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SELF-EFFICACY AND DEPRESSION IN OLDER ADULTS: DIFFERENCES BETWEEN VOLUNTEERS AND NON-VOLUNTEERS

by

Anita Govindan

A Thesis Submitted in Partial Fulfillment of the Requirements for the Award of Masters of Psychology (Clinical Geropsychology)

At the Faculty of Community Services, Education and Social Sciences, Edith Cowan University, Joondalup.

Date of Submission: 1st November 1999.

USE OF THESIS

The Use of	Thesis statement	t is not included in	this version of the thesis.

Abstract

Volunteering has been found to play an important role in the lives of older adults. The general beneficial effects of volunteering have been widely established. However an investigation on the specific effect volunteering can have on older adults' perceptions of their abilities has yet to be established. It is important to investigate whether volunteering in later life is positively associated with one's perception of oneself or one's self-efficacy. Individuals with high levels of self-efficacy tend to believe they are more capable of handling stressful situations and are less likely to feel helpless and dependent and thus feel more confident of their ability to function independently. The present study investigates self-efficacy and depression among 87 older volunteers and 84 older non-volunteers. The present study contrasts volunteers and nonvolunteers on self-efficacy, depression, age and years of education as the hypothesised dimensions along which volunteers differ from non-volunteers. It is further hypothesised that self-efficacy and depression will be the two factors that best discriminate between volunteers and non-volunteers. The results of the present study support the hypothesis. It found that self-efficacy, depression and age discriminated between volunteers and non-volunteers and that self-efficacy and depression were the two factors that accounted for most of the difference. The results of the present study highlights the importance volunteering may have in fostering self-efficacy in older people. The present study, though exploratory in nature, has a number of important implications for promoting independent functioning in later life and improving the quality of life of older people.

Declaration

I certify that this thesis does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education; and that to the best of my knowledge and belief it does not contain any material previously written by another person except where due reference is made in the text.

Anita Govindan

1st November 1999

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CHAPTER ONE

Introduction

In the past decade, there has been a worldwide increase in the elderly population (Glaser, 1997). Since 1976 in Australia, the number of people who are sixty-five years and older has increased by seventy-two percent (Department of Immigration and Multicultural Affairs, 1997). In 1946, the proportion of the Australian population aged sixty-five years and above was 8% but by 1997 it increased to 12.1% (Australian Bureau of Statistics, 1999). It is projected that this figure will increase to 24.2% by year 2051(Australian Bureau of Statistics, 1999). The worldwide increase in numbers reflect a decline in mortality rates, and an increase in life expectancy of elderly people (Cordingley & Webb, 1997; Hanson & Mintz, 1997).

As people are both living longer and retiring at younger ages, there are increasing numbers of older people who are in their retirement years, which is commonly seen as sixty-five years and older (Fischer, Mueller & Cooper, 1991). Although there are a variety of ways in which older people spend their retirement years, there are a substantial number who occupy their retirement years participating in productive activities such as voluntary work (Koenig, George & Schneider, 1994). The past twenty-five years have seen a considerable increase in the number of older adults who participate in volunteering (Okun, Barr & Herzog, 1998).

Chambre (1993) highlighted that in 1990, forty-one percent of people over sixty-five volunteered, compared to eleven percent of people over sixty-five who volunteered in 1965. Chambre attributed the increase in volunteering to a number of factors, such as progress across cohorts in educational attainment and health, positive changes in society's attitude towards aging and elderly people, a greater value of

volunteering, and more opportunities for elderly volunteers in the public and private sectors. The trends in economic and labor restructuring have also led to an increase in demand for volunteers in the social and community services (Warburton, Le Brocque, & Rosenman, 1998).

With increased educational attainment and improvements in income, there are many older people who have established economic security. Retirement before the age of sixty-five is becoming more frequent among older people in the United States (Silverstone, 1996). More adequate pension and health plans have also provided a secure safety net for many older Americans to retire earlier (Silverstone, 1996; Hunter & Linn, 1980-81). The trend towards early retirement also appears to be occurring in Australia. A survey in 1997 indicated that the average age of retirement in Australia was fifty years (Australian Bureau of Statistics, 1997). The average age of retirement for men was fifty-nine years and the average age for women was forty-four years. However, there are many older people who do not experience economic security but have to end their working years due to mandatory retirement or retrenchment. In the 1997 Australian survey, thirty-three percent of men retired because of illness or injury, twenty percent retired because they had reached compulsory retirement age and twelve percent were retrenched (Australian Bureau of Statistics, 1997). As people are retiring earlier either by choice or otherwise, participating in voluntary work has helped to fill the void for many older people (Silverstone, 1996).

The increasing number of retired people and the trend towards early retirement either voluntary or otherwise has also caused researchers and policy makers to realise the potential of tapping into the resources of the retired population. In Australia, as in many other Western countries, policy makers are becoming more aware of the potential source of older volunteers (Warburton, et al., 1998). In Australia, there is a

shift towards encouraging the involvement of older adults in community work (Okun, Barr & Herzog, 1998; Warburton, et al., 1998). Many states in Australia, including Western Australia, have adopted American volunteer programs such as the Retired and Senior Volunteer Program (R.S.V.P.) to encourage older people to become actively involved in the community. The government reports also have begun to emphasise the benefits of community involvement in retirement, especially through volunteering (Okun et al., 1998).

Herzog and Morgan (1992) estimated that during 1986, people aged fifty-four years and over contributed more than 1.3 billion hours of volunteer work in organisations. The estimated figures for 1986 indicated that these older adults contributed approximately 7.8 billion dollars through their volunteer activities. The contribution of older volunteers has been found to help maintain services provided by churches, community organisations, social welfare and health agencies, as well as help expand the quantity and quality of these services (Fischer et al., 1991).

Despite the evident contribution of older volunteers, there are studies that indicate that society and policy makers still see elderly people as passive, needy and dependent (Elder & Pavalko, 1993; Palmore, Fillenbaum, & George, 1984). The significant contribution many elderly volunteers provide to the welfare, health and educational systems, as well as community and social establishments, are often underestimated or disregarded (Harlow & Cantor, 1996; Swindell & Vassella, 1999).

A recent study by Swindell and Vassella (1999) attempted to ascribe a dollar value to voluntarism in Australia and New Zealand. The study found that in general, the value of voluntarism by older adults appears to be overlooked by society. The study highlighted that in Australia and New Zealand, there are thousands of clubs and societies for older people that are run by older volunteer members. These clubs and

societies offer elderly people opportunities to increase their social network. The study suggested that older volunteers who provide opportunities for other elderly people to engage in social activities and increase their social networks could be directly contributing to the country's wealth and health. By providing these individuals the opportunity to develop and maintain social relationships, older volunteers are encouraging them to obtain support from such relationships and rely on these relationships rather than accessing formal services. Furthermore past research has highlighted the significant relationship between social networks and well being in later life (Antonucci & Akiyama, 1987; Chipperfield & Havens, 1991; Logan & Spitze, 1994).

Many older people also provide support to non-profit community based organisations that lack the required human resources to develop and expand their services. There are a number of older Australians who take an active role in providing voluntary support to social support agencies such as Meals on Wheels, Rotary Clubs, Salvation Army and other social support agencies. The services provided by older volunteers enable the social support agencies to provide additional services that benefit the older people who access the services as well as the wider community.

Thus, it can be seen how volunteer work by older adults' play an important role in community-based health and social support agencies. Nonetheless, the study by Swindell and Vassella (1999) on voluntarism in Australia and New Zealand highlights that there still may be an ignorance of the significant contribution of older volunteers in society. There is also an apparent lack of awareness of the costs and benefits of the contribution of older volunteers to society. Despite the lack of research on the costs and benefits of utilising older volunteers and the lack of recognition of

their contribution, there has been a realisation in the past couple of decades of the more general benefits of being a volunteer.

In the past two decades, there have been a number of studies that have investigated the role volunteering plays in the aging process. The growth of an aging population has caused many researchers to focus on the psychosocial factors involved in aging. In recent years, many gerontologists have focussed on the term "successful aging" (Garfein & Herzog, 1995; Kim, Nesselroade, & Featherman, 1996). There are a number of definitions of successful aging. Despite the various definitions the main components of successful aging are (i) a low probability of disease and disease-related disability (ii) a high physical and cognitive functional ability, and (iii) an active participation or engagement with life (Rowe & Kahn, 1997). Rowe and Kahn noted that successful aging is not just an absence of physical illness, or the maintenance of functional capacities, but it is this combination with active engagement with life that reflects the concept of successful aging. In essence, ageing successfully can be characterised by active involvement in society, achieving ongoing independence and a quality of life.

Older adults are not considered as "old" by friends and families and neither do they think of themselves as "old", as long as they remain active and productive (Kaufman, 1986). Providing support to others, that is volunteering, is one way of keeping active and productive (Rowe & Kahn, 1997). Participating in voluntary work in later life can be beneficial as it enriches one's daily activities, offers new and meaningful roles, and gives individuals a sense of importance (Hunter & Linn, 1980-81; Newman, Vasudev, & Onawola, 1985).

Many studies identify volunteer work as an effective means of attaining successful aging (Baltes & Lang, 1997; Fischer et al., 1991; Fisher, 1995; Rowe &

Kahn, 1997). A meta-analysis of thirty-seven North American studies investigated the general beneficial effects of volunteering (Wheeler, Gorey, & Greenbalt, 1998). The meta-analysis indicated that seventy percent of the older volunteers scored higher on quality of life measures than older non-volunteers and that older volunteers benefit most from the experience when it involves a direct, face-to-face helping relationship. The meta-analysis supported the notions that participation in voluntary activities positively affects older volunteers.

Despite a number of studies on volunteering and its beneficial effects, the research has provided only a general understanding of such effects on older people. The past studies that have looked at providing support to others in later life tend to investigate the general effects of providing support (Krause, Herzog, & Baker, 1992; Jirovee & Hyduk, 1998). Most of the studies investigate the characteristics of older people who provide support and the general positive effects it has on their health and general well being (Adelmann, 1994; Cohen-Mansfield, 1989; Krause et al., 1992; McIntosh & Danigelis, 1995; Okun, 1993; Sabin, 1993). Many studies have investigated and shown that elderly volunteers tend to have higher levels of general life satisfaction and self-esteem as well as feelings of usefulness (Cohen & Hoberman, 1983; Krause & Borawski-Clarke, 1994).

It is apparent that there are a number of studies that have investigated and proven the general beneficial effects of volunteering. However, past research has established only the general and not specific ways in which volunteering in later life can result in beneficial effects. There appears to be a lack of research that investigates older volunteers' perceptions of themselves and their abilities compared to older non-volunteers. One important aspect of how people perceive themselves is their perceived self-efficacy. Bandura (1977) defines self-efficacy as a person's perception

of their capabilities within a particular domain. Self-efficacy may be linked to volunteering as only those who feel they can help others are likely to do so.

Higher levels of self-efficacy are also likely to lead to more active efforts at dealing with problems. Active coping can result in turn in better resolution of health and social crises than passive avoidance. Individuals who perceive themselves as having the ability and skills to cope in situations that are stressful tend to handle such situations rather than avoid them (Bandura, 1986; Bandura, 1993). Being involved in activities that foster self-efficacy can make older individuals more confident of their existing abilities and feel less helpless and more independent. It can therefore be seen how volunteering may have a link with fostering self-efficacy in later life.

Despite the probable link volunteering in later life may have with promoting self-efficacy, there is an absence of research investigating the association between volunteering and self-efficacy. Past studies have failed to investigate differences in self-efficacy between older people who volunteer and older people who do not volunteer. Thus, the potential volunteering may have in facilitating self-efficacy in later life has been greatly ignored. A study that attempts to establish whether there is a relationship between self-efficacy and volunteering in later life would be beneficial. Findings from such a study can suggest whether volunteering is one way to promote feelings of self-efficacy which can make older people feel more confident about their abilities to cope with certain situations and thus promote their sense of independence. Thus, any findings to suggest that volunteering in later life can be an important way of fostering self-efficacy and in turn feelings of greater independence will be beneficial.

A lack of research on specific benefits of volunteering in later life, such as self-efficacy, is not the only limitation of past studies. Another limitation of previous research on volunteering in later life is the use of a broad definition of providing

specific areas such as self-efficacy and depression, which leads to the purpose of the study.

1.1 Aim of the Present Study

The present study intends to investigate the differences between volunteers and non-volunteers on four factors: self-efficacy, depression, age and education. A number of research findings suggest that there are differences in age and education amongst volunteers and non-volunteers. It has also been suggested that being involved in productive activities such as volunteering may enhance feelings of self-efficacy and buffer feelings of depression in later life. Thus, based on the literature reviewed, a significant difference is expected between volunteers and non-volunteers on these four factors. The study also intends to investigate which of the four factors, or combination of these factors, best discriminate between members of the volunteer group and members of the non-volunteer group. The study intends to investigate whether self-efficacy and depression will discriminate among the two groups of volunteers and non-volunteers. Thus, it is hypothesized that volunteers will differ from non-volunteers on the four factors of self-efficacy, depression, age and education.

This brief review suggests some important influences on successful ageing.

Therefore, the role of volunteering, age, education, self-efficacy and depression will be looked at next in more detail. The relationship between these factors and volunteering in later life will also be explored.

CHAPTER TWO

Literature review

2.1 Role of Volunteering

Although there have been a number of studies that have investigated volunteering, there still are difficulties in defining volunteering as it may include a broad or narrow range of activities. Some researchers use broad definitions of volunteering which include a wide range of activities, and which may include many forms of providing unpaid help, including babysitting a grandchild or buying groceries for a neighbour (Fischer et al., 1991). On the other hand, narrow definitions can be too specific, for example only including unpaid work for charitable organisations. Both broad and narrow definitions are problematic. However, insofar as formal volunteering can serve as a work-substitute, a narrow definition seems more appropriate (Fischer et al., 1991). The narrow definition would include unpaid work in a formal organisation that involves an individual making a specific commitment, and being involved in an environment which makes the volunteer position resemble a job (Chambre, 1984). Despite the difficulties and discrepancies in defining volunteering, there is a general consensus amongst researchers of the positive role of volunteering in later life, whether formal or informal.

One of the ways volunteering may benefit older people is that volunteer work provides older people with the opportunity to reinforce feelings of personal control. Volunteering can have a positive effect on the well being of the older individual as it can compensate for their loss of roles from employment and changes in social networks (Musick, Herzog, & House, 1999). Volunteering can also help older individuals regain the structure and emotional fulfilment of former jobs and family

ties (Ward, 1979). Volunteer work also provides an outlet for skills from former employment (Wheeler et al., 1998).

It is generally believed that volunteering can provide role enhancement (Musick et al., 1999). Having an additional role such as being a volunteer especially in later life can serve to increase feelings of power and status, as well as meaning to oneself and to other people. Feelings of power and status that were previously obtained through work can be re-established through taking on the role of a volunteer (Musick et al., 1999). Realising that one still has the ability or power to help someone else control a difficult situation can be gratifying. Furthermore, as people grow older they may feel they do not play an important role in contributing to the community as they are no longer working. A lost sense of status in society can be regained by becoming a volunteer member and once again having the opportunity to contribute to the community.

Volunteer work also helps provide older people the opportunity to share and provide service to others that can be very valuable and satisfying (Morgan, 1988). Being able to return to the nurturing role, sharing one's skills and life experiences, and having a place to go and dress for, can provide the older person with a sense of purpose in life (Chambre 1984; Swartz, 1978). Furthermore, today's society is work oriented and once retirement comes, many seek new ways such as volunteering to lead meaningful lives (Musick et al., 1999).

Besides providing a way to deal with role loss in old age, volunteering can fulfil a variety of other needs of the elderly, such as helping them engage in altruistic behaviour and acquire new experiences and skills (Fischer et al., 1991; Warburton et al., 1998). It can provide a sense of community participation that can lead to new social contacts and friendships (Davis et al., 1998). Participating in volunteer work

can also foster development of new friendship with other volunteers. Establishing such new friendships can increase support networks and in turn provide additional social support that may buffer feelings of depression (Hunter & Linn, 1980-81; Rotenberg & Hamel, 1988).

There are a number of studies that have investigated the effects of volunteering on an individual's well being. A study by Rietschlin (1998) investigated psychological distress in people aged twenty-two years to eighty-nine years. The results of the study indicated that individuals who participated in voluntary activities had fewer depressive symptoms in the presence of increasing stress burdens compared to those who did not volunteer. It found no reduction in these effects even after controlling for individual psychosocial resources such as mastery, self-esteem and social support. Thus, the study concluded that participation in voluntary activities makes a unique contribution to reduction in distress. A study by Young and Glasgow (1998) also found that volunteering was associated with positive effects on one's well being, with individuals who participated in voluntary work reporting higher levels of perceived health.

The importance of volunteering for older people can be summarised by activity theory, as it reflects the importance of activities such as volunteering for optimal aging (Chambre, 1984). Activity theory states that "the older person who ages optimally is the person who stays active and who manages to resist the shrinkage of his social world". (Cohen-Mansfield, 1989, p224). Activity theory suggests that maintaining activities of middle age can significantly enhance an elderly person's well being. It further states that a higher level of well being in later life can occur when older people substitute an active role for one that has been lost (Cohen-Mansfield, 1989). Proponents of the activity theory also postulate that maintenance of activity in old age can promote higher morale (Kincade, Rabiner, Bernard, Woomert, Konrad, DeFriese & Ory, 1996). Thus, the concept of activity theory can be seen to reflect the importance of volunteering for optimal aging.

2.2 Age and Education

There are a number of studies that have investigated the demographic characteristics of volunteers (Fischer et al., 1991; Jirovec & Hyduk, 1998; Krause, 1991; Okun & Eisenberg, 1992; Ozawa & Morrow-Howell, 1988). Okun and Eisenberg (1992) compared older adults who volunteer with those who do not volunteer on a number of demographic factors. Their findings indicated that older adults who volunteered had a higher level of education compared to those who did not volunteer.

Kincade et al. (1996) found that older individuals who were more likely to volunteer tended to be younger and had a higher level of educational attainment. A large scale survey of older people in the Minnesota Senior Study also found that volunteers tended to be younger, better educated and with higher incomes (Fischer et al., 1991).

It is apparent that most of the studies that have looked at demographic factors in volunteering in later life highlight that people who volunteer tend to be more educated. There are a number of explanations for such consistent findings. For instance, in general, older cohorts tend to have less formal education as compared to younger cohorts. This might be why there is less volunteering in the older population (Warburton et al., 1998). Furthermore, Krause (1991) found that less educated individuals tend to be more distrustful of others and more isolated as compared to more educated older individuals, and thus less likely to volunteer. People who are

better educated also tend to continue pursuing activities that are physically and mentally simulating in their later life (Okun & Eisenberg, 1992).

Most findings on volunteers indicate that people who volunteer tend to be younger than people who do not volunteer. A possible explanation for such findings is that aging can be associated with increased health problems and poor health could in turn affect volunteering. Okun (1993) found that many elderly people give poor health as a reason for not volunteering or for having to stop volunteering as they are unable to keep up with the activities. Thus, there are several reasons to expect that people who volunteer would be younger and more educated than people who do not volunteer.

Another factor that is expected to differ between older people who volunteer and older people who do not volunteer is self-efficacy. The next section will suggest how engaging in voluntary work in later life can affect levels of self-efficacy.

2.3 Self-efficacy and Coping

Bandura (1977) first developed self-efficacy theory, which postulates that behaviour is cognitively mediated by the strength of people's beliefs about themselves. Bandura (1986) defined self-efficacy as "people's judgments of their capacities to organise and execute courses of action required to attain designated types of performances" (p391). Wood and Bandura (1989) broadened the definition of selfefficacy by including that self-efficacy "refers to beliefs in one's capabilities to mobilise the motivation, cognitive resources, and courses of action needed to meet situational demands" (p408).

In general, self-efficacy refers to an assessment of one's own ability to perform behaviour in specific situations (McAcvay, Seeman & Rodin, 1996). It does not refer to the skills an individual has, but rather to the judgments of what one can do with whatever skills one does have (Bandura, 1986). Individuals with similar skills can differ greatly in their perceptions of efficacy (King & Elder, 1998). Individuals' perceptions affect how they think, feel, and motivate themselves, as well as how they behave (Bandura, 1993). King and Elder (1998) stated that the beliefs individuals possess can shape the course of their life by influencing the type of environments and activities they choose to follow. According to Bandura (1993), these choices cause individuals to foster different competencies, interests, and social networks.

Bandura (1986) also attempted to clarify the relationship of self-efficacy and performance by stating that perceptions of efficacy act as a behavioural predictor. Bandura (1986) elaborated that while people avoid tasks they perceive as exceeding their capabilities, they take on and successfully execute tasks they believe they are capable of handling (Bandura 1977; 1986). Studies have shown that individuals with high perceived self-efficacy approach tasks that are difficult as challenges (Albert, Savage, Blazer, Jones, Berkman, Seeman & Rowe, 1995; McAuley, Lox & Duncan, 1993). Wood & Bandura (1989) also found that individuals with a strong sense of self-efficacy were more likely to take on challenging tasks, persist longer and perform more successfully than individuals with lower levels of self-efficacy. Individuals with high self-efficacy are also more likely to establish challenging goals and maintain commitments even when they are faced with difficulties (King & Elder, 1998). Other studies also support the findings that individuals who lack a sense of efficacy tend to avoid difficult tasks and may have a tendency to give up easily when faced with difficulties (Bandura, 1993; Lang & Featherman, 1997).

Bandura (1977) also suggested that an individual's sense of self-efficacy could determine whether coping behaviour will be initiated. There are a number of studies

that suggest that one's coping response plays an important role in shaping the meaning and impact of their stressful life events (Zautra & Wrabetz, 1991).

A number of studies have addressed the importance of one's evaluation of his or her efforts to cope with specific events (Aldwin & Revenson, 1987; Lennon, Dohrenwend, Zautra & Marbach, 1990). Aldwin and Revenson (1987) found that coping efforts interacted with self-efficacy to predict mental health. They found that some types of active coping were positively associated with adjustment only when the individual rated his or her own efficacy as high. Diehl (1998) also indicated that the belief that one is unable to take on tasks and activities and complete them successfully can have a significant restraint on their independent living and psychological well being.

Past research on self-efficacy has focused more on other clinical populations such as young adults and children rather than older adults. There are numerous studies that have studied self-efficacy in relation to phobias, smoking cessation, achievement in children and young adults, and career development (Brown, Lent, Ryan & McPartland, 1996; Condiotte & Lichtensein, 1981; Lent, Brown & Gore, 1997; Schunk, 1982).

A review of the literature on aging highlights that Bandura's (1977) selfefficacy theory as applied to the psychological functioning of older people has only become of interest to gerontologists in the past decade. Despite the recent interest in aging and self-efficacy, it has already become apparent that self-efficacy has important theoretical and practical applications among older adults (Grembowski, Patrick, Diehr, Durham, Beresford, Kay & Hecht, 1993). A number of studies highlight that a person's perceptions of his or her ability to perform specific health behaviours can influence their health behaviour and health status (Davis-Berman,

1989; O'Leary, 1985; Seeman & Seeman, 1983). When older individuals' perceive their ability to perform health behaviours as high, they tend to be more successful in changing health behaviour to decrease the risk of illness (Grembowski et al., 1993).

There is also growing evidence of the association between self-efficacy and functional outcomes. A number of studies have highlighted a significant crosssectional relationship between self-efficacy and functioning in community-residing elderly residents (Mendes, Seeman, Baker, Richardson & Tinetti, 1996; Tinetti, Mendes de Leon, Doucete & Baker, 1994). Other studies have indicated that selfefficacy is strongly associated to health behavior (Bandura, 1986; Gegas, 1989; Grembowski et al., 1993; McAuley et al., 1993; Rejeski, Craven, Ettinger, McFarlane & Shumaker, 1996). It is evident from these studies that self-efficacy is an important influencing factor in older people's physical functioning.

As many countries are being faced with aging societies, many researchers are trying to obtain a better understanding of the factors that contribute to individual differences in patterns of change in cognitive functioning associated with aging (Dietz, 1996; Seeman, McAvay, Albert, Merril & Rodin, 1996). Researchers are particularly interested in the factors that can contribute to maintaining higher levels of cognitive functioning. Self-efficacy is seen as one possible factor. Self-efficacy theory (Bandura, 1977) postulates that one's efficacy beliefs influence the types of activity people choose to engage in, the level of effort they place, their level of perseverance, and the thought patterns and emotional reactions they experience (Bandura, 1986). Thus, individuals with low self-efficacy tend to limit their activities, and to place less effort and perseverance in the activities they engage in. In regards to cognitive functioning, lower levels of self-efficacy may lead to less participation in challenging activities and less effort in persisting in such activities (Baltes & Lang, 1997). Thus,

if low self-efficacy results in a pattern of less frequent or persistent participation in challenging cognitive activities, it could lead to increased risks for decline in cognitive performance (Seeman, Rodin & Albert, 1993).

Another factor that is important to the functioning of older adults is a sense of control and freedom. Having a sense of control and freedom is critical to both physical and psychological health of older people. Perceived locus of control and competence are two important factors of a sense of independence (Collins, Luszcz, Lawson & Keeves, 1997). Having the ability to have control over one's life is often seen as the core of human functioning and living (Brandtstadter & Rothermund, 1994).

The essence of an individual's psychological functioning is the belief that he or she can take on varying tasks and activities and is capable of executing them successfully (Collins et al., 1997). When individuals give up personal control, they become helpless and lose a sense of purpose in life (Deci & Ryan, 1987). There is substantial research that highlights the importance of personal control and freedom and suggest that individuals want to be able to live their lives independently (Mirowsky, 1995; Wolinsky & Stump, 1996). Research also indicates that a greater sense of control over life is linked with decreased rates of illness (Coleman, 1993; Deci & Ryan, 1987).

Although these studies have looked at the concept of a sense of control and its effects on aging, the findings can also be related to self-efficacy. According to Mirowsky (1997), although the concepts are distinguishable, both theories are related. Mirowsky (1997) stated that a sense of control, or causal beliefs that outcomes such as good physical health, are determined or influenced by a person's own actions can have effects on their self-efficacy. Mirowsky (1997) explained that people who have

a sense of control over their physical health but feel they do not possess the skills required to behave in a manner that would result in good physical health, can experience low self-efficacy and handle such activities with a sense of uselessness. Thus, although the two concepts can be distinguished from one another, the findings of research done on sense of control can still be used to provide an understanding of how self-efficacy may affect one's behaviour and feelings.

Brandstadter and Rothermund (1994) stated that the extent to which individuals believe they are able to control their life or have the ability to cope with situations play a significant role in how they think about and regulate their own development. Past studies have found that the way people perceive their ability to handle and control or manage a situation affects their feelings of competence, and adequacy (Bandura, 1986; Brandstadter & Rothermund, 1994; Dietz, 1996). Older individuals tend to underestimate their true competencies in a number of important areas in life (Bandura, 1986; Dietz, 1996). Furthermore, as people age, they are exposed to an increasing number of personal and social conditions that can threaten their sense of control and independence. Older people may not experience as many situations or circumstances in later life that foster their sense of self-efficacy as they did when they were younger (Bandura, 1986). Many older adults do not have opportunities in later life to make them realise that they still possess the skills and competencies. Therefore it is important that older people have sources that can restore their sense of control and self-efficacy.

According to Bandura (1986), there are factors that can be seen as major sources of information from which individuals obtain their ideas about their selfefficacy. These factors are enactive attainment, vicarious experience, and verbal persuasion. Enactive attainment (that is, successful performance) has the greatest

influence on self-efficacy, as seeing oneself obtain success at a task is evident proof of one's ability to perform a task (Bandura, 1986). Vicarious experience is the next main source of self-efficacy, which is seeing another individual who is similar to oneself succeed (Bandura, 1986; Eden & Kinnare, 1991). The third source of selfefficacy is verbal persuasion, that is, having someone reassure you of your capability to perform successfully in a task or skill (Bandura, 1986). Participating in voluntary activities can provide the opportunity for all these three sources of self-efficacy to be fostered.

Volunteering may help foster one's perceived control or self-efficacy in later life as it provides opportunities for older people to undertake and successfully perform various forms of tasks and activities. Volunteering can also provide older individuals the opportunity to see that they are able to help someone else control a stressful situation by utilising effective coping skills such as problem solving (Fischer et al., 1991). Providing support to others may in turn cause older volunteers to realise that they still possess the skills required to cope and control stressful situations in their own lives. Participating in voluntary work allows individuals to observe that their assistance can improve the situation of another in need and this may lead to the realisation that it is possible for their own problems to be overcome in a similar way (Fischer et al., 1991).

Occupying functional roles such as being a volunteer can increase the likelihood of engaging in decision making, group problem solving, and selfdirectional behaviour, which in turn may foster self-efficacy (Krause, 1990; Stolar et al., 1993). By engaging in such behaviour, it increases one's practice of effective coping skills that can be useful in dealing with various stressful life events.

Engaging in activities such as problem solving can be related to psychological health. Hanson and Mintz (1997) found that older adults who had a favourable perception of their problem-solving abilities tended to have more favourable perceptions of their psychological health. They found that these individuals reported greater independence, more mastery over their environment, a greater sense of purpose in life, more self-acceptance and more interpersonal ties (Hanson & Mintz, 1997). The findings suggested that feeling in control of problem solving tasks and having confidence in one's problem solving skills is associated with psychological health and well being. Thus, it can be seen how volunteer work may be associated with self-efficacy as it can create opportunities for older people to increase their level of confidence in their capabilities.

Volunteer work can also provide the opportunity for older adults to feel a greater sense of control. As volunteers are part of an organisation, it provides them the sense of structure and membership, or sense of belonging, that they may have experienced in previous jobs (Chambre, 1984).

Therefore, volunteering can be seen to represent one of the avenues to aging well (Okun et al., 1998). Using the concept of self-efficacy can provide a valuable perspective on the effects of volunteering on older adults. The realisation that one has helped a person in need, can be a "fulfilling and self-validating experience that can strengthen one's feelings of psychological well-being" (Chambre, 1993, p.221). The literature on the area of volunteering has not used Bandura's (1977) self-efficacy theory as a framework to better understand volunteering in later life. Most past studies have looked at the effects of volunteering on a general level without using a concept or framework to better understand its effects. As has been mentioned, later life does not provide many older people with opportunities for them to realise the skills and

abilities they possess. The concept of self-efficacy is based on one's judgement of what skills and abilities one possesses and it has been highlighted how volunteering provides opportunities in later life for older people to view their skills and abilities. Using the concept of self-efficacy can help better understand or conceptualise how volunteering can be associated with self-efficacy as it may provide opportunities for older individuals to realise that they still possess the skills and abilities to cope with stressful situations.

Thus, it has been suggested how volunteering may be associated with selfefficacy as it may provide opportunities for older people to realise they still possess the required skills for certain situations. The realisation that one possesses the skills and abilities to cope with stressful situations may increase feelings of personal control. As feelings of personal control or perceived ability increases, people tend to experience fewer depressive symptoms. In order to further investigate how feelings of personal control or perceived ability may influence depressed mood, the role of volunteering and depression will be discussed next.

2.4 Depression

Some gerontologists regard depression as the "common cold of geriatric mental health "(Dick & Gallagher-Thompson, 1996, p182). Gerontologists make such reference because of the prevalence of depression as a mental disorder amongst older people (Karel, 1997). Prevalence estimates for depression in older people tends to differ according to the sampling, evaluation and classification methods that are used. The Diagnostic and Statistical Manual of Mental Disorders, 4th ed. (DSM-IV) indicates that rates of major depressive disorder are lower for men and women aged sixty-five years and over compared to men and women aged twenty-five years to forty-four years (American Psychiatric Association, 1994). However it indicates that

there is a fourfold increase in death rates in people with major depressive disorder who are over fifty-five years. Estimates of older community-dwelling people who meet the major depressive disorder criteria are approximately one to six percent (Wolfe, Morrow, & Fredrickson, 1996). Despite the relatively low prevalence rates for depression among older people, it is still regarded as a significant problem among older people (Klinger, 1999). It is important to realise that rates of diagnosed depression vary among older community-dwelling persons and there is an additional nine to thirty percent of community dwelling adults who report significant depressive symptoms that are a subset of the clinical diagnosis of depression (Dick & Gallagher-Thompson, 1996). It should also be mentioned that depression is often seen to be underdiagnosed in older adults (Karel, 1997).

Wallace and O'Hara (1992) conducted a longitudinal study on a sample of older adults aged sixty-five years to ninety years and above (cited in Karel, 1997). They found that depressive symptoms on the Center for Epidemiological Studies-Depression Scale (CES-D) increased over a six year period in the sample.

There are a number of reasons many older people experience depression. Later life can be characterised by tenuous roles that are limited and vague (Adelmann, 1994). As people grow older, they experience a decline in formal roles and an increase in tenuous roles, which can threaten their social identity and well being (Searle, Mahon, Iso-Ahola, Sdrolis & Dyck, 1995). Furthermore, older people tend to experience losses in a number of roles due to retirement, loss of peer relationships, death of parents and or spouse, and departure of their children, causing previously available sources of support to be lost (Braithwaite & Gibson, 1987; Howard, Marshall, Rechnitzer, Cunningham & Donner, 1982; McAvay et al., 1996; Tilburg, 1998). Holahan and Holahan (1987) stated that the loss of familiar roles can deprive

elderly people the opportunity to see themselves functioning effectively in social relationships, leading to a loss of feelings of social competency. Encountering such changes in later life can also result in loss of feelings of self-worth and dignity (Palmore et al., 1984).

There are a number of psychological factors that have been found to be related to depression, such as feelings of helplessness or control and coping (Karel, 1997). The concept of control has been a main theme in the literature on depression. According to Seligman's (1975) learned helplessness theory, the motivational, cognitive and emotional deficits of depression result from learning that one is not able to control outcomes in his or her life. A revised theory of learned helplessness added that attributions that individuals make about the causes of their helplessness are crucial (Abramson, Seligman, & Teasdale, 1978). The revised theory postulated that people who attribute helplessness in negative situations or events to internal, stable, and global causes are more likely to have future expectations of hopelessness, decreased self-esteem, and depression (Abramson et al., 1978). Research indicates that people with an internal locus of control who believe that outcomes in life rely on their own efforts tend to have more positive physical and mental health outcomes compared to people who believe that their life outcomes rely on chance or external forces (Karel, 1997; Mirowsky, 1995).

Older adults tend to constitute a vulnerable population, as they are more likely to be susceptible to the effects of a low sense of control (Thompson & Spacapan, 1991). It has been highlighted earlier that as people grow older, they tend to be faced with stresses such as declines in health, retirement, and bereavement. These stresses that many people face in later life can threaten their sense of control (Howard et al., 1982).

There are a number of studies that indicate that a sense of control protects individuals from anxiety, distrust, demoralisation, and depression (Benassi, Sweeney & Dufour, 1988; Krause & Stryker, 1984; Pearlin, Liberman, Menaghan & Mullan, 1981; Ross & Mirowsky, 1989). Having a sense of control can reduce the likelihood of behaving helplessly in aversive or frustrating situations (Wolinsky & Stump, 1996). Most of the research indicates that a sense of control improves functioning. health, and well being, particularly for older adults (Mirowsky, 1997; Seeman & Seeman, 1983).

Sense of control has been found to increase with employment, occupational status, autonomy on the job and education (Mirowsky, 1995). Studies have found that one's sense of control tends to decrease due to unemployment, demotion, or retirement (Pearlin et al., 1981; Ross & Mirowsky, 1989; Wheaton, 1985).

Research has indicated that as feeling of control or perceived ability declines, older people tend to experience more depressive symptoms (Fry, 1986). A study that followed men who were aged forty-five years to fifty-nine years for a five year period found that a low sense of control increased the odds of mortality, activity limitations, and initial symptoms significantly (Seeman & Lewis, 1995).

Studies indicate that providing formal support to others such as volunteering may reinforce feelings of personal control. These studies suggest that older people who have a strong sense of control tend to experience fewer symptoms of depression than older people who feel they have less control over their life (Benassi et al., 1988; Kincade et al., 1996; Payne, 1977; Ward, 1979).

Another study by Hunter & Linn (1980-81) investigated the psychosocial differences between elderly volunteers and non-volunteers. It found that elderly

volunteers had significantly higher levels of life satisfaction, stronger will to live, and fewer symptoms of depression, anxiety and somatization.

Furthermore, individuals who view themselves as being unable to handle a situation may be less likely to utilise their available resources, such as coping skills, in times of stress (Davis-Berman, 1989). This may result in such individuals experiencing more depressive symptoms as compared to those who are able to use the available resources to cope with stressful situations. It can therefore be seen how being a volunteer may also be associated with lower levels of depression.

With these factors in mind, this study proposes to examine the relationships between volunteering and the factors of age, depression, education, and self-efficacy through two major hypotheses. It is further hypothesized that self-efficacy and depression will be the two factors that best discriminate between volunteers and nonvolunteers.

CHAPTER THREE

Method

3.1 Participants

Approximately 350 questionnaires were distributed to volunteers and nonvolunteers. A total of 182 questionnaires were returned. Eleven of the returned questionnaires were incomplete and were not included in the analysis. A total of 171 completed questionnaires were returned and used in the analysis (48.9% return rate). The sample consists of 171 healthy older adults (81 males and 90 females). The participants' ages ranged from 50 to 81 years with a mean age of 67.76 years (SD= 7.78). The volunteer group consisted of 87 subjects. These participants were selected from formal organizations such as Silver Chain, Cottage Hospice, Alzheimer's Association, Rotary Clubs and Meals on Wheels. The definition of volunteer work that was used in the selection criteria was, any unpaid work in a formal organization that involves a person making a commitment and being involved in an environment that makes their position resemble a job (Chambre, 1984). The selected participants for the volunteer group had to be engaged in voluntary activities that had a specific schedule and a regular commitment (for example, twice a week). Participants who engaged in voluntary activities on an irregular basis, such as once in a couple of months, were not included in the study. All chosen volunteer participants also had to be fifty years and above.

The non-volunteer group consisted of 84 participants. These subjects were selected from senior citizen centers, community groups (such as church groups) and recreational clubs (such as Lawn bowling clubs). To obtain a more representative sample, non-volunteers were also obtained by asking older residents in residential homes and suburbs to complete the questionnaire. The selected non-volunteer

participants were not involved in any form of voluntary work. Participants who indicated that they engaged in voluntary support occasionally were not included in the study. All selected non-volunteers were also fifty years and above.

3.2 Instruments

The questionnaire included a cover letter (Appendix A), consent form (Appendix B), a sheet of general instructions (Appendix C) and an information sheet that requests information about demographic characteristics such as age, sex, health status, and educational level (Appendix D). The information on health status screened participants for any major medical illness.

The self-report measures included in the questionnaire were the General Self-Efficacy Scale (Schwarzer, Babbler, Kwiatek, Schroder & Zhang, 1997) (Appendix E) and the Geriatric Depression Scale (Brink, Rose, Lum, Huang, Adey & Leirer, 1983) (Appendix F).

The General Self-Efficacy Scale

The General Self Efficacy Scale (Schwarzer et al., 1997) was used to measure participants' general sense of personal competence to effectively handle stressful situations (Appendix E). The scale consists of ten items that rate the degree to which each item best applies to them. The scale has internal consistencies across cultures that range between 0.75 to 0.90 (Schwarzer et al., 1997). The scale has also been found to have criterion validity, experimental validity and predictive validity.

Geriatric Depression Scale (GDS)

The GDS was used, as it is a reliable and valid measure of depression in older adults (Appendix F). It consists of thirty items that require yes or no answers. It has a high level of internal consistency with an alpha coefficient of 0.94. Test-retest reliability over a one-week period was 0.85, suggesting that within that period, the

scores on the GDS reflected stable individual differences (Brink et al., 1983; Laprise & Vezina, 1998).

3.3 Procedure

All participants were approached in the various venues stated in the participation section. Participants were briefly informed of the general purpose of the study. They were than asked if they would like to participate in the study. All participants were informed that participation in the study was voluntary. Once participants agreed to participate in the study, they were provided with a copy of the questionnaire. Both volunteers and non-volunteers were asked to complete the same questionnaires. All participants completed a consent form and were assured that any information that was obtained would be treated confidentially. All participants were given a week to return the questionnaires. All participants had the choice of returning the questionnaires by mail or have the questionnaires collected at a convenient place and time.

CHAPTER FOUR

Results

All the completed questionnaires were scored. The scores were then analysed using a Discriminant Function Analysis to contrast volunteers and non-volunteers. Discriminant Function analysis is a statistical technique used to predict group membership (Volunteers, Non-volunteers), on the basis of a set of predictor variables (self-efficacy, depression, age, education). This form of analysis was used because it identifies variables that best discriminate members of one group from another (Tabachniek & Fidell, 1996).

The univariate assumptions were also investigated. A routine pre-analysis screening procedure was conducted to examine the data for missing items, presence of outliers and violations of normality. The z score for skewness and kurtosis was calculated for tests of normality and the acceptable range of values was taken to be -3to 3 (Tabachniek & Fidell, 1996). The results indicated that scores were within the normal range. However, the box-plot for years of education indicated outliers. A transformation was performed to reduce the influence of the outliers on the results. As such the years of education variable was replaced using a logarithmic transformation. The K-S (Lilliefors) test was also conducted to investigate whether there is a normal distribution. The results indicated that all the variables had K-S Lilliefors significance values that were less than 0.05 and as such were not normally distributed (Table 1).

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Table 1. **Univariate Assumptions.**

	K-S Lilliefors Significance
Self-efficacy	.000
Depression	.000
ears of Education	.000
1ge	.042

The Mahalanobis distance test was used after transformation of the years of education variable and no multivariate outliers were found, that is, there were no values greater than or equal to the critical chi-square value of 18.5 at an alpha level of 0.001. There were also no missing data.

The inter-correlations among the four predictor variables of self-efficacy, depression, age and years of education are reported in Table 2. The results indicate that a significant negative relationship exists between self-efficacy and depression (r =-.884, p<0.01) that is, higher self-efficacy scores are associated with lower depressive symptoms.

Table 2. Correlation among predictor variables.

Variable	Self-efficacy	Depression	Year of Education	Age
Self-efficacy	1	884	.391	627
Depression	884	1	442	.614
Years of Education	.391	442	1	379
Age	627	.614	379	1

The dependent variable for the Discriminate Function Analysis is participation in a formal organisation (volunteers and non-volunteers) and the independent variables were self-efficacy, depression, age and years of education. The four variables were found to discriminate significantly between the volunteer group and the non-volunteer group (Wilks Lambda = 0.129, chi-square = 341.807, df = 4, p < 0.000). The univariate F statistics indicate significant differences between groups on each of the four variables.

Table 3. Differences of predictor variables between Volunteers and Non-Volunteers

Variable	V <u>olunte</u> Mean	er SD	Non-Volu Mean	nteer SD	Effect Size Index	Univariate F	Wilks' Lambda	p	Structure Coefficient	Squared Semipartial Correlation	p
Self-efficacy	31.34	4.94	12.21	3.20	-1.829	897.306	.158	.000	.887	7.7%	.000
Depression	2.02	2.23	10.77	2.60	1.747	560.558	.232	.000	701	1.3%	.000
Years of Education	12.89	2.89	10.62	1.96	847	39.401	.811	.000	.186	0.2%	.162
Age	62.71	5.82	72.99	5.86	1.321	132.284	.561	000	341	0.7%	.003

The structure coefficients and squared semi-partial correlations indicate that self-efficacy and depression make significant and unique contributions to the prediction of group membership (Table 3). The variable age also makes a significant contribution to the prediction of group membership. The findings indicate that the average age for the volunteers was 62.71 years compared to the average age of the non-volunteers which was 72.99 years (Table 3). The results, however, also indicate that the variable years of education did not make a significant contribution to group membership. The discriminant function analysis correctly predicted 94% membership of the non-volunteers and 96.6% of the volunteers. Overall, a very high 95.3% of the participants were correctly classified, using the four variables.

In the Discriminant Function Analysis, a high proportion of cases were correctly classified using the four predictor variables. An examination of the distribution of misclassifications indicates that the percentage of correct classifications for the non-volunteer group was slightly higher than the percentage of correct classifications for the non-volunteer group. Overall, the findings indicate that the two groups of participants, that is volunteers and non-volunteers, were readily differentiated.

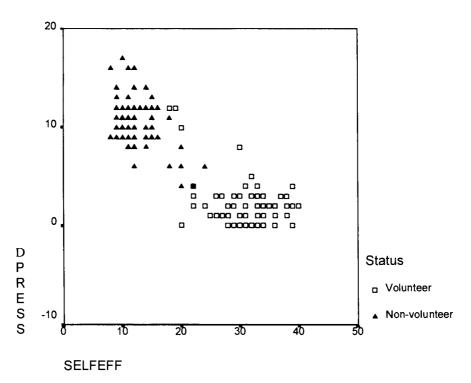


Figure One: Scatterplot of participants' reported self-efficacy and depression Figure One provides a scatter plot of the general findings in the present study. It highlights the distinction between volunteers and non-volunteers. The majority of volunteers are found to the lower right of the plot, and the majority of non-volunteers are in the upper left of the plot. Overall, volunteers have higher self-efficacy and lower depression when compared to non-volunteers.

CHAPTER FIVE

Discussion

5.1 General Findings

The study specifically investigated the hypothesis that older people who are volunteers will differ from older people who are not volunteers and that these differences will be best explained by self-efficacy and depression. The findings of the present study did support this study's hypothesis. The results indicate that volunteers and non-volunteers did differ significantly on the four predictor variables, namely self-efficacy, depression, age, and years of education. The findings further indicate that self-efficacy and depression were the two variables that best discriminated between volunteers and non-volunteers, with volunteers reporting significantly higher levels of self-efficacy and lower levels of depression as compared to non-volunteers. The results support the hypothesis that self-efficacy and depression make a significant and unique contribution to predicting volunteers and non-volunteers.

5.2 Self-efficacy

The significant contribution self-efficacy made to the prediction of group membership, that is volunteers and non-volunteers, indicates an association between volunteering and reported levels of self-efficacy. The average scores on the selfefficacy measure for the volunteer group is 31.34 as compared to 12.21 for the nonvolunteer group.

Past studies indicate that volunteering may foster perceived self-efficacy by providing opportunities for older individuals to undertake and successfully perform a number of tasks (Bandura, 1986; Fischer et al., 1991). The high levels of reported self-efficacy among volunteers may be due to volunteers having the chance to realize that they have the ability to help someone else control a stressful situation by using

problem-solving skills or other effective coping skills. Volunteering may also allow them to see themselves coping with the demands of the role of a volunteer. This may result in the volunteers realizing that they possess the coping skills needed to cope with problems in their own lives.

Past findings suggest that people with high self-efficacy beliefs tend to take on rather than avoid challenging tasks and they do not give up easily when faced with problems (Bandura, 1986; Bandura, 1993 & Wood & Bandura, 1989). The selfefficacy measure used in the present study identifies whether respondents tend to seek solutions if confronted with a problem or tend to avoid problems. The high scores on the self-efficacy measure among volunteers suggest that these individuals may be more likely to attempt to deal with situations rather than avoid them as they may feel they have the coping skills that are needed.

However, the nature of the present study does not distinguish between the present findings being interpreted as volunteers have higher self-efficacy or being a volunteer enhances self-efficacy. It only suggests an associated between volunteering and reported levels of self-efficacy.

5.3 Depression

The present findings also indicate a significant difference between volunteers and non-volunteers on reported levels of depression. Physical illness could not have been an influencing factor in the high level of reported depression amongst nonvolunteers, since all participants that were included in the analysis were healthy and did not report any major medical illness.

The measure used to assess depression in this study that is the GDS, considers a score greater than or equal to 11 as indication of a case of depression, while a score of 10 or less indicates the absence of depression (Laprise & Vezina, 1998). The

average scores for the volunteer group on the GDS was 2.02 indicating that they were not depressed. The average scores on the GDS for the non-volunteer group was 10.77, indicating mild depression. It is possible that people with mild depression do not tend to participate in volunteer work.

A possible explanation for a lower report of depressive symptoms among volunteers could be due to increased opportunities for social interaction. Engaging in volunteer work may have provided opportunities for increasing social networks such as establishing friendships with other volunteers. Added social support from new friendships could have helped buffer feelings of depression, thus resulting in lower reported levels of depression among older volunteers (Palmore et al, 1984).

The low depression reported amongst volunteers may also reflect that volunteer work can provide structure to a person's daily life and provide a means of achievement and personal identification. Engaging in volunteer work can strengthen a person's ties to the community and make him or her feel like an important member of the society and an important community resource (Braithwaite & Gibbon, 1987). It suggests that the participants who are volunteers gain satisfaction from being committed and involved in tasks and in turn feel more contented with their lives and less depressed. The higher levels of depression amongst non-volunteers suggest that these individuals may not have the opportunities to participate in productive activities that enables them to view themselves functioning effectively and producing useful outcomes.

Furthermore, the significant lower levels of reported depression among older volunteers suggest that volunteering may substitute a number of role losses in life. Volunteering may help older people regain some of the control and confidence that may have been lost due to role losses that tend to accompany later life such as the loss of previously held job position. It therefore appears that the present findings suggest that there may be an association between volunteering and reported levels of depression.

5.4 The relationship between self-efficacy and depression

The present findings also indicate that there is a significant negative relationship between self-efficacy and depression (r =-.884, p<0.01). That is, most volunteers' higher levels of reported self-efficacy are associated with lower levels of reported depressive symptoms while most non-volunteers' low levels of reported selfefficacy are associated with higher levels of depressive symptoms. These findings support past research that suggests that as feeling of control or perceived ability increases, older people experience fewer depressive symptoms and vice versa (Fry, 1986).

The self-efficacy measure used in this study consists of items assessing confidence in dealing with unexpected events and self-reliance on coping abilities to handle difficulties. On average, the volunteers felt more confident of their ability to cope in stressful situations. Volunteering could result in them feeling more competent and adequate and thus, less depressed. The high reported levels of self-efficacy and low reported levels of depression in volunteers and the low self-efficacy and high depression levels amongst non-volunteers suggests that the way one perceives his or her ability to cope with a situation may affect his or her feelings of competence and adequacy.

The present findings also provides support for past research which suggests that people's perception of their ability to cope with situations, influences their feelings of competency (Bandura, 1986; Brandstader & Rothermund, 1994; Dietz, 1996). Bandura (1977) argues that a person's sense of self-efficacy can determine

whether coping behavior is initiated. The high reported levels in self-efficacy among volunteers suggest that they believe they have the coping skills needed to handle stressful situations and their low reported levels of depression suggest that they are confident that they can initiate coping behavior if required. Thus, the findings appear to provide support for the rationale that volunteer work may be associated with increasing self-efficacy and decreasing depressive symptoms.

5.5 Age and Education

The results of the present study indicate that there is a significant difference between volunteers and non-volunteers in age and years of education. On average the number of years of education in the volunteer group was higher than the number of years of education in the non-volunteer group and volunteers were, on average, younger than non-volunteers. This finding supports past research which suggest that people who volunteered tend to be younger and more educated than people who did not volunteer (Fischer et al., 1991; Kincade et al., 1996; Krause, 1991) and that on average volunteers had a higher level of education compared to non-volunteers (Okun & Eisenberg, 1992). A possible explanation for the present results could be that participants who received more formal education when they were young continue to participate more frequently in mentally and physically stimulating activities even in their later years, thus accounting for most of the volunteers being more educated than the non-volunteers.

5.6 Limitations

It is evident that the present study was successful in establishing the importance of self-efficacy, depression, age and years of education in distinguishing between older people who volunteer and older people who do not volunteer. It is also apparent that the present findings suggest a negative association between self-efficacy and reported depressive symptomatology. However, any relationships or associations can only be implicated by the present findings and cannot be determined without further research.

The present findings seem to strongly support the concept of Bandura's selfefficacy theory (1977) that suggests that perceptions of self-efficacy can predict subsequent mood states and behaviors, as on average volunteers who reported high self-efficacy also tend to report low depression and vice versa for non-volunteers. Despite the significant support found in the present study, a thorough and accurate interpretation of the present results cannot be discussed without the acknowledgement of possible factors that limit the present findings. It is important that the limitations in the study are identified so that the findings reported can be placed in a proper context.

The present study used self-report questionnaires as the only source of information. Although using self-report questionnaires eliminated interviewer bias, the possibility of other biases cannot be overlooked. The present study used the Geriatric Depression Scale (GDS) (Brink et al., 1983) and The General Self-Efficacy Scale (Schwarzer et al., 1997) as they are both reliable and valid measures of depression and self-efficacy respectively.

However, it cannot be disputed that the use of self-report questionnaires does have a number of problems. Firstly, the significantly high correct classification of participants suggest that the four predictor variables are very accurate in discriminating between people who volunteer and people who do not volunteer, thus strongly supporting the hypothesis that these factors can predict accurately between the two groups. However, there could be other possibilities for such a high classification and reliance on only self-reports tend to make it difficult to accurately identify whether other factors made a significant contribution to the outcomes.

The general stability of participants' reported levels of self-efficacy and depression can also be questioned. A basic problem with self-report measures is the ability of the respondent to make accurate self-reports. Events or incidents that occur between the time something happens and the time it is recalled can affect the accuracy of an individual's memory and in turn his or her response to the questions. For example, the depression measure requires participants to rate their mood in reference to the past week, but there may have been a number of other factors other than participants' group status that could have influenced the ratings on the depression scale. An unpleasant experience may have caused a non-volunteer to rate his or her depression higher than it would normally be or a volunteer may have had a positive experience and rated his or her depression as lower than it may have been two weeks ago. As the present study did not use any measures to control for such possible contributing factors, its findings must be interpreted cautiously. It may be more beneficial for future studies to use measures of stressful life events to control for such factors and limit their influence. A more thorough investigation can provide a better understanding of the impact one's status that is, volunteer or non-volunteer, can have on their depression and self-efficacy.

Another possible factor that may have contributed to the results is participants' marital status. As marital status was not controlled for in the present study, it could have contributed to some of the differences found between volunteers and nonvolunteers. It could have been that many of the volunteers were still married and had the social support of their partner and this could have contributed to low levels of reported depressive symptoms.

There are a number of other factors that could have also influenced the results. For instance, the present study included participants from a wide age range of 50

years to 81 years. The wide age range may have included people from distinctly different age cohorts. The wide age group could account for differences in selfefficacy and depression among volunteers and non-volunteers. An alternative explanation for the significantly lower self-efficacy found among non-volunteer participants could be because they were on average older than the volunteer participants. The average age for the volunteers was 62.71 years compared to the average age of the non-volunteers which was 72.99 years. The non-volunteers may have felt less in control of their lives at all stages in their life not just when they became older. Compared to the fifty and sixty year old volunteers, the older nonvolunteers may have had more experiences in situations such as alienating jobs, social or political repression, and economic exploitation that may have contributed to them feeling less in control and more helpless. Thus, unless this possible influencing factor and others are investigated the present results cannot be seen as conclusive.

Another possibility is the influence of preexisting differences between the two groups on the present results. People with higher social status, who are better educated and who have higher sense of control or lower levels of distress may be more likely to become a volunteer, thus possibly accounting for some of the high levels of self-efficacy found among the participants who were volunteers. The differences in self-efficacy beliefs between volunteers and non-volunteers may be due to behavior patterns that were established earlier in life. For instance, the volunteer participants may have always had higher self-efficacy beliefs and effective coping skills to deal with stressors and this could have followed on in later life. The preexisting factors such as higher social status and higher sense of control may also predispose these individuals to have a history of volunteering. Thus, the present findings of high reported self-efficacy beliefs and low reported depressive symptoms

5.7 Implications and Future Directions

The discussion of the present study's limitations and possible influencing factors aimed to provide a more representative explanation of what was found in the present study. Despite the possible influence of other factors, the significant findings of the present study should not be minimized. The present study investigated the association between being a volunteer in later life and feelings of self-efficacy and depression and succeeded in identifying that there may be an association between being a volunteer and feelings of self-efficacy and depression. It has been successful in highlighting the potential role volunteering may have on the way older people feel about their coping abilities and in turn about themselves. As people who have stronger self-efficacy beliefs tend to feel more in control of their lives and more independent, it has significant impact on the potential role volunteering can have in promoting or maintaining greater independence in later life. Thus, it is imperative that the potentially important association between being a volunteer in later life and feelings of self-efficacy and depression should not be overlooked. The potential implications of the present study will further illustrate the significance of the present findings.

The significant difference in self-efficacy and depression between volunteers and non-volunteers accentuates the need for social policy makers to actively promote volunteering in later life. There is a need for social policy makers and society to encourage opportunities for older people to participate in voluntary activities.

The growing aging population in Australia has resulted in a number of concerns such as the financial costs needed to support an aging population. If policy makers utilize research that evidently highlights ways of maintaining a successful or healthy aging population, it could possibly reduce some of the concerns.

The cohorts that will constitute the majority of the aging population in the next few decades are the baby boomers. Many of these individuals possess skills, expertise and extensive experience and can be an asset to the community. The skills and experience of older people can prove valuable and can be used to help other social problems or issues. For instance older volunteers can use their life experiences and knowledge to work collaboratively with school enrichment programs to help children facing problems with school or home.

Community organizations could also provide older people with more opportunities to share their skills, knowledge and life experiences by involving them in community based projects. Many non-profit community organizations lack the human resources to develop and expand their services. If these organizations utilize the resources of older volunteers, it can result in beneficial effects for the volunteers as well as the wider community.

If policy makers in Australia start to realize the potential of tapping into such a rich source of resource, there is the potential of reducing some of the financial costs linked with the aging population. It has been established that volunteering has positive effects on one's well-being, self-confidence, self-efficacy, mood and health. Healthy, contented and independent elderly people will be less likely to access formal support or services. Older people who are more activity involved in the community are more likely to have access to informal support gained through their contacts with people in

the community and may be more likely to utilize formal support only when other forms of informal support are no longer sufficient to accommodate their needs.

The present findings provide further support for the suggestion that selfefficacy is correlated positively with the mental health of older adults. Self-efficacy may influence whether older people attempt to prevent their health problems by engaging in health-promoting behaviors. As poor health tends to result in more use of health services among older people, it has implications on health care costs. Thus, interventions such as volunteer work that can foster efficacy beliefs may motivate older people to increase health behaviors and thus improve health status. As health status is negatively correlated with visits to the general practitioner, an increase in efficacy beliefs for health-promoting behaviors may have an indirect negative effect on visits to the general practitioner. Thus, efforts to encourage volunteering in later life may help control health care costs by possibly reducing use of services.

The results of the study also have implications for another important issue among the older population. Many older people feel socially isolated and this may often lead to depression or even suicide. Despite the significant rates of suicide among the elderly population, suicide among older people is less recognized or acknowledged compared to suicide among younger people (Klinger, 1999). The present findings suggest that voluntary activities tend to promote social interaction and social networks. The significantly lower reported levels of depression among the older volunteer participants suggest that engaging in voluntary work may buffer feelings of depression and promote community involvement. If policy makers campaign towards actively encouraging all older people to engage in voluntary work, it can lead to an aging population that looks forward to their later life rather than dread it for fear of social isolation and dependency. If social and health policy makers

and society understand and encourage the importance of volunteering in promoting self-efficacy and sense of control and confidence in oneself, it could lead to more older people participating in voluntary work and playing an active and productive role in the community.

Besides social and health policy implications, the findings of the present study also have implications for future research. The present study has established its aim to investigate whether volunteering is associated with older people's sense of selfefficacy. Although other possible influencing factors have to be taken into consideration, the present study has established that volunteering may be positively associated with older people's sense of self-efficacy. The present findings can be seen as useful in establishing the possibility that providing support to others in the form of formal support can help older people regain their sense of confidence and control and in turn increase their self-efficacy beliefs. Future research should investigate whether being a volunteer fosters and maintains self-efficacy or whether the high levels of self-efficacy among volunteers are due to preexisting factors such as coping skills and high self-efficacy beliefs that tend to predispose people to become volunteers in later life. Empirical evaluation in the form of longitudinal studies can help provide more light on the association between volunteering in later life and self-efficacy.

Furthermore, as the present study has established the possibility of an association between volunteering, self-efficacy and depression, future studies can attempt to investigate whether volunteering does affect levels of self-efficacy and depression. A possible suggestion for future studies is to conduct interventions that recruit older people to randomized trials. Older people who have had no prior experience in volunteering can be randomly assigned to groups that are either control groups or experimental groups (the latter requiring them to participate in voluntary

activities). The levels of self-efficacy and depression can be measured pre and post intervention to investigate whether participation in the voluntary activities increased levels of self-efficacy and depression.

It is therefore evident that the present findings, though exploratory in nature, have a number of implications. It is important to realize the potential these implications have on improving the quality of life of older people.

5.8 Conclusion

Although losses in life cannot be controlled, their adverse impact can be buffered by increasing effective coping strategies and self-efficacy beliefs. The present study has provided evidence for the potential of volunteer work as one effective way of compensating for role losses in life by helping older people regain their self-efficacy beliefs in coping with stressors.

As society's perceptions of aging continue to change and the values of volunteering are emphasized, as well as education levels increasing, the number of older volunteers will continue to increase. The skills and experience of the present and future older population should be acknowledged and utilized as an important community resource. Increased community awareness of the potential of older people as a community resource needs to be established. More opportunities should be made available for further exploration of the implications and potential of volunteering

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Appendix A

COVER LETTER

Dear Sir/ Madam,

I am conducting a study as part of my Masters of Psychology Degree at Edith Cowan University. The aim of this research is to understand more about activities in older people.

A questionnaire will be provided for you to complete at your own time. I will be grateful if you could return the completed questionnaire within a week. The completed questionnaire can be returned to me, either by mail or I can collect it at a time or place that is convenient for you. If you wish to return the questionnaire by mail, a paid postage envelope will be provided. There are instructions provided on the questionnaire. However, if you have any questions, please feel free to contact me at the number provided below.

Your participation is voluntary. The information obtained in this study will remain confidential. A summary of the results of the study will be provided upon request.

If you have any queries about this study or about the questionnaire, please do not hesitate to contact me, or my university supervisor on the telephone number provided below.

Your participation will be sincerely appreciated.

Yours sincerely,

Anita Govindan 93104406

Dr Edward Helmes Department of Psychology Edith Cowan University 94005543

Appendix B

CONSENT FORM

have read the information above and I
gree to participate in this study. I am aware that participation is
oluntary and that I can withdraw from the study at any time. I
ealise that the research data collected may be published, provided
at I am not identifiable.
ignature of participant Date
lease send a summary of the results to
ddress:

Appendix C

GENERAL INSTRUCTIONS

I would like you to respond to all the statements by choosing the response which best applies to you. Please answer all the items by yourself. Please try to answer every item. If you have any queries about the questions, please do not hesitate to contact me on the number provided below.

Thank you for your participation.

ANITA GOVINDAN

93104406.

Appendix D **GENERAL INFORMATION**

Marital status: (Please tick)	single widowed defacto		married divorced	
How old are you?				
Sex: male ☐ fem	ale 🗖			
Highest Level of Ed	ucation: primary school	☐ high sch	ool tertiary	
	many years of education		-	
Have you any seriou	s health problems?			
	,			
Are you a volunteer	? Yes 🗆 No 🗖			
If yes, please state th	ne organisation for which	you work a	as a volunteer.	
Briefly describe the	work you do as a volunte	eer.		
How long have you	worked as a volunteer?			

Appendix E

THE GENERAL SELF-EFFICACY SCALE

(Schwarzer et al., 1997)

Please tick the answer that best applies to you.

1.	I can always manage to solve difficult problems if I try hard enough
	Not at all true \Barely true
2.	If someone opposes me, I can find means and ways to get what I want.
	Not at all true Barely true Moderately true Exactly true
3.	It is easy for me to stick to my aims and accomplish my goals.
	Not at all true Barely true Moderately true Exactly true
4.	I am confident that I could deal efficiently with unexpected events.
	Not at all true Barely true Moderately true Exactly true

5.	Thanks to my resourcefulness, I know how to handle unforeseen situations.					
		Not at all true Barely true Moderately true Exactly true				
6.	I can solve mo	st problems if I invest the ne	ecessary effort.			
		Not at all true Barely true Moderately true Exactly true				
7.	I can remain coping abilitie	alm when facing difficulties s.	because I can rely on my			
		Not at all true Barely true Moderately true Exactly true				
8.	When I am consolutions.	nfronted with a problem, I ca	an usually find several			
		Not at all true Barely true Moderately true Exactly true				
9.	If I am in a bir	nd, I can usually think of son	nething to do.			
		Not at all true Barely true Moderately true Exactly true				
10.	No matter wha	at comes my way, I'm usuall	y able to handle it.			
		Not at all true Barely true Moderately true Exactly true				

Appendix F

THE GERIATRIC DEPRESSION SCALE

(Brink, et al., 1983)

Choose the best answer for how you felt over the past week.

1.	Are you basically satisfied with your life?	Y/N
2.	Have you dropped many of your activities	
	and interests?	Y/N
3.	Do you feel that your life is empty?	Y/N
4.	Do you often get bored?	Y/N
5.	Are you hopeful about the future?	Y/N
6.	Are you bothered by thoughts you	
	can't get out of your head?	Y/N
7.	Are you in good spirits most of the time?	Y/N
8.	Are you afraid that something bad is	
	going to happen to you?	Y/N
9.	Do you feel happy most of the time?	Y/N
10	. Do you often feel helpless?	Y/N
11	. Do you often get restless and fidgety?	Y/N

12. Do you prefer to stay at home, rather than	
going out and doing new things?	Y/N
13. Do you frequently worry about the future?	Y/N
14. Do you feel you have more problems	
with memory than most?	Y/N
15. Do you think it is wonderful to be alive now?	Y/N
16. Do you often feel downhearted and blue?	Y/N
17. Do you feel pretty worthless the way you are now?	Y/N
18. Do you worry a lot about the past?	Y/N
19. Do you find life very exciting?	Y/N
20. Is it hard for you to get started in the morning?	Y/N
21. Do you feel full of energy?	Y/N
22. Do you feel that your situation is hopeless?	Y/N
23. Do you think that most people are better off	-
than you are?	Y/N
24. Do you frequently get upset over little things?	Y/N
25. Do you frequently feel like crying?	Y/N
26. Do you have trouble concentrating?	Y/N
27.Do you enjoy getting up in the morning?	Y/N

28. Do you prefer to avoid social gatherings? Y/N 29. Is it easy for you to make decisions? Y/N 30. Is your mind as clear as it used to be? Y/N

Thank you for taking the time to complete this questionnaire