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Resilience and Protective Factors in Older Adults

Jessica McClain
Dominican University of California

Katelyn Gullatt
Dominican University of California

Caroline Lee
Dominican University of California

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Resilience and Protective Factors in Older Adults

By

Kayte Gullatt, Caroline Lee, Jessica McClain

A culminating Capstone project report submitted to the faculty of Dominican University of California in partial fulfillment of the requirements for the degree of Master of Science in Occupational Therapy.

San Rafael, California

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This project, written under the direction of the candidates' thesis advisor and approved by the department chair, has been presented to and accepted by the Department of Health and Human Sciences in partial fulfillment of the requirements for the degree of Master of Science in Occupational Therapy. The content and research methodologies presented in this work represent the work of the candidates alone.

Katelyn Gullatt, Candidate

December 5, 2017

Caroline Lee, Candidate

December 5, 2017

Jessica McClain, Candidate

December 5, 2017

Susan Morris, Ph.D., OTR/L, Thesis Advisor

December 5, 2017

Julia Wilbarger, Ph.D., OTR/L, Department Chair

December 5, 2017

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Abstract

Evidence suggests resilience promotes successful aging in place and protective factors promote resilience. This study sought to investigate whether or not the combination of three protective factors, physical health, social support, and self-efficacy are all of equal importance in predicting resilience among Marin County older adults, or if some individual protective factors have a greater impact on resilience than the others. Fifty-eight participants ages 62 and higher were recruited from senior community programs and personal contacts. Four self-report questionnaires were completed by the participants in this exploratory, cross-sectional, quantitative design. SPSS was used for a descriptive and multivariate analyses to investigate the relationship between the key variables. Of the three protective factors combined, self-efficacy was the greatest predictor of resilience $R^2 = .279$, $F(3,48) = 6.207$, $p < .01$; $B = 1.735$, $\beta = .495$, $p < .01$. The remaining protective factors both were found to predict self-efficacy, physical health ($R^2 = .312$, $F(2,51) = 11.55$, $p < .001$; $B = .588$, $\beta = .356$, $p < .01$) and social support ($R^2 = .312$, $F(2,51) = 11.5$, $p < .001$; $B = .756$, $\beta = .317$, $p < .05$). In conclusion, self-efficacy is an important predictor of resilience in older adults. Social support and physical health support self-efficacy. Incorporation of physical activity and social participation during occupational therapy intervention will increase self-efficacy, and therefore, increase resilience.

Keywords: resilience, successful aging, older adults, protective factors, self-efficacy, physical health, social support, aging in place, actively aging, independent living, geriatrics, occupational therapy, OT

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In Memoriam

In memoriam of Joan Loberg, our first participant. We appreciated her honesty, guidance, and her contribution to this study as well as the future of occupational therapy practice. She will always be remembered and will forever remain in our hearts.

Introduction

More than 34 million Americans were 65 years or older in the year 2000, a number projected to exceed 70 million by the year 2030 (Sikorska-Simmons, & Wright, 2007). Technological medical advances and the shift in medical practice to preventative care have increased the longevity of this population. With this surge in the population of older adults (OAs), a greater demand exists to provide support to their unique set of adversities to optimize a high quality of life. As older adults are living longer and healthier, a strong desire to age in place, or at home, has been demonstrated by this population (Wiles, Leibing, Guberman, Reeve, & Allen, 2012). Aging in the home allows older adults to maintain their lifestyle and valued roles, which prolongs their health-related quality of life (HRQoL), and offers economic advantages compared to institutional care (World Health Organization [WHO], 2010; Fänge & Ivanhoff, 2009). Despite this paradigm shift, there is a lack of evidence-based practice for occupational therapists to support this growing population's desire to age in place successfully.

Resilience is a concept that is gaining attention in gerontology research, as it has been linked to successful aging and HRQoL (Hildon et al., 2010; Netuveli & Blane, 2008). Resilience is the ability to bounce back from adversity, or circumstances that produce a significant decrease in one's quality of life (Hildon et al., 2010). Resilience is enhanced and supported by protective factors (PFs), which facilitate the resilience process and modify risk effects associated with adversity (Montpetit, Bergman, Deboeck, Tiberio, & Boker, 2010; Luthar, Sawyer & Brown, 2006). To date, multiple studies have examined the relationship of various protective factors and resilience. Throughout literature, three protective factors were commonly found: social support, physical health, and self-efficacy. Fuller-Iglesias, Sellars, and Antonucci (2008) and Netuveli, Wiggins, Montgomery, Hildon and Blane (2008) found higher levels of social support fostered

higher resilience. According to Yi, Vitaliano, Smith, Yi, and Weinger (2008), positive physical health outcomes resulted in higher resilience when faced with increasing stress. Zimmerman (2013) found self-efficacy worked to negate risk factors after adversity. While physical health, social support, and self-efficacy appear to be correlated with resilience throughout literature, the combined effect of the factors on resilience in OAs has yet to be examined.

Understanding the collective effect of physical health, social support, and self-efficacy on resilience would enrich evidence-based practice for occupational therapy (OT). Currently, there is a lack of research examining how occupational therapists can effectively utilize protective factors and create client-centered interventions for older adults. With stronger evidence, OTs would be able to incorporate resilience and the three protective factors into interventions with confidence. Therefore, the purpose of this study was to investigate the predictive relationship between the three protective factors and resilience in older adults aging in place.

Literature Review

Resilience

Throughout gerontology literature, resilience, commonly studied in conjunction with successful aging, is an important concept for older adults who desire to age in place (Martin, Palmer, Rock, Gelston, & Jeste, 2015). Rowe and Kahn (1997) developed the first model of successful aging (Figure 1) in the late 1990s, which included three interactive components, avoiding disease and disability, high cognitive and physical function, and engagement with life. Positive performance in each of these areas results in the absence of disease and disability, leading to the definition of successful aging as “high cognitive and physical functional capacity, and active engagement with life” (Rowe & Kahn, 1997, p.433). In addition to successful aging,

resilience is also associated with HRQoL. Netuveli and Blane (2008) defined HRQoL as a person's functional states, impairments, perceptions, and social opportunities impacted by disease, injury, treatment, or policy. HRQoL focuses on the physical element of quality of life (Netuveli & Blane, 2008), however for older adults, high HRQoL is only one aspect of successful aging. Negative effects from decreased physical functioning are overridden by resilience, enabling older adults to age successfully (Hildon, Montgomery, Blane, Wiggins, & Netuveli, 2010; Rowe & Kahn, 1997).

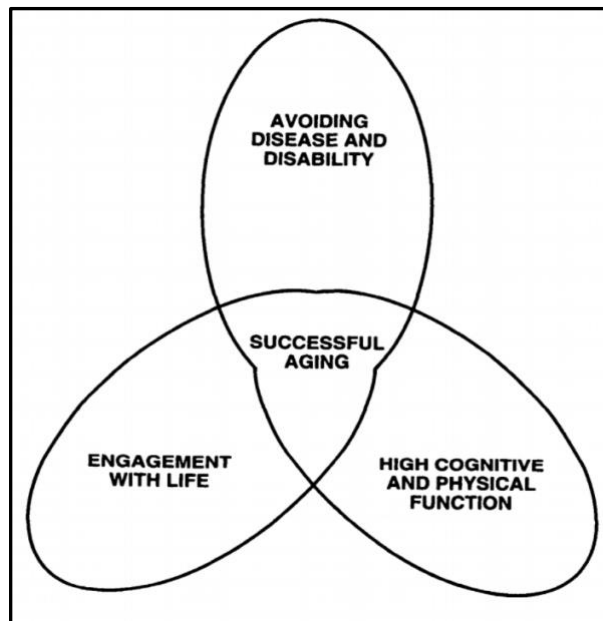


Figure 1. Model of successful aging. The model outlines three components contributing to successful aging through a relative and interactive relationship. Adapted from: Rowe, J. W., & Kahn, R. L. (1997). Successful aging. The gerontologist, 37(4), 433-440.

Currently, there is a surge in resilience research for the growing aging population. In the 1980s, a paradigm shift resulted when gerontology research switched focus from negative aspects of aging to successful aging (Harris, 2008). However, evidence remains to be established regarding factors that support successful aging through resilience. Resilience studies, primarily on children and adolescents, found that effective coping skills promote resilience and ultimately, occupational independence (Werner, 1995). Therefore, further research is needed to instill

effective strategies to facilitate resilience within older adults, a population that will inevitably face adversity. (Lawford & Eiser, 2001).

Definition. Congruous definitions of resilience have been found throughout gerontology literature. Harris (2008) defined resilience as “the ability to bounce back, to overcome negative influences that block achievement” (p. 45). Building upon Harris’ concept of bouncing back from adversity, Resnick (2014) stated resilience is the ability to “reintegrate and ideally grow from the experience” (p. 155). Windle (2012) brought another perspective and saw resilience as the process of negotiating, managing, and adapting to significant sources of stress or trauma, ultimately resulting to “doing better than could be expected, given the individual circumstances” (p. 159). Throughout the literature, resilience is described as a personal process resulting in the ability to recover from adversity, ideally adapting positively in order to reintegrate back into a satisfying life after difficult circumstances (Hardy, Concato, & Gill, 2004; Resnick, 2014; Shen & Yen, 2010). In this study, resilience is defined as the ability to bounce back and recover from adversity.

Building upon this multifaceted definition of resilience, the effects of resilience are considered dynamic and impact a myriad of components constituted within an older adult’s life (Figure 2; Wild, Wiles, & Allen, 2013). For example, a person may be environmentally or financially resilient, but lack resilience culturally or emotionally. Since there are different areas of resilience, an increase or decrease in one area can determine the effect of another. This being said, resilience is fluid and can change through life as an individual ages (Wild et al., 2013). The ripple effect is present within resilience, as one area of resilience can succeed another. Different types of resilience have been mentioned, but three main areas will be discussed for the purpose of this project, psychological, physical, and social resilience.

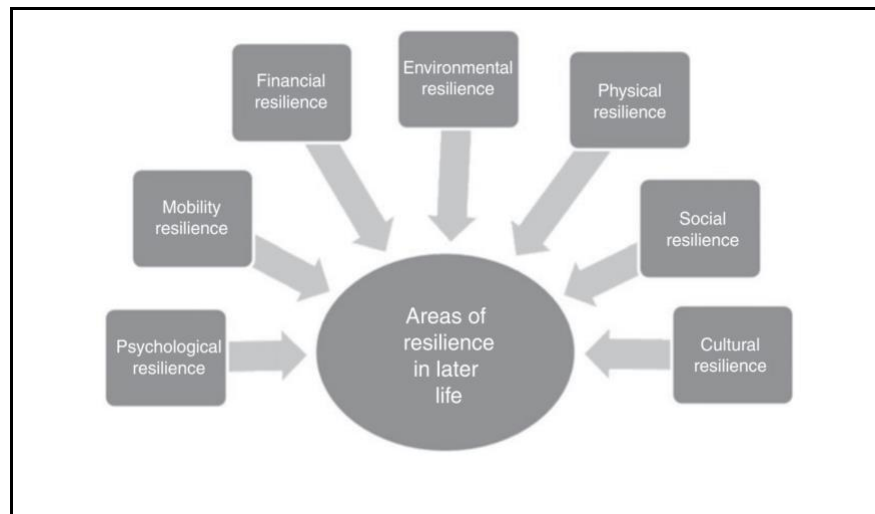


Figure 2. *Areas of older adult life. Different areas of resilience leading to the summation of a person's total resilience later in life. Adapted from: Wild, K., Wiles, J. L., & Allen, R. E. (2013). Resilience: thoughts on the value of the concept for critical gerontology. Ageing and Society, 33(01), 137-158.*

Psychological, physical, and social aspects of resilience help overcome age-related adversities (Li, Theng, & Foo, 2013; Wild et al., 2013). Using a combination of healthy personality and coping strategies, psychological resilience is a process of using positive adaptive behaviors when dealing with adversity, such as loss of functional independence from dementia or depression (Resnick, 2014; Rutter, 1987). Physical or health resilience is the capacity to maintain good health, persevere, and restore function in the face of adversity, such as a hip fracture, arthritis or frailty (Resnick, Galik, Dorsey, Scheve, & Gutkin, 2011). Social resilience is the ability to cultivate, engage in, and maintain positive relationships, in addition to enduring, recovering from, and adapting as a result of adverse events and social isolation (Cacioppo, Reis, & Zautra, 2011). Recent research suggests that resilience can override the challenges associated with aging by overcoming hardship and persevering, or even flourishing, despite the adversity (Hildon et al., 2010; Wild et al., 2013; Fuller-Iglesias, Sellars, & Antonucci, 2008). The resilience process is outlined by the Resilience Model.

Resilience Model. The Resilience Model (Figure 3) for older adults outlines the dynamic pathway of reintegration back into life after a disruption of homeostasis (Resnick, 2014). Homeostasis is a moment in time “when one has adapted physically, mentally, and spiritually to a set of circumstances whether good or bad” (Richardson, 2002). A disruption in homeostasis caused by a stressor forces a person to use his or her resilient characteristics to overcome the adversity and reintegrate back to homeostasis. Resilience characteristics, such as equanimity, perseverance, self-reliance, meaningfulness, and existential aloneness, have been found to facilitate successful reintegration (Wagnild & Collins, 2009; Richardson, 2002). *Equanimity* is the ability to accept adversities as they come, alleviating the stressors associated with those challenges (Wagnild, 2009). *Perseverance* is choosing to remain involved when facing adversity, practicing self-discipline (Wagnild, 2009). *Self-reliance* is the awareness of limitations and strengths and belief in abilities (Damasio, Borsa, & da Silva, 2011). *Meaningfulness* refers to the ability to value personal contributions and recognize life’s purpose (Damasio, Borsa, & da Silva, 2011). Finally, *existential aloneness* is the realization that some experiences need to be confronted alone, emphasizing individual uniqueness (Wagnild, 2009; Wagnild & Young, 1993). Through the use of resilience characteristics, one of four reintegration outcomes is possible: dysfunction, loss or disappointment, reintegration but return to homeostasis, or ideally, resilient reintegration (Resnick, 2014). Resilient characteristics may also be known as protective factors. (Richardson, 2002; Resnick, 2014).

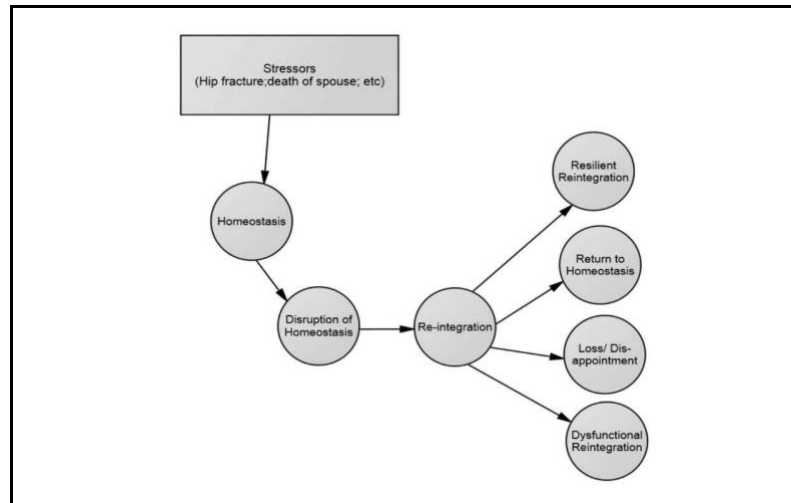


Figure 3. Resilience model. The model outlines the cause and effect pathway of facing adversity, leading to four possible reintegration outcomes. Faced with adversity, homeostasis is disrupted resulting in reintegration. Ideally resilient reintegration is reached, but homeostasis, loss, or dysfunction are possible. Adapted from: Resnick, B. (2014). Resilience in older adults. *Topics in Geriatric Rehabilitation*. 30(3), 155-163.

Protective Factors

Resnick's (2014) model outlined the resilience process of overcoming adversity through the use of protective factors. Martin, Distelberg, Palmer, and Jeste (2015) stated that protective factors decreased negative long-term effects of adversity and are used in the development and maintenance of resilience. People are bombarded with internal and external stressors throughout life. Protective factors help the person adapt and cope, making these adversities become less disruptive and enabling him or her to restore homeostasis (Richardson, 2002). The internal and external life stressors in turn result in utilization of internal and external protective factors.

Resnick (2014) postulated two types of protective factors were used when faced with adversity, internal and external. Internal protective factors are attributes from within the individual contributing to reintegration and include self-reliance, self-efficacy, self-esteem, psychological and physical health. Resources from the environment are the extrinsic protective factors, such as social support, financial resources, and nature. When faced with adversity, an individual has a choice to use either internal or external protective factors. Richardson (2002)

further explains that the interaction between adversity and protective factors determines the reintegration outcome.

Since aging comes with its own set of adversities, protective factors are critical for the older adult population (Resnick, 2014). Various types of internal and external protective factors fill the literature in regards to resilience and successful aging. However, three protective factors that continuously appeared throughout the research and correlated with resilience and successful aging are self-efficacy, social support, and physical health.

Self-efficacy. An intrinsic factor, self-efficacy has been studied in relation to resilience and successful aging. In 1977, Bandura originally defined self-efficacy as a person's perception of his or her effectiveness in overcoming adversity. Bandura (1994) later re-defined his definition stating that self-efficacy is an individual's perception of his or her ability to achieve a goal. Building upon Bandura's definition, Hardy et al. (2004) defined "functional self-efficacy" as confidence in performing basic activities. Ten years later, Resnick (2014) further defined self-efficacy as the motivation and belief of achieving a goal in a certain context or situation. Incorporating these definitions, for the purpose of this study, self-efficacy has been defined as the belief in self and motivation to achieve a goal.

The level of self-efficacy is an indicator of a person's belief in his or her own ability to overcome adversity. The individual with higher self-efficacy demonstrates increased use of positive coping mechanisms to persist through adversity. Lower self-efficacy results in an avoidance or cessation of coping techniques, resulting in dysfunctional reintegration. An individual who utilizes self-efficacy as a protective factor creates meaning of the adversity and difficulties in their own life and continues to strive toward the goal in mind (Martin et. al., 2015). Possessing the belief and motivation to accomplish a goal, a person is more likely to be resilient

during life's difficulties. Problem solving skills and accepting personal limitations and capabilities are signs of self-efficacy (Martin et. al., 2015; Damasio, Borsa, & da Silva, 2011). Increased self-efficacy, or belief that obstacles could be overcome by utilization of individual skills and talents, are associated with greater resilience (Bandura, 1994). Overall, a significant relationship is consistently found between self-efficacy and resilience, suggesting its key role in overcoming adversity.

Social support. An extrinsic protective factor, social support is an important area of gerontology. While amount of social supports, or relationships, may fluctuate as one ages, the quality of relationships that one maintains becomes more salient for overcoming adversity (Hildon et al., 20010; Fuller-Iglesias, Sellars, & Antonucci, 2008). Incorporating quality social support throughout the lifespan, White, Philogene, Fine, and Sinha (2009) described social support as a way of strengthening the well-being of members within social networks (p. 1872). Seeman (1996) defined social networks as a web of social relationships that involve both intimate and formal relationships that socially connect individuals to larger communities. While Forsman, Herberts, Nyqvist, Wahlbeck, & Schierenbecks, (2013) described intimate social contacts as networks that generate a sense of belonging to social groups or contexts, for the purpose of this study, social support is defined as a network of quality relationships and a sense of belonging.

In gerontology literature, social ties have been found to be strongly correlated to resilience (Wells, 2010). Hardy, Concata, and Gill (2004) found that living with others greatly contributed to resilience, demonstrating the significant role of social networks. Furthermore, the quality of relationships and community engagement were found to be key components of resilience (Netuveli et al., 2008; Hildon, et. al., 2010). Fuller-Iglesias, Sellars, and Antonucci

(2008) described social support as a facilitator and a coping tool for overcoming adversity. Therefore, in summary, social support has been found to help older adults overcome adversity and adapt positively through resilience (Hatch, 2005; Lin & Peek, 1999).

Physical health. Another internal factor influencing resilience is physical health, not to be confused with physical activity or physical function which are components of physical health. Wolff, Warner, Ziegelmann, and Wurm (2014) described physical health as having fewer diseases and more active physical engagement, which leads to better physical functioning. The World Health Organization (2010) defined physical health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.” For the purpose of this study, physical health is the ability to perform physical activities and important roles without limitations due to health (Brazier et al., 1992).

Comprised of physical activity and lack of disease, physical health can promote and improve resilience and improve overall health (MacLeod, Musich, Hawkins, Alsgaard, & Wicker, 2016). Several studies found that physical health is reflected in resilience scores (Cacioppo, Reis, & Zautra, 2011; Perkins, Multhaup, Perkins, & Barton, 2008; Wells, 2010). Characteristics associated with high resilience include independence in activities of daily living, being physically active, and better physical health with fewer chronic conditions (MacLeod et al., 2016). Studying the relationship between physical health and resilience in the older adult population is relevant since functional ability and health status may decline with age (Wells, 2010).

Resilience for Older Adults Aging in Place

Through the use of protective factors, resilience supports the process of overcoming adversity, enabling older adults to age successfully. Incorporating high functional capacity,

active engagement, and the absence of disease and disability, successful aging promotes independence in older adults (MacLeod et al., 2016). Montross et al. (2006) conducted a study with 205 older adults who completed self-report questionnaires measuring successful aging. Ninety-two percent of participants rated themselves as aging successfully. With older adults demonstrating increased independence, their desire for more residential options is growing. In fact, 87% of this population desire to age in their homes (American Association of Retired Persons, 2014). An important part of their identity, the home environment contributes to successful aging and contentment in life for many older adults (Wiles et al., 2012; Stevens-Ratchford & Diaz, 2003).

According to Wiles et al. (2012), aging in place is defined as housing located in a community that does not provide residential or institutional care, requiring residents to remain independent. “Home” is defined as a familiar environment that is comfortable to navigate and facilitates participation in personal occupations, roles, routines and habits developed over a lifetime (Fänge & Ivanhoff, 2009). Engagement in daily activities at home and in the community is associated with healthy aging and is supported by an established lifestyle with stable performance patterns. A sense of autonomy is fostered by aging in the place of establishment, providing safety and security for the aging adult. Living in a familiar place mitigates health decline, supports routines, and enhances participation in occupations, leading to a better quality of life (Fänge & Ivanhoff, 2009).

Resilience and Occupational Therapy

Older adults aging in place tend to be more physically able, have a higher quality of life (QoL), and achieve better clinical outcomes in comparison to institutionalized older adults (Wang, Shepley & Rodiek, 2012). Further supported by Montross et al. (2006), not only did

participants, community-dwelling older adults, perceive themselves to be aging successfully, but they also reported greater participation, better functioning, and lower mortality, all associated with more freedom of choice, resilience, and QoL. Supporting these older adults who desire to age at home requires services that support successful aging in place (American Association of Retired Persons, 2014). Helping older adults age successfully in their homes helps avoid unnecessary costs of institutional care (WHO, 2007). Incorporating resilience into occupational therapy services for older adults aging in place could therefore improve quality of care.

Rogers, Bai, Lavin, and Andersen (2016) found that increasing occupational therapy services during hospital stays led to lower readmission rates for older adult patients who suffered from heart failure, pneumonia, or acute myocardial infarction. Before discharge, occupational therapists evaluate whether a patient can return safely to his or her environment by considering a variety of factors. Calvillo-King et al. (2013) found that assessing a patient's social context, including housing and support network, reduced risk of readmission and mortality. Because occupational therapists focus on safe discharge planning and home evaluations, being aware of factors that support resilience once home, may help contribute to keeping older adults at home for longer periods of time.

Conclusion

Older adults are a rapidly growing population, and many are choosing to age in place. Aging in the home is favorable for many seniors and is supported by their health providers since it is a more affordable alternative to institutional care, and living in a familiar setting prolongs HRQoL (WHO, 2010; Fänge & Ivanhoff, 2009). Aging is accompanied by its own set of adversities, and resilience is associated with how well individuals respond to these adversities. Resilience is the ability to recover and adapt to adverse life events resulting in reintegration.

There are different kinds of resilience that may impact an OA's life, but this study focused on psychological, physical, and social resilience because they coincide with the three commonly used protective factors, self-efficacy, social support, and physical health. Protective factors support and enhance the ability to cope with adversity, increasing the likelihood of a positive resilient reintegration outcome.

Research investigating successful aging and resilience continues to grow, but the incorporation of protective factors into occupational therapy interventions is an area that remains to be understood. A deeper understanding of how best to promote protective factors, and resilience, will help OTs develop more effective treatment plans when working with aging clients. Further research on the relationship between protective factors and resilience may help to provide more effective occupational therapy treatments to the growing number of older adults in the United States who desire to age in their homes.

Statement of Purpose

The purpose of this study was to investigate protective factors that promote resilience in older adults aging in place. The primary research question of this exploratory, cross-sectional quantitative study was as follows: How do three key protective factors predict resilience for older adults living independently in Marin County? The hypothesis of this study was that older adults who reported a higher level of physical health, social support and self-efficacy were likely to report a higher level of resilience compared to those who reported a lower level of the three protective factors.

Theoretical Framework

Resilience theory, which guided this research, emphasizes competence, or positive adaptation, despite exposure to adversity (Yates, Tyrell, & Masten, 2015). The pioneers of resilience theory, Norman Garmezy, Emmy Werner, Anne Masten, and Sir Michael Rutter, addressed why some adolescents evolved into well-adjusted adults despite adversity (Yates et al., 2015). Past resilience research primarily focused on an individual's behavior, however, contemporary resilience models incorporate multiple levels of function, acknowledging the interdependence of interacting systems, such as individuals, families, peer groups, schools, communities, governments, and cultures (Yates et al., 2015). More recently, resilience theory has been applied to older adults facing adversities of aging.

Resilience theory describes resilience as a developmental and dynamic process that originates in childhood and continues until the end of life. A person's ability to protect, adapt, and persevere determines the outcome of whether or not they can overcome adverse threats to function, viability, and development of the human body (Masten, 2014). Threats to health or well-being are adversities which have the potential to disrupt or challenge adaptive functioning and development (Harris, 2008). Adversity can be chronic or acute and affect individuals by blocking, exhausting, or compromising the function of adaptive systems instilled to protect development (Yates et al., 2015). The ability to progress and develop demonstrates positive adaptation and competence to function in daily occupations (Yates et al., 2015). Adapting to a new context represents a capacity for success and meeting novel contextual needs of the occupation or environment (Yates et al., 2015).

Two different perspectives influence a resilient outcome. A trait-oriented perspective defines resilience as an inborn personal trait that helps overcome adversity and achieve

successful reintegration, but places responsibility on the individual if they fail to overcome adversity (Wang, Zhang, & Zimmerman, 2015). However, this perspective does not take into consideration context or environmental influences. A process-oriented perspective defines resilience as the interaction between the individual and the environment when overcoming the negative event, coping successfully, and avoiding negative outcomes. Resilience is not a personal trait that is always present, but rather a blend of the context, population, risk, protective factors, and outcome. Resilience theory guides this study due to its focus on a strengths-based approach utilizing both perspectives, rather than a deficit- and problem-oriented approach (Wang et al., 2015).

Resilience theory provides a conceptual framework for considering a strengths-based approach, focusing on positive attributes that contribute to an outcome (Zimmerman, 2013). The objective of this study was to investigate factors that are hypothesized to help independent, community-based older adults overcome detrimental effects of adversity. The factors found to promote resilience were protective factors, elements of a person that mitigate risk effects. While some protective factors may be instilled by environmental circumstances, such as family, others may be innate (Garmezy, 1991). Whether external or internal, protective factors foster positive outcome after difficulty (Garmezy, 1991). Thus, an individual may be able to overcome an adverse event based on their use of protective factors, such as self-efficacy, social support, or physical health (Resnick, 2014; Netuvelli et al., 2008; Wells, 2010). One or more of these protective factors are likely to succeed when in place prior to and during an adverse event, outlining the framework's emphasis on strengths-based approach.

Harris' (2008) Resilience Framework outlines resilience as an adaptive process with observable patterns when faced with adversity. Key concepts included in this framework are the

adaptive process, competence, adversity, assets and risk, and protective processes and vulnerabilities (Yates & Masten, 2004). This framework presumes two fundamental assumptions: (1) resilience requires a past or present adverse event and (2) the individual has achieved successful reintegration (Harris, 2008; Masten & Coatsworth, 1998). Windle (2012) further described resilience not as a means to thrive, but as a coping mechanism to persevere. Windle's framework (Figure 4) outlines general pathways that promote resilience through reduction of threat or adversity and resources to develop and facilitate a positive outcome (Windle, 2012). Windle used Harris' framework as a foundation to develop a more dynamic process, which uses internal resources, life experience, and environment to facilitate adaptation and recovery after adversity. Adversity and the avoidance of negative outcomes or maintenance of health are key features that are encountered and use resilience (Windle, 2012). The process and reintegration outcomes of an adverse event are further illustrated by Resnick's Resilience Model, mentioned above. Aiming to promote health and well-being, Resnick's Resilience Model emphasizes attainable goals of competence and positive adaptation for development after adversity. When faced with an adverse life event, one must decide how to address the situation, which will then determine the outcome of reintegration. Ideally, true resilience is overcoming an adversity and growing as a result from this experience. In summary, the Resilience Theory, Framework, and Model provide older adults a clear outline of the resilience process, demonstrating that through the use of protective factors, one can avoid or minimize negative effects of adversity (Wang et al., 2015).

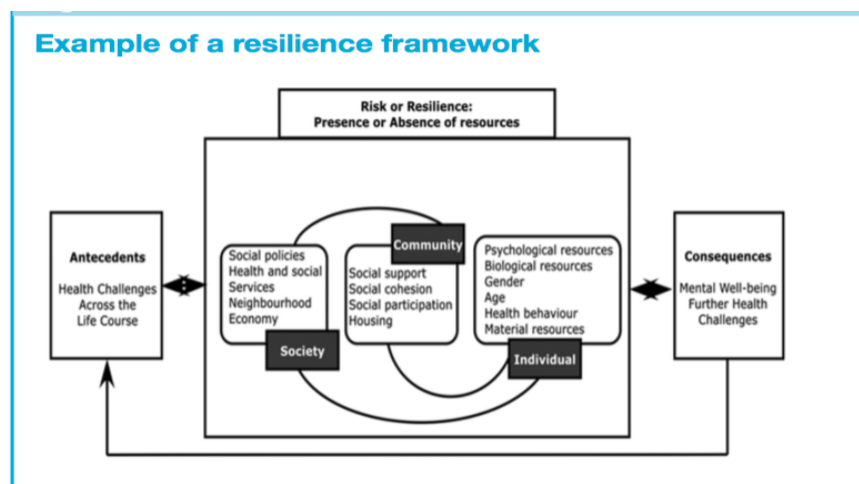


Figure 4. Windle's Resilience Framework. Illuminates the dynamic process of resilience. Faced with adversity, the individual relies on interlocked resources of self, community, and society, but is also affected by antecedents and consequences. The double black arrows indicate that antecedents or consequences may be an effect or a result. Adapted from: Windle, G. (2012). The contribution of resilience to healthy ageing. *Perspectives in Public Health*, 132(4), 159-160.

Methodology

Quantitative Design

This was a descriptive study using quantitative data collection and analysis strategies. An exploratory, cross-sectional design was chosen to gain a deeper understanding of the effect of three protective factors on resilience in older adults. Four widely used measures with established psychometric properties were administered to assess the relationship between resilience and three protective factors. Participants were recruited at community settings, and upon providing consent, were asked to complete the questionnaire battery. Descriptive and multivariate analyses were conducted to investigate the relationship between the key variables.

Participants

The target population for this study was comprised of English-speaking, Marin County residents, ages 62 years and older, who were living independently and able to make legal and medical decisions. Independent living was defined as residing in one's own home or retirement community that did not provide institutional care (Roos & Havens, 1991). Researchers chose 62

years of age, as it is the earliest age that an individual can begin to collect Social Security retirement benefits (Social Security Administration, 2016). Only English-speaking individuals were included, as there were insufficient resources for survey translation into other languages. OAs receiving assistance with activities of daily living (ADL) and instrumental activities of daily living (IADL) from community resources were not excluded from this study. Study participation and ability to provide consent demonstrated sufficient independence and mental capacity for this study. Inclusion criteria did not consist of gender, racial, or ethnic-based restrictions.

Recruitment

Upon approval by the Institutional Review Board (IRB) of Dominican University of California, 58 participants were successfully recruited. Strategies included direct contact with community centers, community flyers, and reaching out to local contacts, all of which created a convenience and snowball sampling. Marin County community senior centers were selected based on older adult membership and participation. An email was sent to a primary contact from selected community organizations using the Letter of Introduction to Agency Directors (Appendix A). Permission was requested to solicit organization members for study participation. A Community Flyer (Appendix B) was posted in various locations within the county, however, researchers did not receive any responses via email or phone call. Researchers also reached out to local contacts through email, phone calls, and in-person conversations to complete the recruitment process.

Measures and Instruments

Demographic information, resilience, and protective factor data were collected through the Questionnaire Packet (Appendix C). Demographic information was collected using a

questionnaire (Appendix C, page 1). Resilience was assessed using the 14-item Resilience Scale (14RS) (Appendix C, page 2). The General Self-Efficacy Scale (GSE) was used to measure self-efficacy (Appendix C, page 3). Social Support was assessed with the Medical Outcomes Study Social Support Survey (MOS) (Appendix C, page 4). Physical health was measured using the 36-Item Short Form Survey (SF-36) (See Page 6 of Appendix C).

Resilience: 14RS. The 14-item Resilience Scale (14RS) was developed to assess general resilience in older adults (Wagnild, & Young, 2009). The scale measures the five characteristics that make up resilience: equanimity, perseverance, self-reliance, meaningfulness, and existential aloneness (Damasio, Borsa, & da Silva, 2011; Resnick, 2014; Wagnild, 2009). Participants responded to Likert scale questions of 1 (disagree) to 7 (agree), with higher responses indicating higher resilience. A summary scale score of individual resilience was obtained by summing the responses to the 14 items. Rights to use the 14RS were obtained through a licensing agreement The Resilience Center™. The 14RS has demonstrated high internal consistency, test-retest reliability, and construct validity based on a significant correlation between resilience and life satisfaction, morale, and depression (Wagnild & Young, 1993). Wagnild's (2009) review of the Resilience Scale found that previous studies done with participants of various ages produced excellent internal consistency (.87 alpha range is .87 to .95; 0.91 for older adults) (Wagnild, 2009). Based on the review of 12 studies, a strong positive correlation was found between the Resilience Scale scores and overall health promoting factors and were inversely related to with life stressors, indicating high construct validity (Wagnild, 2009).

Self-efficacy: GSE. The General Self-Efficacy Scale (GSE) measures self-efficacy perceptions as predictors of coping strategies and adaptations to adverse experiences. A 10-item, unidimensional survey, participants responded to questions on a Likert scale of 1 (not true at all)

to 4 (exactly true). A total score was calculated by adding the sum of all 10 items. Total scores range from 10 to 40, with a higher score indicating higher self-efficacy. Studies using GSE have shown high internal-consistency reliability (Cronbachs alpha from 0.76 to 0.90) (Schwarzer & Jerusalem, 1995). Furthermore, high convergent validity has been documented through positive correlations of the GSE total score with favorable emotions, dispositional optimism, and work satisfaction. The GSE total score has been shown to be negatively correlated with depression, anxiety, stress, burnout, and health complaints, supporting the discriminant validity of the instrument (Schwarzer & Jerusalem, 1995). Utilizing the GSE, previous studies with cardiac patients demonstrated that pre-surgery self-efficacy was a good predictor of recovery over a six-month period (Schwarzer & Jerusalem, 1995). GSE is designed for individuals, ages 12 and up. As it is publicly available online, permission was not required to use GSE.

Social support: MOS Social Support Survey. Originally developed for patients with chronic conditions, the Medical Outcomes Study (MOS) Social Support Survey assesses four dimensions of social support and overall social support (Sherbourne, & Stewart, 1991). The four dimensions are as follows: (1) emotional and informational support, such as empathy or encouragement and guidance or feedback, (2) tangible support, such as resources, (3) affectionate support, such as love, and (4) positive social interaction. Participants responded to Likert scale questions of 1 (none of the time) to 5 (all of the time), with higher scores indicating more social support. Responses were converted into scaled scores by calculating the averages from each dimension. Four subscales were calculated into an overall support index. Internal-consistency reliability for each section is high (Cronbach's alpha 0.91 to 0.97) (Sherbourne & Stewart, 1991). Construct validity is high, indicating strong correlations with loneliness and emotional ties, followed by family and marital functioning and mental health, all concepts

related to social support. Furthermore, convergent and discriminant validity are high, confirming its multidimensional aspect (Sherbourne, & Stewart, 1991). Available online, permission was not required to use MOS Social Support Survey.

Physical health: SF-36. The 36-Item Short Form Survey (SF-36) (Version 1.0) is a 36-item questionnaire about health perceptions (Brazier et al., 1992) and assesses eight sub-domains: physical functioning, bodily pain, role limitations due to physical health problems, general health perceptions, role limitations due to personal or emotional problems, emotional well-being, social functioning, and energy/fatigue (RAND Corporation, 2016). Questions required yes/no and Likert scale responses recoded to a value between 0 and 100, then scores from each dimension were averaged and turned into a scaled score, obtaining eight scores (RAND Corporation, 2016). Internal-consistency reliability for each dimension is high (0.73 to 0.96). Ample evidence was found for SF-36 reliability (Cronbach's $\alpha > 0.85$, reliability coefficient > 0.75 for all dimensions except social functioning) and high construct validity has been observed in various studies with healthy and non-healthy older adults (Brazier, et al., 1992; McHorney, Ware, Rachel Lu, & Sherbourne, 1994; McHorney, Ware, & Raczek, 1993). When conducting a study with community-dwelling older adults, between ages 64 and 104, Walters, Munro, and Brazier (2001) found SF-36 to be a practical and valid instrument. Available online, permission was not required to use SF-36.

The SF-36 measures the quality of life for individuals. As previously mentioned, the SF-36 is comprised of eight subscales, which can then be calculated into two scores, the Physical Component Summary (PCS) and the Mental Component Summary (MCS). The four subscales of the PCS were: 1) general health, 2) pain, 3) physical function, and 4) role of limitations due to physical function. For the purpose of this study, only the PCS was used as the summary score for

physical health, since the study focused on the individual's ability to perform activities without limitations due to physical health.

Procedures & Data Collection

With permission from the facility's primary contact, the study was conducted in community locations and the Dominican University campus. Once all participants arrived at the community site and checked in with the researchers, a brief introduction was provided. Check-in consisted of receiving a Letter of Introduction (Appendix D), Participant's Bill of Rights (Appendix E), and a participant Consent Form (Appendix F). Student researchers reviewed the documents with the participants and addressed questions or concerns. Interested parties signed the consent form, representing full understanding of participant rights and study procedure, then voluntarily took the survey. Uninterested parties declined to provide consent, leaving at their own discretion without repercussion. Researchers ensured that all signatures were received prior to data collection.

Once signed, a student researcher collected the consent form and matched the participant's name on a secure randomized identification number (IN) list. The IN list with participant names remained in the possession of a research student while conducting the study at the community location. Upon completion of consent forms, participants received a questionnaire packet with their personalized IN written on it, the IN list and consent forms were placed in a secure file. Participants completed the survey at their own pace while student researchers remained present to answer questions or address concerns throughout the administration period.

After each participant completed their questionnaire packet, a student researcher collected the data and placed it into the secure file, along with the consent forms and IN list. At

the same time, participants were offered the opportunity to enter a raffle as compensation for their participation. Interested participants wrote only their name and phone number on a Raffle Ticket (Appendix G), which was placed into a secure box that remained under the supervision of a research student.

Participants received a presentation upon completion of the questionnaire battery. A copy of the Research Study PowerPoint Presentation (Appendix H) and a Resilience Pamphlet (Appendix I) were distributed to participants as they waited for others to finish. Once all questionnaire packets were collected, the participant group was debriefed and educated on resilience and successful aging through a formal PowerPoint presentation. Student researchers concluded the presentation by answering questions, which typically resulted in an open discussion regarding successful aging. Directly following each presentation, the secure file containing the IN list, consent forms, and all questionnaire packets, as well as the secure box were placed in the faculty advisor's locked filing cabinet. Upon completion of the study in May 2017, one raffle ticket was selected and the winning participant was notified. All other raffle tickets were shredded and disposed to ensure patient confidentiality.

Data Management and Analysis

Data collected from questionnaires were entered into an Excel spreadsheet by primary researchers and two research assistants and kept on confidential flash drives. Statistical Package for the Social Science (SPSS) was used for data analysis due to its capability of handling large amounts of data and performing a myriad of analyses required for this study. SPSS is one of the most widely used statistical packages due to its simplicity of use and efficiency in analyzing data for evidence-based practice (Hodgin, Chandra, & Weaver, 2010). This program was selected specifically for its capability to conduct correlations and regression and factor analyses. A

general resilience score and protective factor scores were calculated according to relevant scoring guides. Once scores were obtained, Pearson's correlations were calculated. Initial analyses focused on finding correlations between resilience and the three PFs. To explore possible predictive relationships of the three PF scores with resilience, multiple linear regression analyses were completed with resilience as the dependent variable and the PF scores as independent variables. An independent variable was only included in the regression analysis if it was significantly correlated with the dependent variable. All three independent variables were entered into the regression equation simultaneously. Preliminary analyses were completed to ensure that there were no violations of the assumptions of normality, linearity, multicollinearity and homoscedasticity. Results were considered statistically significant at the 0.05 alpha level.

Ethical and Legal Considerations

Ethical and legal considerations were addressed to ensure informed consent and participant safety. The research proposal was approved by the Dominican University of California Institute Review Board for the Protection of Human Subjects (IRBPHS), and assigned number #10564. Throughout this study, care was taken to ensure the American Occupational Therapy Association (AOTA) Code of Ethics were upheld (American Occupational Therapy Association, 2010). The set of principles that specify significant standards appropriate to this study included beneficence, nonmaleficence, veracity, and autonomy. Beneficence is the consideration of all participants welfare. Therefore, a presentation was provided at the end of the study to ensure that all participants were educated on the importance of resilience. Nonmaleficence, or avoiding harm or injury to recipients, was demonstrated by efforts taken to ensure confidentiality and addressing concerns or emotional discomfort immediately. Veracity,

the principle of providing accurate and objective information, was ensured by researchers properly crediting and citing sources and materials used. To ensure fidelity, the principle of respect and integrity, researchers introduced themselves as occupational therapy students, and were clear about the risks and benefits of participating in the study. Autonomy was ensured by providing consent forms prior to participation, and informing participants they had the right to refuse involvement and drop out at any time during the study. The research team also ensured that all participant information (verbal, non-verbal, written, or electronic information) obtained during the study remained confidential and safely secured in the academic advisor's office on the Dominican University campus. All original written data were stored in a locked cabinet, and all electronic data were stored on a flash drive, which were both kept in the advisor's locked office. Only researchers had access to data that were attainable through password-protected personal computers. To further ensure confidentiality, randomly assigned identification numbers were used as the only identifying information on the questionnaires. Questionnaire packets, consent forms, the identification number list, and flash drives were stored in a secured cabinet in the faculty advisor's locked office.

There were no direct benefits or risks to the participants in this study. Subjects may have developed increased insight of overcoming past adversities through the use of resilience. Satisfaction may have been found from contributing to research on aging and its effect on future occupational therapy interventions. All participants were offered entry into a raffle for a \$25 gift basket as compensation for their time. No physical risks were reported. However, some participants expressed concerns or uncertainty regarding the subject matter. Researchers were present to answer questions and allay concerns when a participant became anxious,

psychologically distressed, or otherwise emotionally uncomfortable. Participants were also reminded that they could withdraw from the study at any time without penalty.

Results

Fifty-eight older adults from Marin County participated in the study. *Table 1* presents the demographic characteristics. The percentages of men and women were 25.9% and 74.1%, respectively. Ages ranged from 62 to 90 years, with the mean age of 74.48, $SD \pm 7.42$ years. Single OAs totaled 15.5% of all the participants with 34.5% married or widowed, 13.8% divorced/separated, and 3.4% who had a life partner. The majority of OAs lived alone (53.4%) or with a significant other (31.0%), while only 10.3% lived with family and 5.2% whom specified other. A majority, 63.8%, lived in a house, 13.8% lived in an apartment, 6.9% resided in a condominium/townhouse, and 12.1% lived in a retirement community. Only 1.7% of the participants lived at a family member's home or other. Less than half of older adults self-reported a chronic illness diagnosis (43.1%), and only 1.7% self-reported having a diagnosis of mental illness.

Table 1

Demographic Characteristics of Population (N=58)

Property	n	%
Gender		
Male	15	25.9
Female	43	74.1
Age (Mean \pm SD)	74.48 \pm 7.42	Min 62, Max 90
Marital status		
Single	9	15.5
Married	20	34.5

Widowed	20	34.5
Divorced/separated	8	13.8
Lifetime partner	2	3.4
Other	0	0.0
Live with		
Alone	31	53.4
Signiant other	18	31.0
Family	6	10.3
Roommates	0	0.0
Other	3	5.2
Where live		
Home	37	63.8
Apartment	8	13.8
Condo/townhouse	4	6.9
Retirement community	7	12.1
Assisted living community	0	0.0
Family members	1	1.7
Other	1	1.7
Chronic illness diagnosis		
Yes	25	43.1
No	32	55.2
Mental illness diagnosis		
Yes	1	1.7
No	55	94.8

Table 2 details the descriptive statistics used to provide an overview of the scores obtained. This study found that Marin County older adults aging in place scored a mean of 84.55

out of 100 on the 14-RS, indicating high resilience. The sample scored a mean of 34.05 out of 40 on GSE, demonstrating high self-efficacy. The participant group's mean score of 7.95 out of 10 on the MOS Social Support Survey indicated moderately high social support. A mean physical health score of 68.1 out of 100 on the PCS indicated only moderately healthy older adults. Overall, the participant group has high resilience, self-efficacy, and social support levels, but only moderate physical health levels.

Table 2.

Descriptive Statistics.

Variables	Mean	SD	Range
Resilience (N=55)	84.55	15.33	84.0
Self-Efficacy (N=56)	34.05	4.62	18.0
Social Support (N=58)	7.95	1.93	7.17
Physical Health (N=55)	68.1	22.52	79.05

Note: Total of 58 participants completed the study, but the N values vary from 54-56 due to omitted or ambiguous data.

Pearson's correlation coefficients were used to examine associations between resilience, self-efficacy, social support, and physical health (*Table 3*). Resilience had the strongest correlation to self-efficacy $r(54) = .563$, $p < .001$, followed by social support $r(55) = .386$, $p < .01$. However, there was no significant relationship between physical health and resilience. Self-efficacy was strongly correlated with social support $r(56) = .500$, $p < .001$ and physical health

$r(54) = .475, p < .001$. Social support was found to be correlated to physical as well $r(55) = .372, p < .01$. Self-efficacy showed to be the strongest correlated protective factor to resilience than the other two studied.

Table 3.

Pearson's Correlation (r)

Variable	Self-Efficacy	Social Support	Physical Health
Resilience	.563**	.386*	.211
Self-Efficacy		.500**	.475**
Social Support			.372*

*Correlation is significant at the $p < 0.01$ level (2-tailed).

**Correlation is significant at the $p < 0.001$ level (2-tailed).

To explore possible predictive relationships within the three PF scores and resilience, multiple linear regression analyses were completed. When all three protective factors were entered into the model together, the results were significant $F(3,48) = 6.207, p < .01$. However, self-efficacy was the only significant predictor of resilience among the three protective factors ($\beta = .495, p < .01$; Table 4). Given the strong correlation between self-efficacy, physical health, and social support, a *post hoc* regression analysis was conducted with self-efficacy as the dependent variable, and social support and physical health as dependent variables. Results indicated that the model was significant $F(2,51) = 11.55, p < .001$, with an R^2 of .312. Moreover, physical health and social support both were predictors of self-efficacy; physical health had a stronger and more significant relationship to self-efficacy ($\beta = .356, p < .01$) than social support ($\beta = .317, p < .02$). Figure 5 presents the model of these 3 protective factors, and resilience.

*Table 4.**Summary of Multiple Regression Analysis for Protective Factors Predicting Resilience (N=58)*

Variable	B	β	p
Self-Efficacy	1.735	.495	.002*
Social Support	.786	.102	.479
Physical Health	-.267	-.049	.730

Note: Dependent variable is resilience.

*Predictor is significant at the 0.005 level.

This study found that Marin County older adults aging in place have overall high resilience, social support, and self-efficacy and moderately high physical health. The three protective factors collectively were found to correlate with each other. Only self-efficacy directly predicted resilience, however, social support and physical health predicted self-efficacy.

Discussion, Summary, and Recommendations

Gerontology literature has previously outlined the role of resilience for overcoming adversity (Resnick, 2014; Wild et al., 2013; Rowe & Kahn, 1997), however, there is a growing need for more research on older adult resilience. Results from this exploratory, cross-sectional, quantitative study support findings from previous research that affirms the presence of a relationship between resilience and protective factors (Hildon et al., 2010; Resnick, 2014; Netuveli et al., 2008; Yates et al., 2015). Furthermore, this study provided new insight on resilience for the older adult population and created a new resilience model (Figure 5). Findings demonstrated that self-efficacy, social support, and physical health, were correlated with resilience for Marin County older adults who are choosing to age in place.

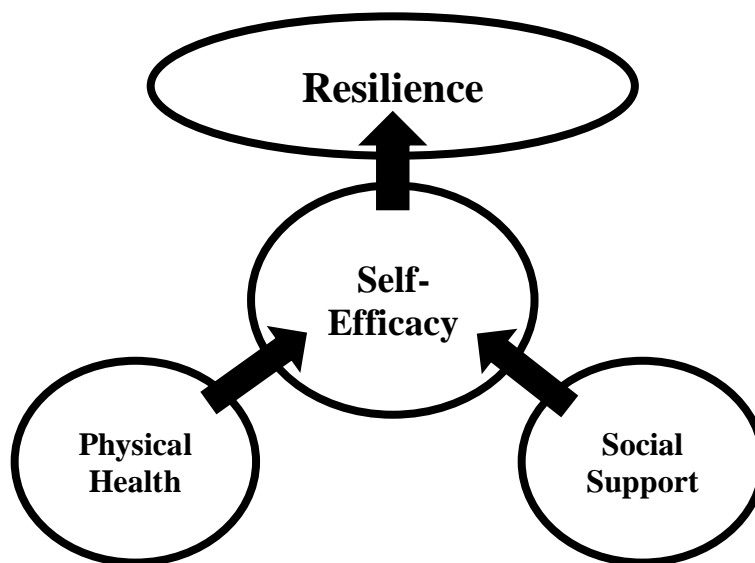


Figure 5. New proposed resilience model.

Self-efficacy was predictive of resilience. Moreover, social support and physical health predicted self-efficacy. This finding is supported by previous studies (Caltabiano & Caltabiano, 2006; Stadtlander et al., 2015) that also found an important relationship between self-efficacy and resilience in independent living older adults. Social support was significantly correlated with resilience and confirmed to be a predictor of self-efficacy. Caltabiano & Caltabiano (2006) and Netuveli and Blane (2008) also found that social support promoted resilience. While this study did not find a correlation between physical health and resilience, Gooding, Hurst, Johnson, and Tarrier (2012) and Caltabiano and Caltabiano (2006) found that poor health perceptions and decreased energy levels were associated with lower resilience scores. The present study only included the PCS summary score of the SF-36, and therefore, may not have assessed physical health in the same way as previous studies. On the contrary, physical health was found to be a predictor of self-efficacy. The relationship between self-efficacy and physical health supports previous findings. Resnick, Galik, Dorsey, Scheve, and Gutkin (2011) found self-efficacy to be positively influenced by physical health. Furthermore, Beverly and Wray (2010) found that increased social support correlated with higher levels of physical activity, which ultimately

influenced self-efficacy. Overall, self-efficacy was a significant variable having a direct effect on resilience and was positively supported by social support and physical health (Perkins, Multhaup, Perkins, & Barton, 2008). While social support and physical health individually had a weaker relationship to resilience, this study found both to be predictors of self-efficacy. Therefore, resilience can be promoted not only through self-efficacy, but also with social support and physical health through self-efficacy.

Implications

Utilizing the proposed resilience model and incorporating protective factors into interventions, occupational therapists can foster resilience in older adults. While the concept of resilience cannot be taught to individuals, findings from this study outline a plausible pathway to resilience. Perkins et al. (2008) suggested that health care providers develop self-efficacy-based interventions for physical and social activity. Self-efficacy can be addressed with gradation of tasks and utilization of the “just right” challenge to achieve mastery for tasks perceived to be unattainable (Andonian & MacRae, 2011). Furthermore, involving older adults in the goal-making process and peer modeling will increase motivation for mastery and ultimately, empower clients to perform activities independently.

This new model illustrates that physical health and social support promote self-efficacy. Thus, apart from targeting self-efficacy, occupational therapists can utilize physical health and social support to build self-efficacy and ultimately, resilience in older adults. Gallagher, Clarke, and Carr (2016) demonstrated that therapeutic exercises, such as aerobics, strengthening, stretching, and balance exercises, build activity tolerance and maintain physical abilities to perform basic and instrumental activities of daily living. Wells’ (2010) demonstrated that while resilience and physical health were weakly correlated, better perceived physical health was

affiliated with resilience. Therefore, building activity tolerance to maintain participation in meaningful occupations may not only establish self-efficacy in older adults, but also, improve positive health perceptions, enabling them to maintain residence in their homes. Furthermore, social support interventions, such as peer modeling and resources to maintain quality relationships and community involvement, encourage participation in activities that individuals may be less likely to participate in without peers (Andonian & MacRae, 2011). Not only is there a comfort to engaging in activities with peers, but also, these peer relationships may serve as a motivating factor. Targeting significant protective factors, this study narrows the gap in gerontology literature and provides a guideline for occupational therapists to support older adults who desire to age in place.

While this study produced statistically significant results, some limitations may have impacted results. One limitation was a lack of diversity among the participant group. Most participants were female, Caucasian, and recruited primarily from two out of 15 cities within the county. However, it is noteworthy that the sample was demographically representative of Marin County. While researchers attempted to remain consistent during the data collection procedure, various testing environments used throughout the study may have impacted results. Furthermore, in two locations, despite researchers' instructions, a few participants discussed and assisted each other through the survey. Participants were promptly reminded to complete questionnaires individually. Finally, this study only examined three protective factors, excluding others, such as optimism and emotional regulation (Martin et. al., 2015).

Conducting additional approaches to assess resilience in older adults may increase understanding of the findings. Implementing a mixed-methods design with qualitative interviews would expand understanding of the psychosocial and physical components of resilience.

Recruiting participants from a larger geographic region with an equal representation of males to females, would improve the ability to generalize results to the older adult population as a whole. Furthermore, conducting the study in a controlled environment and utilizing scripted introductions and responses to participant questions are recommended for future studies to ensure consistency in administration. Recommended next steps include a prospective study in which protective factors are examined over a period of time, or following adverse events in OAs. Also, developing a self-efficacy intervention using a pre- and post-test design to further examine its influence on resilience in older adults may provide occupational therapists additional evidence-based treatment options to support this growing population.

Conclusion

Despite encountering adversities that typically accompany aging, 87% of the older population desire to age in place, or at home, demonstrating a greater opportunity for occupational therapy home health care (AARP, 2014; Clark et al., 1997). The aging population growth has created a demand for more research on resilience and successful aging in place. The purpose of this study was to narrow the gap in gerontology research aimed to understand factors that promote resilience in older adults. The results of this study show that resilience is promoted by protective factors and directly influenced by self-efficacy, which in itself is influenced by physical health and social support, creating a new proposed resilience model. Not only does this study confirm previous resilience research and support the dynamic process outlined in the resilience theoretical framework, it adds to our understanding of the relationship between the three protective factors and their impact on resilience in independent living older adults.

Occupational therapists can play a vital role in promoting resilience and successful aging in place. Whether resilience is innate or learned throughout life, resilience can be improved upon through self-efficacy. Occupational therapists can incorporate self-efficacy into interventions by grading tasks to achieve mastery, and promoting successful aging in place with older adults. Self-efficacy is an important therapeutic consideration when working with older adults who have new challenges, such as a newly diagnosed condition, or decreased functional abilities. Among factors to tune into when working to develop self-efficacy in clients are physical health and social support. Physical health interventions can involve activity tolerance, therapeutic exercises, and routine. Social support interventions can include maintaining valued relationships, accessing community resources, and participating in health and action groups. It is the researchers' hope that findings from this quantitative study are used by occupational therapists to better serve older adult clients and promote resilience utilizing the three protective factors.

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Appendix A

Letter of Introduction to Agency Directors

Dear Mr/Mrs. _____:

This letter confirms that you have been provided with a brief description of our senior thesis research project, which concerns resilience factors related to successful aging in place, and that you give your consent for us to visit your facility to administer a survey to a random sample of your clients. This project is an important part of our undergraduate requirements as an Occupational Therapy masters, and is being supervised by Dr. Susan Morris, Professor of Occupational Therapy at Dominican University of California.

As we discussed in our phone conversation, we will make every effort to ensure that our data collection does not interfere with your regularly scheduled classes and workshops, and that your clients are treated with the utmost discretion and sensitivity. If you have questions about the research you may contact us at phone number or email address below. If you have further concerns you may contact my research supervisor, Dr. Susan Morris, at (415) 482-2486 or the Institutional Review Board for the Protection of Human Participants at Dominican University of California by calling (415) 482-3547.

After my research project has been completed in November 2018, I will be glad to send you a summary of our research results.

If our request to visit your establishment and to interview your clients meets with your approval, please sign and date this letter below and return it to me in the enclosed self-addressed, stamped envelope as soon as possible. Please feel free to contact me if you have any questions about this project.

Thank you very much for your time and cooperation.

Sincerely,

Katelyn Gullatt

Email address: katelyn.gullatt@students.dominican.edu

(415) 482-2486

I agree to the above request. _____

(Addressee's name)

Date

Appendix B
Community Flyer

YOUR EXPERIENCE MATTERS



Graduate student research study

- **62+** years old and living in **Marin County**
- Participate in a survey regarding your life experiences.
- Information gathered will benefit older adults.
- ***Refreshments offered and raffle will take place.***

Friday, March 17, 2017
10:00am-11:00am Meadowlands Building
50 Acacia Avenue, San Rafael 94901

If interested please contact:
Phone: (415) 482-2486
Email: resilientaging@gmail.com

Appendix C

Questionnaire Packet

ID # _____

Dominican University of California Department of Occupational Therapy Survey

Demographics

Gender: M F Other

Birthday: _____

County of Residence: _____

<i>Please check one.</i>

Marital Status: <input type="checkbox"/> single <input type="checkbox"/> married <input type="checkbox"/> widowed <input type="checkbox"/> divorced/separated <input type="checkbox"/> lifetime partner <input type="checkbox"/> other: _____	Who do you live with? <input type="checkbox"/> live alone <input type="checkbox"/> significant other <input type="checkbox"/> family <input type="checkbox"/> roommates <input type="checkbox"/> other: _____	Where do you live?: <input type="checkbox"/> home <input type="checkbox"/> apartment <input type="checkbox"/> condominium / townhouse <input type="checkbox"/> retirement community <input type="checkbox"/> assisted living community <input type="checkbox"/> family member <input type="checkbox"/> Other: _____
--	---	---

<u>OPTIONAL:</u> Please circle one.
--

Have you been diagnosed with a chronic illness? Yes No I'd rather not say

Comments: _____

Have you been diagnosed with a mental illness? Yes No I'd rather not say

Comments: _____

General Resilience Scale

Please read each statement and circle the number to the right of each statement that best indicates your feelings about the statement. Respond to all statements.

Circle the number in the appropriate column	Strongly Disagree				Strongly Agree		
1. I usually manage one way or another.	1	2	3	4	5	6	7
2. I feel proud that I have accomplished things in my life.	1	2	3	4	5	6	7
3. I usually take things in stride.	1	2	3	4	5	6	7
4. I am friends with myself.	1	2	3	4	5	6	7
5. I feel that I can handle many things at a time.	1	2	3	4	5	6	7
6. I am determined.	1	2	3	4	5	6	7
7. I can get through difficult times because I've experienced difficulty before.	1	2	3	4	5	6	7
8. I have self-discipline.	1	2	3	4	5	6	7
9. I keep interested in things.	1	2	3	4	5	6	7
10. I can usually find something to laugh about.	1	2	3	4	5	6	7
11. My belief in myself gets me through hard times.	1	2	3	4	5	6	7
12. In an emergency, I'm someone people can generally rely on.	1	2	3	4	5	6	7
13. My life has meaning.	1	2	3	4	5	6	7
14. When I'm in a difficult situation, I can usually find my way out of it.	1	2	3	4	5	6	7

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Self-Efficacy

Please read each statement and check the body that best indicates your feelings about the statement.

General Self-Efficacy Scale (GSE)

	Not at all true	Hardly true	Moderately true	Exactly true
1. I can always manage to solve difficult problems if I try hard enough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. If someone opposes me, I can find the means and ways to get what I want.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. It is easy for me to stick to my aims and accomplish my goals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I am confident that I could deal efficiently with unexpected events.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I can solve most problems if I invest the necessary effort.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I can remain calm when facing difficulties because I can rely on my coping abilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. When I am confronted with a problem, I can usually find several solutions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. If I am in trouble, I can usually think of a solution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I can usually handle whatever comes my way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, Measures in health psychology: A user's portfolio. Causal and control beliefs (pp. 35- 37). Windsor, England: NFER-NELSON.

Social Support

People sometimes look to others for companionship, assistance, or other types of support. How often is each of the following kinds of support available to you if you need it? Choose one number from each line.

Emotional/informational support	None of the time	A little of the time	Some of the time	Most of the time	All of the time
Someone you can count on to listen to you when you need to talk	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Someone to give you information to help you understand a situation	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Someone to give you good advice about a crisis	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Someone to confide in or talk to about yourself or your problems	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Someone whose advice you really want	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Someone to share your most private worries and fears with	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Someone to turn to for suggestions about how to deal with a personal problem	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Someone who understands your problems	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

Tangible support	None of the time	A little of the time	Some of the time	Most of the time	All of the time
Someone to help you if you were confined to bed	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Someone to take you to the doctor if you needed it	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Someone to prepare your meals if you were unable to do it yourself	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Someone to help with daily chores if you were sick	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Affectionate support	None of the time	A little of the time	Some of the time	Most of the time	All of the time
Someone who shows you love and affection	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Someone to love and make you feel wanted	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Someone who hugs you	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Positive social interaction	None of the time	A little of the time	Some of the time	Most of the time	All of the time
Someone to have a good time with	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Someone to get together with for relaxation	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Someone to do something enjoyable with	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Additional item	None of the time	A little of the time	Some of the time	Most of the time	All of the time
Someone to do things with to help you get your mind off things	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

Physical Health

Choose one option for each questionnaire item.

1. In general, would you say your health is:

- ☐ 1 - Excellent
 - ☐ 2 - Very good
 - ☐ 3 - Good
 - ☐ 4 - Fair
 - ☐ 5 - Poor
-

2. **Compared to one year ago**, how would you rate your health in general **now**?

- ☐ 1 - Much better now than one year ago
- ☐ 2 - Somewhat better now than one year ago
- ☐ 3 - About the same
- ☐ 4 - Somewhat worse now than one year ago
- ☐ 5 - Much worse now than one year ago

The following items are about activities you might do during a typical day. Does **your health now limit you** in these activities? If so, how much?

	Yes, limited a lot	Yes, limited a little	No, not limited at all
3. Vigorous activities , such as running, lifting heavy objects, participating in strenuous sports	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
4. Moderate activities , such as moving a table, pushing a vacuum cleaner, bowling, or playing golf	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
5. Lifting or carrying groceries	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
6. Climbing several flights of stairs	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
7. Climbing one flight of stairs	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
8. Bending, kneeling, or stooping	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
9. Walking more than a mile	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
10. Walking several blocks	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
11. Walking one block	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
12. Bathing or dressing yourself	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3

During the **past 4 weeks**, have you had any of the following problems with your work or other regular daily activities **as a result of your physical health**?

- | | Yes | No |
|---|-----------------------|-----------------------|
| 13. Cut down the amount of time you spent on work or other activities | <input type="radio"/> | <input type="radio"/> |
| | 1 | 2 |
| 14. Accomplished less than you would like | <input type="radio"/> | <input type="radio"/> |
| | 1 | 2 |
| 15. Were limited in the kind of work or other activities | <input type="radio"/> | <input type="radio"/> |
| | 1 | 2 |
| 16. Had difficulty performing the work or other activities (for example, it took extra effort) | <input type="radio"/> | <input type="radio"/> |
| | 1 | 2 |
-

During the **past 4 weeks**, have you had any of the following problems with your work or other regular daily activities **as a result of any emotional problems** (such as feeling depressed or anxious)?

- | | Yes | No |
|--|-------------------------|-------------------------|
| 17. Cut down the amount of time you spent on work or other activities | <input type="radio"/> 1 | <input type="radio"/> 2 |
| 18. Accomplished less than you would like | <input type="radio"/> 1 | <input type="radio"/> 2 |
| 19. Didn't do work or other activities as carefully as usual | <input type="radio"/> 1 | <input type="radio"/> 2 |
-

20. During the **past 4 weeks**, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?

- ☐ 1 - Not at all
- ☐ 2 - Slightly
- ☐ 3 - Moderately
- ☐ 4 - Quite a bit
- ☐ 5 - Extremely

21. How much **bodily** pain have you had during the **past 4 weeks**?

- ☐ 1 - None
 - ☐ 2 - Very mild
 - ☐ 3 - Mild
 - ☐ 4 - Moderate
 - ☐ 5 - Severe
 - ☐ 6 - Very severe
-

22. During the **past 4 weeks**, how much did **pain** interfere with your normal work (including both work outside the home and housework)?

- ☐ 1 - Not at all
- ☐ 2 - A little bit
- ☐ 3 - Moderately
- ☐ 4 - Quite a bit
- ☐ 5 - Extremely

These questions are about how you feel and how things have been with you **during the past 4 weeks**. For each question, please give the one answer that comes closest to the way you have been feeling.

How much of the time during the **past 4 weeks**...

	All of the time	Most of the time	A good bit of the time	Some of the time	A little of the time	None of the time
23. Did you feel full of pep?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
24. Have you been a very nervous person?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
25. Have you felt so down in the dumps that nothing could cheer you up?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
26. Have you felt calm and peaceful?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
27. Did you have a lot of energy?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
28. Have you felt downhearted and blue?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
29. Did you feel worn out?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
30. Have you been a happy person?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6
31. Did you feel tired?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> 6

32. During the **past 4 weeks**, how much of the time has **your physical health or emotional problems** interfered with your social activities (like visiting with friends, relatives, etc.)?

- ☐ 1 - All of the time
- ☐ 2 - Most of the time
- ☐ 3 - Some of the time
- ☐ 4 - A little of the time
- ☐ 5 - None of the time

How TRUE or FALSE is **each** of the following statements for you.

	Definitely true	Mostly true	Don't know	Mostly false	Definitely false
33. I seem to get sick a little easier than other people	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
34. I am as healthy as anybody I know	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
35. I expect my health to get worse	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
36. My health is excellent	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5

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Appendix D

Letter of Introduction

Dear Study Participant,

Our names are Katelyn Gullatt, Caroline Lee, and Jessica McClain and we are graduate occupational therapy major students at Dominican University of California. We are conducting a research project as part of our Masters thesis requirements, and this work is being supervised by Dr. Susan Morris, Professor at Dominican University of California. We are requesting your voluntary participation in our study, which concerns experiences of older adults regarding their approach to life decisions.

Participation in this study involves filling out a questionnaire answering questions pertaining to your life experiences. Please note that your participation is **completely voluntary** and you are **free to withdraw your participation at any time**. Likewise, your participation or nonparticipation **will not affect your results**. In addition, your survey responses are designed to be **completed anonymously**. Anonymity can be guaranteed, however, in the unlikely event an identity becomes known, all information will be held as completely confidential as possible. Filling out the survey is likely to take approximately 20-30 minutes of your time.

If you choose to participate in this study, please fill out the attached materials as honestly and completely as possible. You may then return them to us which will then be placed in an envelope. Remember, this survey is completely anonymous; do not put your name or any other identifying information on your survey form. If you choose not to participate, please return your unused survey materials to one of us and we'll place it in a separate envelope.

If you have questions about the research you may contact us at the email address below. If you have further questions you may contact our research supervisor, (Dr. Susan Morris, 415-482-2486) or the Dominican University of California Institutional Review Board for the Protection of Human Participants (IRBPHP), which is concerned with protection of volunteers in research projects. You may reach the IRBPHP Office by calling (415) 482-3547 and leaving a voicemail message, or FAX at (415) 257-0165, or by writing to IRBPHP, Office of Associate Vice President for Academic Affairs, Dominican University of California, 50 Acacia Avenue, San Rafael, CA 95901.

If you would like to know the results of this study once it has been completed, a summary of the results will be presented at Dominican University of California's Academic Showcase in November, 2018. Contact us at the email address below for further information.

Thank you in advance for your participation. Sincerely,

Katelyn Gullatt, Caroline Lee, Jessica McClain
Occupational Therapy Masters Students
Dominican University of California
50 Acacia Avenue
San Rafael, CA 94901
Email address: resilientaging@gmail.com

Appendix E

Participant's Bill of Rights

DOMINICAN UNIVERSITY OF CALIFORNIA

Every person who is asked to be in a research study has the following rights:

1. To be told what the study is trying to find out;
2. To be told what will happen in the study and whether any of the procedures, drugs or devices are different from what would be used in standard practice;
3. To be told about important risks, side effects or discomforts of the things that will happen to her/him;
4. To be told if s/he can expect any benefit from participating and, if so, what the benefits might be;
5. To be told what other choices s/he has and how they may be better or worse than being in the study;
6. To be allowed to ask any questions concerning the study both before agreeing to be involved and during the course of the study;
7. To be told what sort of medical treatment is available if any complications arise;
8. To refuse to participate at all before or after the study is stated without any adverse effects. If such a decision is made, it will not affect his/her rights to receive the care or privileges expected if s/he were not in the study.
9. To receive a copy of the signed and dated consent form;
10. To be free of pressure when considering whether s/he wishes to be in the study.

If you have questions about the research you may contact us at resilientaging@gmail.com. If you have further questions you may contact our research supervisor, (Dr. Susan Morris, (415)482-2486) or the Dominican University of California Institutional Review Board for the Protection of Human Participants (IRBPHP), which is concerned with protection of volunteers in research projects. You may reach the IRBPHP Office by calling (415) 482-3547 and leaving a voicemail message, or FAX at (415) 257-0165, or by writing to IRBPHP, Office of Associate Vice President for Academic Affairs, Dominican University of California, 50 Acacia Avenue, San Rafael, CA 94901

Appendix F

Consent Form

DOMINICAN UNIVERSITY OF CALIFORNIA

1. I understand that I am being asked to participate as a Participant in a research study designed to assess supports used to overcome adversities. This research is part of Katelyn Gullatt, Caroline Lee, and Jessica McClain's Masters Thesis at Dominican University of California. This research study is being supervised by Susan Morris, PhD, OTR/L, Occupational Therapy Department, Dominican University of California.
2. I understand that participation in this research will require completion of questionnaires. The process should take approximately 20-30 minutes, questions will be about supports used to overcome past adversities, and possibly a follow-up interview via phone or in person.
3. I understand that my participation in this study is completely voluntary and I am free to withdraw my participation at any time.
4. I have been made aware that the questionnaires will be collected and stored in a confidential file. All participants will be identified by numerical code only; the master list for these codes will be kept by Dr. Susan Morris in a locked file, and in a locked computer. Questionnaires will be seen only by the researchers and their faculty advisor. One year after the completion of the research, all written and electronic materials will be destroyed. If I participate in a follow-up interview, the audiotape will be destroyed upon completion of transcription.
5. I am aware that all study participants will be furnished with a written summary of the relevant findings and conclusions of this study. Such results will not be available until January 2018.
6. I understand that I will be discussing topics of a personal nature and that I may refuse to answer any question that causes me distress or seems an invasion of my privacy. I may elect to stop the questionnaire at any time.
7. I understand that my participation involves no physical risk, but may involve some psychological discomfort, given the nature of the topic being addressed in the questionnaire. If I experience any problems or serious distress due to my participation, I am fully aware that I can withdraw from the study.
8. I understand that if I have any further questions about the study, I may contact Katelyn Gullatt, Caroline Lee, or Jessica McClain at resilientaging@gmail.com or their research supervisor, Dr. Susan Morris at susan.morris@dominican.edu. If I have further questions or comments about

participation in this study, I may contact the Dominican University of California Institutional Review Board for the Protection of Human Participants (IRBPHP), which is concerned with the protection of volunteers in research projects. I may reach the IRBPHP Office by calling (415) 482-3547 and leaving a voicemail message, by FAX at (415) 257-0165 or by writing to the IRBPHP, Office of the Associate Vice President for Academic Affairs, Dominican University of California, 50 Acacia Avenue, San Rafael, CA 94901.

9. All procedures related to this research study have been satisfactorily explained to me prior to my voluntary election to participate.

I HAVE READ AND UNDERSTAND ALL OF THE ABOVE EXPLANATION REGARDING THIS STUDY. I VOLUNTARILY GIVE MY CONSENT TO PARTICIPATE. A COPY OF THIS FORM HAS BEEN GIVEN TO ME FOR MY FUTURE REFERENCE.

Signature

Institutional Review Board for Protection of Human Participants
7/15/2006 (Revised 6/25/2014)

Date

Appendix G
Raffle Ticket

NAME:

CONTACT NUMBER:

Thank you!


Appendix H

Research Study PowerPoint Presentation

Resilience and Successful Aging For Older Adults

Katelyn Gullatt OTS, Caroline Lee OTS, & Jessica McClain OTS
Susan Morris PhD, OTR/L
Dominican University of California


Older Adult Population



- By 2030, 20% of the total population will be comprised of older adults aged 65+ making this demographic the fastest growing population. (MacLennan, et al., 2016; Orman, Velkoff, & Hogan, 2014)
- 87% desire to age in place, or at home. (AARP, 2014)
- Occupational therapists specializing in home health want to know how to better assist clients who desire to age in place.


https://www.pexels.com/photo/older-adults-walking-2040720/

Our Study




- Determine correlation between three common protective factors and resilience.
- Resilience is important for older adult independence.
- Ultimate goal:** Promote resilience in older adult clients to increase independence and successful aging in place.

https://www.pexels.com/photo/red-arrow-pointing-up-right-2040720/



Research Question



How do three key protective factors correlate with resilience, and therefore successful aging in place, for older adults living independently in Marin County?

http://www.dominican.edu/question-mark-5-1914


What is resilience?

- The ability to “bounce back” after a time of adversity. (Resnick, 2014)
- Dynamic process that can be genetic or learned. (Lamb, Brady, & Lohman, 2009; Resnick, 2014)
- Uses internal and/or external protective factors to build resilience (Resnick, 2014)



https://www.pexels.com/photo/baby-in-harness-2040720/

Protective Factors Effect on Resilience



Physical Health
Increasing physical mobility, affects self-efficacy and optimism, and personal motivation. Helps build social support all improving resilience. (Resnick, Galik, Dorsey, Schever, & Gustin, 2011)

Social Support
An external protective factor which acts as a buffer to adversity. Helps with successful coping, and provides motivation to reintegrate back into life. Having quality relationships before and during adversity increases resilience. (Fuller-Iglesias, Sellers, & Antonucci, 2008)

Self-Efficacy
The motivation and belief of achieving a goal. An internal protective factor which is the most important personality characteristic associated in the development of resilience. (Beverly & Wray, 2010)

https://www.pexels.com/photo/bar-chart-2040720/

What does resilience look like?



Additional Resources



Socially Connected

Bridge
@ YMCA
Wednesdays, 9:00am-12:00pm
415-492-9622
Multicultural Senior Program
@ Albert J. Boro Community Ctr.
Wednesdays, 11:00am-12:00pm
415-485-3077
iPhone/iPad Classes
@ Whistletop
March 7th & 14th, 10:00am-12:00
415-456-9062

Physically Active

Tai Chi Intro
@ YMCA
March 1st, 3:00pm-4:00pm
415-492-9622
Line Dancing
@ Margaret Todd Senior Center
Tuesdays, 12:20pm-1:30pm
415-699-8290
Walking Tour
@ Frank Lloyd Wright Civic Center
Wednesdays, 10:30am-12:00pm
415-499-7099

Self-Efficacy

Senior Circle
@ Whistletop
Wednesdays, 10:00am-11:30pm
415-456-9062
Meditation
@ Margaret Todd Senior Center
Mondays, 10:45am-11:00pm
Thursdays, 12:00pm-12:15pm
(415) 899-8290
Civic Center
Coloring Club
415-473-6058



Healthy Aging Website
<http://www.dominican.edu/academics/hns/ot/healthyaging>

Healthy Seniors Program
<http://www.dominican.edu/dominicannews/healthy-seniors-program-returns-to-dominican>

Thank you for your time and participation!



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Appendix I

Resilience Pamphlet

Resilience

Resilience is the ability to "jump back" after a time of adversity. Throughout life there are different sets of adversities that a person encounters. As one ages common adversities may be death of a loved one, decreased health, or loss of independence. The ability to return to life and return to normal once again is a sign of resilience. For others, resilience is genetic, others it is learned. Building resilience helps maintain a desired quality of life and contributes to successful aging.

Protective Factors

Protective factors are used to develop resilience. The three most commonly used by individuals are social support, physical health, and self-efficacy. Interventions promoting these protective factors can be incorporated into every day life to increase resilience and age successfully.

Growing Population

By 2050, the 65+ population will compose 20% of the total population. The Baby Boomers are getting older and thriving due to medical technology and assistance.

Living at Home

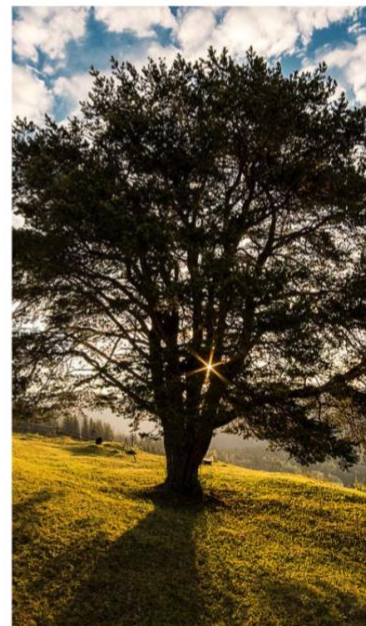
87% of the older population desires to age in their home or a desired location. Occupational therapists are equipped with the skills and knowledge to provide independence to live at home. The ability to dwell in the same home and area where relationships and routines have been established increases resilience and quality of life.



Resilience

The Future of Older Adults

**The ability to reintegrate
back into life after adversity.**



Social Support

Supporting and trusting relationships that share life experiences and social activities promote mental health in older adults. Social supports act as buffers to adversity, help with successful coping, and provide motivation to reintegrate back into life. Having quality relationships before and during adversity increases resilience.



Physical Activity

Can be simple and done in increments. Moving around and keeping a routine helps keep you mobile and healthy.



Physical Health

To maintain good health moderate-intensity exercise and healthy eating are suggested. The results of these efforts increases resilience and improves overall health. Self-efficacy, physical mobility, optimism, and building social support are all affected positively by physical health. Being active and eating healthy change how you think, your level of independence, and the amount of social support in your life.

Healthy Aging

Do what the doctor recommends. Eat healthy, move around, and be consistent with prescriptions.

Successful Aging

Living a life you enjoy in the location you desire. Being able to maintain independence where it matters.

Build Self-Efficacy

Do what you think you cannot do. Say yes when you want to say no. Surprise yourself and build your confidence.



Self-Efficacy

Self-efficacy is the motivation and belief of achieving a goal. Possessing this trait offers problem solving skills, creates meaning to life's adversities, and persistence during the difficult moments. In result, resilience is increased and successful aging occurs. Believing you can overcome daily trials and adversities will benefit your physical and psychological health, as well as giving security to those you love.