Wang, Y., & Kong, F. (2014). The role of emotional intelligence in the impact of mindfulness on life satisfaction and mental distress. *Social Indicators Research*, 116(3), 843-852.
- Whitebird, R. R., Kreitzer, M. J., Lewis, B. A., Hanson, L. R., Crain, A. L., Enstad, C. J., & Mehta, A. (2011). Recruiting and retaining family caregivers to a randomized controlled trial on mindfulness-based stress reduction. *Contemporary clinical trials*, 32(5), 654-661. <https://doi.org/doi:10.1016/j.cct.2011.05.002>
- Whitebird, R. R., Kreitzer, M., Crain, A. L., Lewis, B. A., Hanson, L. R., & Enstad, C. J. (2012). Mindfulness-based stress reduction for family caregivers: a randomized controlled trial. *The Gerontologist*, 53(4), 676-686. <https://doi.org/https://doi.org/10.1093/geront/gns126>
- Whitebird, R. R., Kreitzer, M., Crain, A. L., Lewis, B. A., Hanson, L. R., & Enstad, C. J. (2012). Mindfulness-based stress reduction for family caregivers: a randomized controlled trial. *The Gerontologist*, 53(4), 676-686.
- Whitebird, R. R., Kreitzer, M., Crain, A. L., Lewis, B. A., Hanson, L. R., & Enstad, C. J. (2012). Mindfulness-based stress reduction for family caregivers: a randomized controlled trial. *The Gerontologist*, 53(4), 676-686.
- Whitehead, A. L., Julious, S. A., Cooper, C. L., & Campbell, M. J. (2016). Estimating the sample size for a pilot randomised trial to minimise the overall trial sample size for the external pilot and main trial for a continuous outcome variable. *Statistical methods in medical research*, 25(3), 1057-1073.

- Wilkins, V. M., Bruce, M. L., & Sirey, J. A. (2009). Caregiving tasks and training interest of family caregivers of medically ill homebound older adults. *Journal of aging and health, 21*(3), 528-542.
- Williams, J. M. G., Crane, C., Barnhofer, T., Brennan, K., Duggan, D. S., Fennell, M. J., ... & Shah, D. (2014). Mindfulness-based cognitive therapy for preventing relapse in recurrent depression: a randomized dismantling trial. *Journal of consulting and clinical psychology, 82*(2), 275. <https://doi.org/doi:10.1037/a0035036>
- Wojjutari, A. K. Effect of Caregiver's Burden and Life Satisfaction on Older Adults Care Providers Psychological Well-Being in Ondo State.
- Wong, C. C., & Mak, W. W. (2013). Differentiating the role of three self-compassion components in buffering cognitive-personality vulnerability to depression among Chinese in Hong Kong. *Journal of counseling psychology, 60*(1), 162.
- Wong, K. F., Massar, S. A., Chee, M. W., & Lim, J. (2018). Towards an objective measure of mindfulness: Replicating and extending the features of the breath-counting task. *Mindfulness, 9*(5), 1402-1410.
- World Bank List of Economies. (2014). *World Bank*.
- Wrosch, C., Amir, E., & Miller, G. E. (2011). Goal adjustment capacities, coping, and subjective well-being: The sample case of caregiving for a family member with mental illness. *Journal of personality and social psychology, 100*(5), 934.
- Wubbolding, R., Robey, P., & Brickell, J. (2010). A Partial and Tentative Look at the Future of Choice Theory, Reality Therapy and Lead Management. *International Journal of Choice Theory and Reality Therapy, 29*(2), 25-34.
- Xue, Q. L. (2011). The frailty syndrome: definition and natural history. *Clinics in geriatric medicine, 27*(1), 1-15.
- Yahaya, N., Abdullah, S. S., Momtaz, Y. A., & Hamid, T. A. (2010). Quality of life of older Malaysians living alone. *Educational Gerontology, 36*(10-11), 893-906. [https://doi.org/DOI: 10.1080/03601271003609009](https://doi.org/DOI:10.1080/03601271003609009)
- Yilmaz, E., & Kavak, F. (2018). Effects of Mindfulness-Based Psychoeducation on the Internalized Stigmatization Level of Patients With Schizophrenia. *Clinical nursing research, 1054773818797871*.
- Young, L. A., & Baime, M. J. (2010). Mindfulness-based stress reduction: Effect on emotional distress in older adults. *Complementary health practice review, 15*(2), 59-64.
- Zamir, D. R. (2012). *Self-Esteem as a Mediator of the Relationship Between Mindfulness and Satisfaction with Life* (Pacific University). Retrieved from <http://commons.pacificu.edu/spp/241>

- Zarit, S. H., Bangerter, L. R., Liu, Y., & Rovine, M. J. (2017). Exploring the benefits of respite services to family caregivers: Methodological issues and current findings. *Aging & mental health*, 21(3), 224-231.
- Zarit, S. H., Todd, P. A., & Zarit, J. M. (1986). Subjective burden of husbands and wives as caregivers: a longitudinal study. *The Gerontologist*, 26(3), 260-266.
- Zegwaard, M. I., Aartsen, M. J., Grypdonck, M. H., & Cuijpers, P. (2013). Differences in impact of long term caregiving for mentally ill older adults on the daily life of informal caregivers: a qualitative study. *BMC psychiatry*, 13(1), 103.
- Zendjidjian, X., Richieri, R., Adida, M., Limousin, S., Gaubert, N., Parola, N., ... & Boyer, L. (2012). Quality of life among caregivers of individuals with affective disorders. *Journal of affective disorders*, 136(3), 660-665.