



Exploring the Association Between Motivation, Self-Efficacy, and Behavior among College Students Participating in the Dementia-Friendly Guardian Angel Volunteer Program

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ABSTRACT

Background: As the population ages, promoting healthy aging among the elderly has become a top priority in elderly care. One major issue that has garnered significant attention is dementia and its prevention. Dementia, an irreversible cognitive condition, is no longer just an individual or family concern, but a societal and national challenge that requires collective effort. The Dementia-Friendly Guardian Angels initiative aims to educate the public about dementia, its warning signs, respecting human rights, and destigmatizing the condition. Given the social responsibility aspect, fostering awareness and enhancing participation among university students are considered crucial. This study, therefore, explores the motivations, self-efficacy, and behaviors of university students serving as Dementia-Friendly Guardian Angels.

Method: This study used a cross-sectional design and convenience sampling to recruit university students as participants. It looked at students' motivations for volunteering as Dementia-Friendly Guardian Angels, their self-efficacy in doing this work, and their level of involvement. The questionnaire covered topics like gender, age, university departments, club participation, volunteering experience, frequency of volunteering, part-time jobs, and religious beliefs, and included scales measuring motivation, self-efficacy, and behavior. The data was analyzed using SPSS 28.0 software, including descriptive statistics, *t*-tests, one-way ANOVA, and correlation analysis.

Results: A total of 246 participants were included in the study, comprising 24 males and 222 females. The results indicated that the average score for motivation among the participants was 49.31, while the average self-efficacy score was 36.76. Only 14 individuals (5.7%) reported serving as Dementia-Friendly Guardian Angels. Basic demographic attributes showed no association with serving as Dementia-Friendly Guardian Angels. However, motivations and self-efficacy related to serving as Dementia-Friendly Guardian Angels demonstrated significant positive correlations with actual behaviors.

Conclusion: Motivation and self-efficacy related to serving as Dementia-Friendly Guardian Angels exhibited a positive correlation with actual behavior. It is suggested that future efforts focus on enhancing motivation and self-efficacy among university students to promote their involvement as Dementia-Friendly Guardian Angels.

KEYWORDS: Dementia-Friendly Guardian Angel Volunteers, motivation, self-efficacy, behavior

INTRODUCTION

Taiwan's population is undergoing significant aging. The proportion of individuals aged over 65 within the total population surpassed 7% in 1993, marking the onset of an aging society. By 2018, this figure had soared to 14.6%, officially classifying Taiwan as an aged society. Projections indicate that by 2025, the percentage of individuals aged over 65 will exceed 20%, transitioning Taiwan into a super-aged society (National Development Council, 2024). As of February 2023, the proportion of individuals aged over 65 in Taiwan had already reached 17.8%, with an aging index of 153.83% (Department of Statistics, Ministry of the Interior, 2023), indicative of a faster aging rate compared to other nations. This demographic shift is accompanied by a surge in chronic diseases, physical debilitation, disabilities, and dementia cases. According to the Alzheimer's Disease International (ADI) World Alzheimer Report, the global prevalence of dementia surpassed 50 million in 2019, and was projected to escalate to 152 million by 2050, with one person diagnosed every three seconds. Dementia-related costs are anticipated to reach US\$1 trillion annually, doubling by 2030 (Alzheimer's Disease International, 2021). In Taiwan alone, approximately 270,000 individuals aged 65 and above are afflicted with dementia, reflecting a prevalence rate of 7.99%, which escalates with advancing age (Ministry of Health and Welfare, 2024). The healthcare demands for people with dementia far exceed those of ordinary adults and are notably more complex. Addressing how to reduce the risk of dementia in older adults and effectively providing dementia care, particularly utilizing volunteer resources, emerges as a critical topic in today's aged society.

In 2001, Taiwan enacted the "Volunteer Service Act," alongside the Ministry of Interior's introduction of the "Peaceful Plan." These initiatives aimed to instill in the public the belief that giving brings greater blessings and happiness than receiving, fostering the seeds of volunteerism. The goal was to disseminate the values of volunteer service and encourage active participation, thereby expanding social welfare initiatives and fostering greater societal harmony and dedication. Numerous colleges and universities across Taiwan have promoted volunteerism, integrating it into their curricula through service learning. This educational approach leverages societal resources as a platform for learning, enhancing students' educational experiences while nurturing citizenship skills, preparing them for future employment, and fostering cognitive and

psychosocial development (Hung et al., 2020). Today, on university campuses, students are not only encouraged to engage in volunteer services but also to integrate these experiences with their academic pursuits. By applying classroom knowledge to community service, students gain a deeper understanding of the practical relevance of their studies, creating new insights and experiences. This synergy fosters a mutually beneficial relationship among students, educational institutions, and communities, promoting a win-win-win scenario (Chang et al., 2010). The underlying purpose of promoting service learning is to encourage students to transcend individualism, overcome apathy and selfishness, and embrace a mindset of societal care, interaction, and service (Chang et al., 2010).

In the context of an aging society, promoting healthy aging and preventing disability among the elderly are increasingly vital objectives in health promotion for older adults (Tsai, 2019). Notably, there is a paucity of literature addressing the involvement and influencing factors of college students in programs such as the Dementia-Friendly Guardian Angel Volunteer initiative. Therefore, this study aimed to explore the motivation, self-efficacy, and behavior of college students participating in this volunteer initiative, as well as to investigate associations between these factors.

Literature Review

This study included a comprehensive literature review focusing on the current landscape concerning individuals with dementia, volunteer motivation, volunteer self-efficacy, and the behavior of participants in Dementia-Friendly Guardian Angel programs.

1. The current status of people with dementia

According to the Alzheimer's Disease International (ADI) World Alzheimer Report (2021), approximately 41 million out of the 55 million individuals worldwide living with dementia remain undiagnosed, constituting approximately 75% of the dementia population. In Taiwan, 291,961 individuals over 65 years old are living with dementia (7.71%). This translates to roughly 1 in 12 individuals having dementia, with the prevalence increasing to 1 in 5 among those older than 80 years old. The prevalence rate of dementia rises with age. Projections from

the Ministry of Health and Welfare suggest that the dementia population in Taiwan will surpass 470,000 by 2031, with 96% of cases occurring in adults over 65 years old. Additionally, there is a concerning trend of younger individuals being diagnosed with dementia (Alzheimer's Disease Association, 2021; Ministry of Health and Welfare, 2024). Therefore, initiatives like the Dementia-Friendly Guardian Angel program serve as crucial solutions to address the growing dementia population.

As the care needs of individuals with dementia continue to increase, the availability of caregivers becomes a pressing concern. Training of volunteers, families, and medical institutions provides a reliable support network. In Taiwan, dementia-friendly initiatives include creating accessible environments, establishing supportive organizations like care centers, involving churches and temples, and engaging volunteers in facilitating the participation of individuals with dementia in daily activities and community life (Health Promotion Administration, 2021). Dementia care should not be viewed as solely an individual responsibility but rather as a collective societal concern that requires the involvement of all citizens nationwide.

2. Volunteer Motivation

Fischer and Schaffer (1993) categorized motivations into eight types: altruistic, ideological, egoistic, material/rewards, status/rewards, social relationships, leisure time, and multiple motivations. This exploration of motivation classification underscores the complexity inherent in human motivations. It reveals that diverse behaviors can stem from the same motivation, while a single motivation can lead to varied behaviors. Consequently, clear classification of motivations is challenging. Nonetheless, at its core, motivation remains an internal driving force for external behavior, and volunteers' actions are influenced by their underlying motivations (Wu et al., 2017). Moreover, an individual's inclination to engage in volunteering is closely linked to age and social group affiliation. Research indicates that individuals within the same age cohort and social group often share similar motivations for volunteering (Cho et al., 2018).

One factor influencing participation in volunteer services is the "motivation model," which centers on personal motivation orientation with volunteer work as the goal. This includes aspects

such as acquiring new skills, self-development, demonstrating self-worth, fostering a sense of community mission, and reducing self-conflict and self-identity threats (Lee et al., 2019). Theories on participation motivation can be categorized into six types: the hierarchy of needs theory (Maslow), cognitive theory, self-attribution theory, self-efficacy theory, transformation theory, and socialization theory (Wu et al., 2017). Considering the information outlined previously, motivations for college students' participation in volunteering programs, such as the Dementia-Friendly Guardian Angel program, can be summarized as follows: (1) College students pursue self-established goals through volunteer services; and (2) Despite having progressed to higher-level psychological and spiritual needs, college students are still influenced by various factors such as their developmental environment and cognitive processes.

By the end of June 2023, Taiwan had recruited a total of 489,000 dementia-friendly guardian angel volunteers (Ministry of Health and Welfare, 2023). The Ministry of Health and Welfare (2022) highlighted that the role of these volunteers is to offer timely assistance to individuals with dementia and contribute to creating a dementia-friendly environment. While motivation often influences behavior, there is a scarcity of literature on the current status of college students' involvement in the Dementia-Friendly Guardian Angel program and their underlying motivations. Hence, this study was warranted in this area.

3. Volunteer Self-efficacy

Self-efficacy, introduced by Bandura in 1977, refers to an individual's belief in their ability to successfully accomplish assigned tasks or actions. Apart from influencing volunteers' attitudes in everyday life, self-efficacy plays a crucial role when volunteers engage in service activities, affecting their task selection, level of effort, cognitive processes, perseverance, and sustainability (Lee, 2019; Chen, 2013). Acting as a bridge between knowledge and action, self-efficacy impacts on personal motivation and behavior, subsequently influencing future actions (Bandura, 1986).

Self-efficacy is a personal belief, representing an individual's confidence in their highest abilities. It is a belief in a special situation that holds motivational power, but it does not necessarily reflect one's true capabilities. Self-efficacy can originate from intrinsic factors like

personal achievements and emotions, as well as from substitute experiences and external persuasion in the extrinsic environment. In the realm of volunteer service, individuals should embrace a mindset of selflessness, joy, and unwavering enthusiasm to drive themselves in providing services, thereby fostering happiness for both volunteers and those they serve. Throughout the service journey, experiences of self-enrichment, fulfillment of personal needs, and achievements in service can effectively enhance self-efficacy. Additionally, volunteers' motivation for service significantly correlates with their social problem-solving skills and self-efficacy (Lau et al., 2019). Acting as a bridge between motivation and behavior, self-efficacy plays a pivotal role. However, there is currently a lack of investigation into the motivation, self-efficacy, and behavior of dementia-friendly guardian angels.

4. Behavior of Dementia-Friendly Guardian Angels

The Dementia-Friendly Guardian Angel Volunteer program is open to the public with the aim of promoting accurate understanding of dementia and its warning signs, upholding human rights, and eradicating stigmatization. Upon completion of a one-hour online course, volunteers can download a certificate to become recognized as dementia-friendly guardian angels. This program welcomes volunteers of all genders and ages. At the end of June 2023, Taiwan had recruited a total of 489,000 dementia-friendly guardian angels (Ministry of Health and Welfare, 2023), and the Dementia Prevention and Care Policy and Action Plan 2.0 aims to increase this number by 60,000 volunteers annually (Ministry of Health and Welfare, 2020).

Statistics from the Ministry of Health and Welfare (2000) indicate that 70% of registered volunteer service members across various fields are women, with the majority being over 65 years old. The largest categories of volunteer service include health and welfare, followed by education. However, the participation of college students as dementia-friendly guardian angels has received little attention. Therefore, this study aimed to gather relevant information from college students on this matter.

METHODS

Study Design

This study utilized a cross-sectional research design and administered structured questionnaires, comprising self-compiled scales: 'Motivation to Serve as a Dementia-Friendly Guardian Angel,' 'Self-Efficacy of Serving as a Dementia-Friendly Guardian Angel,' and 'Behavior while Serving as a Dementia-Friendly Guardian Angel.' The aim was to investigate the motivations, self-efficacy, and involvement of college students as dementia-friendly guardian angels. Drawing from a nationwide pool of college students, the study enrolled a total of 246 participants.

Study Instruments

This study employed self-designed structured questionnaires to investigate the motivation, self-efficacy, and behavior associated with serving as a dementia-friendly guardian angel. Following the initial drafting of the questionnaires, five nursing faculties and experts specializing in dementia were invited to assess the content validity of the questionnaires using the Content Validity Index (CVI) method. Their feedback was used to refine the questionnaire content and language. The questionnaires are summarized as follows:

1. Basic Demographics: Gender, Age, College Department, Club Participation, Volunteer Service, Frequency of Volunteering, Part-Time Employment Status, and Religious Beliefs.
2. Motivation to Serve as a Dementia-Friendly Guardian Angel: Assessed with 12 questions rated on a 5-point Likert scale, resulting in a total score ranging from 12 to 60 points. Higher scores indicate stronger motivation. The CVI was 1.0, and Cronbach's α was 0.95, indicating excellent reliability and validity.
3. Self-Efficacy of Serving as a Dementia-Friendly Guardian Angel: Assessed with 9 questions rated on a 5-point Likert scale, yielding a total score ranging from 9 to 45 points. Higher scores denote greater self-efficacy. The CVI was 0.99, and Cronbach's α was 0.96, indicating excellent reliability and validity.
4. Behavior Assessment: Consisted of two questions regarding whether participants served as dementia-friendly guardian angels and the frequency of their participation in dementia-friendly services over the past year.

Study Procedures

Following approval by the Chang Gung Medical Institutional Review Board (IRB case number: 202301184B0), college students were recruited through various channels, including school mailboxes, social media websites, and direct outreach to instructors for participant recruitment. Conflict of interest concerns were not identified. Subsequently, the principal investigator provided an overview of the study objectives and procedures to the participants. Upon comprehension, college students were invited to complete the questionnaire. To ensure participant confidentiality and rights, all information obtained was anonymized for academic research purposes. Following data collection, descriptive statistics, t-tests, one-way analysis of variance, and correlation analyses were conducted using SPSS 28.0 statistical software.

RESULTS

This study is divided into three sections aligned with the research objectives: understanding the basic demographics of the participants; exploring their motivation, self-efficacy, and behavior as dementia-friendly guardian angels; and analyzing the correlations among participant demographics, motivation, self-efficacy, and behavior in this role.

Basic Demographics of the Study Participants

For the basic demographics of the study participants, categorical variables are presented in frequency distribution and percentage, while continuous variables are represented by mean and standard deviation (Table 1). The majority of participants were female, comprising 222 individuals (90.2%), and 24 were male (9.8%). Regarding class standing, there were 65 freshmen (26.4%), 6 sophomores (2.4%), 75 juniors/1st year of a two-year technical program (30.5%), and 100 seniors/2nd year of a two-year technical program (40.7%). In terms of club participation, the majority (152 participants or 61.8%) did not engage in clubs, while 94 (38.2%) reported club involvement. Among the 92 participants who provided the name of the club they belonged to, 51 (55.4%) participated in non-service clubs, and 41 (44.6%) engaged in service clubs. Regarding volunteering experience, 160 participants (65.0%) had never served as volunteers, while 122 (49.6%) had. Among those who had volunteered, the average service frequency was 2.1 times per month ($SD = 3.0$). In terms of part-time employment, 124 participants (50.4%) did not have

part-time jobs, while 122 (49.6%) did. Regarding religious beliefs, the majority (135 individuals or 54.9%) had none, while 26 (10.6%) identified their religious belief as Buddhism. The mean age of participants was 20.2 years ($SD = 1.4$).

Research Participants' Motivation, Self-efficacy, and Behavior in Serving as Dementia-Friendly Guardian Angels

As indicated in Table 2, in terms of motivation, participants displayed a relatively high mean total motivation score of 49.31 ($SD = 8.26$) with a range of 12–60, indicating a strong desire to serve as dementia-friendly guardian angels. The top three highest-scoring items were "Enhancing cooperative skills" ($M = 4.27, SD = 0.78$), "Achieving a sense of accomplishment" ($M = 4.26, SD = 0.76$), and "Serving others" ($M = 4.22, SD = 0.82$). Conversely, the three items with the lowest scores were "Serving the organization" ($M = 3.89, SD = 0.91$), "Building friendships" ($M = 3.89, SD = 0.93$), and "Recognition by family members" ($M = 3.89, SD = 0.99$).

In terms of self-efficacy, the participants exhibited a mean total efficacy score of 36.76 ($SD = 6.14$), ranging from 13 to 45. This suggests a moderate to high level of self-efficacy in serving as dementia-friendly guardian angels. The three items with the highest scores were "When faced with tasks beyond my current abilities as a dementia-friendly guardian angel, I persist until I acquire the necessary skills" ($M = 4.22, SD = 0.73$); "Upon deciding to join the Dementia-Friendly Guardian Angel program, I was confident in my ability to take action" ($M = 4.18, SD = 0.73$); and "I actively engage in service activities as a dementia-friendly guardian angel, persisting through challenges to achieve goals" ($M = 4.16, SD = 0.75$). Conversely, the three items with the lowest scores were "I have confidence in fulfilling my role as a dementia-friendly guardian angel" ($M = 3.84, SD = 0.84$); "As a dementia-friendly guardian angel, I trust in my ability to handle emergencies effectively" ($M = 4.00, SD = 0.85$); and "I believe I can accurately complete tasks assigned to me as a dementia-friendly guardian angel" ($M = 4.05, SD = 0.77$) (see Table 3).

Among the participants, only 14 (5.7%) identified as dementia-friendly guardian angels, while the vast majority ($n = 231, 94.3%$) did not. For those who were dementia-friendly guardian

angels, their average participation in dementia-friendly services over the past year was merely 0.7 times ($SD = 1.3$), indicating a notably low level of engagement in these services (see Table 4).

Correlation Between Participants' Basic Demographics, Motivation to Serve as a Dementia-Friendly Guardian Angel, Self-efficacy, and Behavior

There were two male participants serving as dementia-friendly guardian angels, constituting 14.3%, and 12 females, representing 85.7% of the total. Additionally, 22 (9.5%) male participants were not dementia-friendly guardian angels; neither were 210 female participants (90.5%). Results from the Chi-square test indicated no significant difference between gender and serving as dementia-friendly guardian angels ($\chi^2 = 0.35, p = 0.63$). Similarly, no statistically significant differences were found in class standing, club participation, involvement in service clubs, volunteering status, part-time employment, religious beliefs, and serving as a dementia-friendly guardian angel ($\chi^2 = 2.20, 0.87, 2.81, 0.27, 0.00, 0.87; p = 0.53, 0.40, 0.13, 0.78, 1.00, 0.41$) (see Table 5).

The correlation matrix (Table 6) reveals that age showed no significant correlation with serving as a dementia-friendly guardian angel or the number of service participations ($r = 0.033, -0.045; p > 0.05, p > 0.05$). Similarly, the frequency of volunteering demonstrated no significant relationship with serving as a dementia-friendly guardian angel or the number of service participations ($r = -0.126, -0.045; p > 0.05, p > 0.05$). Conversely, motivation exhibited a significant positive correlation with both serving as a dementia-friendly guardian angel and the number of service participations ($r = 0.138, r = 0.146; p < 0.05, p < 0.05$). Similarly, self-efficacy displayed a significant positive correlation with both serving as a dementia-friendly guardian angel and the number of service participations ($r = 0.167, r = 0.169; p < 0.01, p < 0.01$). Moreover, a significant positive correlation was observed between serving as a dementia-friendly guardian angel and the number of service participations ($r = 0.404; p < 0.001$).

DISCUSSION

Discussion of Motivation, Self-Efficacy, and Behavior of College Students Engaged as Dementia-Friendly Guardian Angels

Based on the findings of this study, the primary motivations for college students to engage in dementia-friendly services were "Achieving a sense of accomplishment," "Serving others," and "Enhancing cooperative skills." Conversely, the least influential motivations were "Serving the organization," "Building friendships," and "Recognition by family members." Among college students, the primary aim of participating in dementia volunteer services was to serve others and foster personal growth, aligning with prior research findings by Wu (2017). Regarding other motivations for college students engaging as dementia-friendly guardian angels, the results mirrored past studies on college student volunteer service motivations (Changliao, 2012; Wu, 2017; Lee, 2019; Lin, 2023), indicating high motivation scores; however, building interpersonal relationships dominated non-medical volunteer services.

In the self-efficacy analysis, the top three items rated by participants were "I actively engage in service activities as a dementia-friendly guardian angel, persisting through challenges to achieve goals," "When faced with tasks beyond my current abilities as a dementia-friendly guardian angel, I persist until I acquire the necessary skills," and "Upon deciding to join the Dementia-Friendly Guardian Angel program, I was confident in my ability to take action." Conversely, the three lowest-rated items for self-efficacy were "I have confidence in fulfilling my role as a dementia-friendly guardian angel," "As a dementia-friendly guardian angel, I trust in my ability to handle emergencies effectively," and "I believe I can accurately complete tasks assigned to me as a dementia-friendly guardian angel." These results suggest that college students were highly motivated to engage in dementia-friendly behaviors and exhibited persistence, but they may require additional support and training to bridge the gap between their confidence and their performance expectations. These findings align with those of Lin (2023).

In terms of behavior, the analysis revealed that the majority of participants (94.3%) did not engage as dementia-friendly guardian angels, with only a small proportion (5.7%) involved in dementia-friendly services. However, as there are currently no specific surveys regarding college

students' involvement as dementia-friendly guardian angels, direct comparison of the data is not feasible. Nonetheless, this rate appears lower than the general participation rate in medical volunteerism (Changliao, 2012; Lin, 2023). These findings underscore the limited engagement of college students in dementia-friendly services, highlighting the need for increased promotion, encouragement, and support from relevant organizations to boost participation rates among college students.

Discussion of Factors Related to Dementia-Friendly Service Behavior

The results of this study indicated that "gender," "class standing," "club participation," "involvement in service clubs," "volunteering status," "part-time employment," and "religious beliefs" did not exhibit significant associations with the behavior of serving as a dementia-friendly guardian angel. However, data from the Ministry of Health and Welfare (2021) suggest that a majority of volunteers across diverse sectors are women. This discrepancy in findings could be attributed to the focus of our study solely on college students, thus yielding different results.

The findings of this study demonstrated a positive correlation between motivation and the behavior of serving as dementia-friendly guardian angels. This aligns with previous research by Wu et al. (2017), which revealed the impact of volunteer motivation on actual participation behavior. Similarly, other studies have underscored the significance of personal motivational orientation in engaging in volunteer services (Lee et al., 2019, Song & Chien, 2023). These findings collectively emphasize the crucial role of motivation in influencing behaviors related to serving as a dementia-friendly guardian angel or engaging in volunteer activities.

In this study, participants' self-efficacy showed a positive correlation with the behavior of dementia-friendly guardian angels. Several scholars have noted that aside from influencing volunteers' attitudes in daily life, self-efficacy also affects various aspects of volunteer services, including task selection, effort level, cognitive processes, response patterns, persistence, and sustainability (Lee, 2019; Chen, 2013). Therefore, the findings of this study are in line with previous research by Lee (2019) and Chen (2013), underscoring the significance of self-efficacy as a crucial factor in both dementia-friendly guardian angel behavior and volunteer engagement.

CONCLUSIONS

This study enrolled 246 participants, predominantly female, with motivation and self-efficacy levels for serving as dementia-friendly guardian angels ranging from moderate to high. A mere 5.7% of participants actually served in this capacity. Basic demographic factors showed no significant association with serving as a dementia-friendly guardian angel. Nonetheless, higher motivation and self-efficacy were correlated with a greater likelihood of engaging in this role. Overall, the findings of this study suggest that individuals with stronger motivation and higher self-efficacy in becoming dementia-friendly guardian angels are more inclined to actively participate and provide services.

Limitations and suggestions

As the questionnaire survey primarily targeted nursing students, with fewer participants from other departments, the study's findings may not be entirely generalizable to other fields. Future research should aim to diversify the participant pool by including college students from various departments. Additionally, considering the limited number of participants serving as dementia-friendly guardian angels in this study and the exclusive use of quantitative analysis without qualitative interviews, it is advisable for future studies to incorporate qualitative interviews. This approach would offer a deeper understanding of factors associated with serving as dementia-friendly guardian angels.

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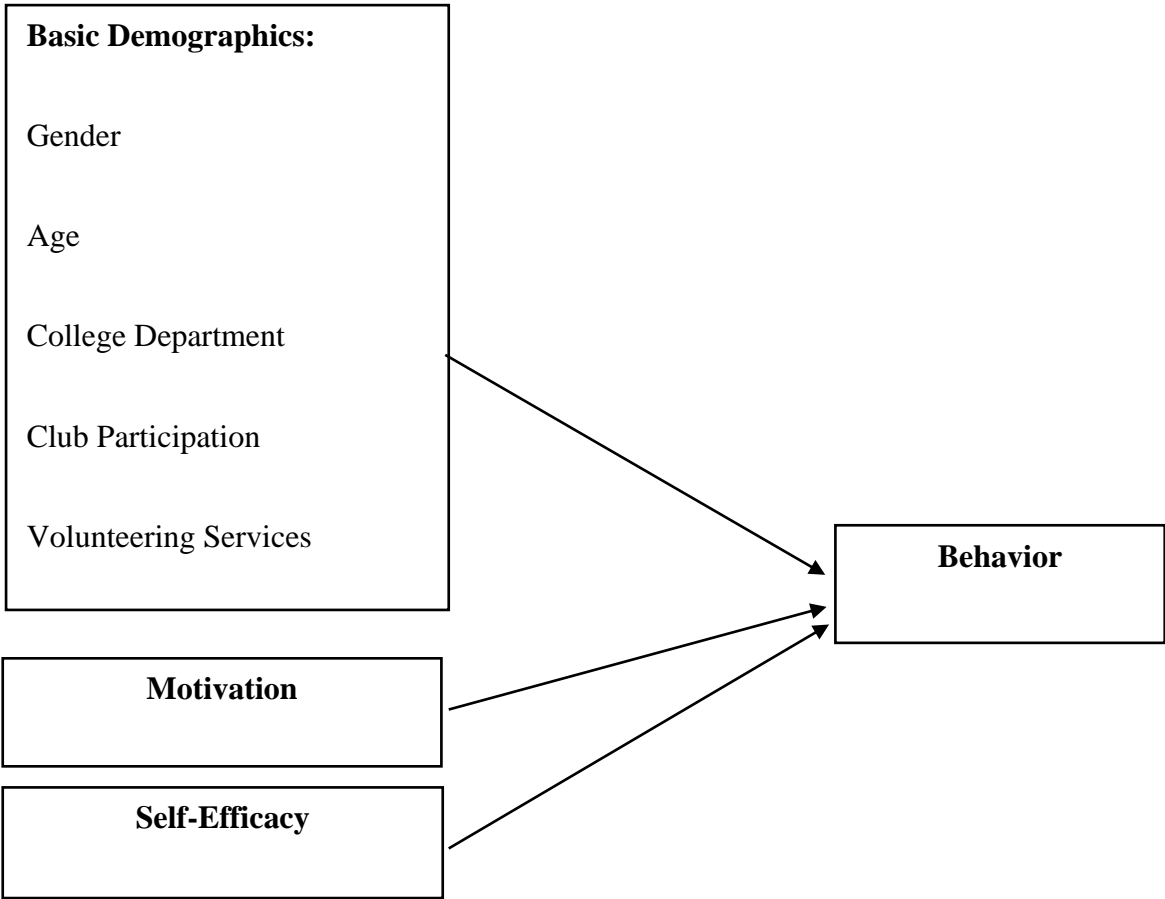


Figure 1. Research Framework

Table 1. Basic Demographics of Study Participants (N = 246)

Variable	<i>n</i>	%	<i>Mean</i>	<i>Standard Deviation</i>
Gender				
Male	24	9.8%		
female	222	90.2%		
Age			20.2	1.4
Class Standing				
Freshman	65	26.4%		
Sophomore	6	2.4%		
Junior/1 st year of two-year technical program	75	30.5%		
Senior/2 nd year of two-year technical program	100	40.7%		
Club Participation				
No	152	61.8%		
Yes	94	38.2%		
Club Types				
Non-service clubs	51	55.4%		
Service clubs	41	44.6%		
Volunteering Services				
No	160	65.0%		
Yes	122	49.6%		
Frequency of volunteering (times/month)			2.1	3.0
Part-time employment				
None	124	50.4%		
Yes	122	49.6%		
Religious Belief				
None	135	54.9%		
Buddhism	26	10.6%		
Taoism	67	27.2%		
Catholic	3	1.2%		
Christianity	13	5.3%		
I-Kuan Tao	2	0.8%		

Table 2. Participants' Motivations for Serving as Dementia-Friendly Guardian Angels (N = 246)

Item	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Standard Deviation</i>
1. Serving others	1.0	5.0	4.22	0.82
2. Serving the organization	1.0	5.0	3.89	0.91
3. Fulfilling social responsibilities	1.0	5.0	4.18	0.82
4. Acquiring knowledge	1.0	5.0	4.20	0.78
5. Developing skills	1.0	5.0	4.21	0.83
6. Achieving a sense of accomplishment	1.0	5.0	4.26	0.76
7. Broadening the scope of life experiences	1.0	5.0	3.98	0.86
8. Building friendships	1.0	5.0	3.89	0.93
9. Engaging with the public and society	1.0	5.0	4.11	0.83
10. Recognition by service recipients	1.0	5.0	4.21	0.84
11. Recognition by family members	1.0	5.0	3.89	0.99
12. Enhancing cooperative skills.	1.0	5.0	4.27	0.78
Total motivation score	12.00	60.00	49.31	8.26

Table 3. Self-Efficacy of Participants Serving as Dementia-Friendly Guardian Angels (N = 246)

Item	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Standard Deviation</i>
1. I have confidence in fulfilling my role as a dementia-friendly guardian angel.	2.0	5.0	3.84	0.84
2. I believe I can accurately complete tasks assigned to me as a dementia-friendly guardian angel.	2.0	5.0	4.05	0.77
3. I actively engage in service activities as a dementia-friendly guardian angel, persisting through challenges to achieve goals.	1.0	5.0	4.16	0.75
4. As a dementia-friendly guardian angel, I am resilient and do not easily give up when faced with difficulties.	1.0	5.0	4.11	0.81
5. When faced with tasks beyond my current abilities as a dementia-friendly guardian angel, I persist until I acquire the necessary skills.	1.0	5.0	4.22	0.73
6. In the face of setbacks while serving as a dementia-friendly guardian angel, I am motivated to work even harder.	1.0	5.0	4.11	0.78
7. Upon deciding to join the Dementia-Friendly Guardian Angel program, I was confident in my ability to take action.	2.0	5.0	4.18	0.73
8. I set goals for myself as a dementia-friendly guardian angel and have the capability to reach them.	1.0	5.0	4.09	0.77
9. As a dementia-friendly guardian angel, I trust in my ability to handle emergencies effectively.	1.0	5.0	4.00	0.85
Total self-efficacy score	13.00	45.00	36.76	6.14

Table 4. Participants' Behavior as Dementia-Friendly Guardian Angels (N = 246)

Variable	<i>n</i>	<i>%</i>	<i>Mean</i>	<i>Standard Deviation</i>
Dementia-Friendly Guardian Angel Behavior				
None	232	94.3		
Yes	14	5.7		
Number of times participating in services as dementia-friendly guardian angels in the past year			0.7	1.3

Table 5. Differences in Dementia-Friendly Guardian Angel Participation Across Participants' Basic Demographics (N = 246)

Variable	Dementia-Friendly Guardian Angel		Non-Friendly Angel		χ^2	<i>p</i>
	<i>n</i>	%	<i>n</i>	%		
Gender						
Male	2	14.3	22	9.5	0.35	0.63
Female	12	85.7	210	90.5		
Class Standing						
Freshman	2	14.3	63	27.2	2.20	0.53
Sophomore	0	0.0	6	2.6		
Junior/1st year of two-year technical program	4	28.6	71	30.6		
Senior/2nd year of two-year technical program	8	57.1	92	39.7		
Club Participation						
No	7	50.0	145	62.5	0.87	0.40
Yes	7	50.0	87	37.5		
Service clubs						
No	6	85.7	45	52.9	2.81	0.13
Yes	1	14.3	40	47.1		
Volunteering Services						
No	10	71.4	150	64.7	0.27	0.78
Yes	4	28.6	82	35.3		
Part-time Employment						
No	7	50.0	117	50.4	0.00	1.00
Yes	7	50.0	115	49.6		
Religious Belief						
No	6	42.9	129	55.6	0.87	0.41
Yes	8	57.1	103	44.4		

Table 6. Correlation Matrix of Participants' Basic Demographics, Motivation, Self-Efficacy, and Serving as a Dementia-Friendly Guardian Angel (*N* = 246)

	1	2	3	4	5	6
1. Age	1					
2. Volunteering Frequency	0.040	1				
3. Motivation	-0.086	0.178	1			
4. Self-efficacy	-0.057	0.105	0.788***	1		
5. Dementia- friendly guardian angel	0.033	-0.126	0.138*	0.167**	1	
6. Number of Participations in Services	-0.045	-0.045	0.146*	0.169**	0.404***	1