Factors Affecting Willingness of Direct Care Workers to Engage in Elderly Care

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Abstract
Direct care workers are the main workforce in long-term care in Taiwan. However, few direct care workers desire to enter or stay in this field. This study aims to explore the factors influencing direct care workers’ elderly care willingness. A cross-sectional design was used in the present study. Stratified random sampling was utilized to select samples from a southern city in Taiwan. Overall, 207 participants completed the questionnaire, including providing demographic data and answering all questions on the Older People Scale and the Willingness Toward Elderly Care Scale. An independent sample t-test, one-way analysis of variance (ANOVA), Pearson’s correlation coefficient, and multiple regression analyses were used to examine the associations among the study variables. Direct care workers’ elderly care willingness was significantly influenced by junior high school (β = .023, p = .047), hourly wage (β = .148, p = .037), and appearance and physical attitude toward older adults (β = .302, p = .002). These factors explained 15.4% of elderly care willingness. In conclusion, it is critical to cultivate positive attitudes toward older adults and nurture the appropriate understanding of aging to avoid stereotypes and enhance the willingness of direct care workers to care for older adults. Furthermore, providing a more flexible schedule and additional opportunities to receive better compensation will increase the care willingness of direct care workers. It is suggested that the on-the-job training about caring for older people that aims to develop positive attitudes toward older adults and awareness of age stereotypes are required. These findings provide critical information for the retention and recruitment of the workforce to care for older adults.

Keywords: direct care workers, attitudes toward older adults, elderly care willingness

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1. Introduction

In 2018, the percentage of Taiwanese older people aged 65 and over was 14%, and according to the definition provided by the World Health Organization [1], Taiwan was officially declared as an aged society. Taiwan has become one of the fastest-aging countries worldwide. Thus, the government should provide adequate direct care workers for older adults who need long-term care (LTC) in Taiwanese society. Increasing the willingness to care in the LTC workforce demands immediate attention.

A change in the family structure has meant that most informal family caregivers are unable to take care of the older people in their family alone [2]. The importance of direct care workers has attracted increasing attention [3]. However, the job of direct care workers has been regarded as a low wage, low social status, and poor working environment job [4], which has led to few people desiring to become direct care workers in LTC [5].

Studies have shown that society has a stereotype against older adults, which has a negative influence on their well-being [6]. Nursing students’ attitudes toward older adults are associated with their choice to care for older people in the future [7]. The most important factors that deter caring for older adults are ageism and anxiety about aging [8]. The Taiwanese government had trained over 50,000 direct care workers in Taiwan by 2018, but only 21% wished to enter the LTC system after training, according to a report of the Ministry of Health and Welfare, Taiwan [9]. The report showed that most direct care workers have no interest in taking part in the geriatric care system. Thus, direct care workers’ elderly care willingness in the LTC care system becomes a major issue in Taiwan. However, few studies investigated the factors affecting willingness of direct care workers to work with older adults. Therefore, this study will explore the factors that affect direct care workers’ willingness to engage in elderly care.

1.1. Attitudes toward Older Adults

Attitudes toward older adults are usually examined by individuals’ levels of agreement and disagreement with positive and negative statements about older adults [10]. Lu and Kao [11] explored Taiwan’s attitude toward older adults and developed a Chinese version of a scale that applied to all domestic age groups and was closely
related to Taiwan’s social reality. Negative attitudes toward older people have been shown to negatively influence on older adults’ well-being [6]. Stereotypes which exist in LTC systems caused senior adults to be treated unfairly [12]. Gebremariam and Sadana [13] demonstrated that some seniors have experienced care without dignity during caring process.

Additionally, Liou [14] indicated that most nursing students in Taiwan viewed aging as becoming a frail and sick older adult using walking aids, and showed that they did not have interest in choosing geriatrics as their future career. Liu et al. [8] showed that nursing students had less interest in working with older adults and were associated with ageist attitudes toward older adults. Shinan-Altman et al. [5] indicated that ageism and no interest in caring for older adults caused a manpower shortage in LTC.

1.2. Willingness to Care

Past studies that have examined elderly care willingness have primarily focused on healthcare workers or nursing students. However, it may be beneficial to explore direct care workers because they are the main manpower available to care for older adults. Unfortunately, there were few direct care workers willing to enter or stay in the LTC system [4].

Willingness to care for older adults refers to the willingness to voluntarily perform care for the older adults [15]. Morgan et al. [10] showed that frontline care workers’ retention was related to higher remuneration and increased promotion opportunities. Other study demonstrated that flexible working hours could reduce turnover of nurses’ aides [16]. Kim and Kim [17] also indicated that reasonable workloads could enhance job satisfaction and improve direct care workers’ retention. Kim and Kim [17] showed that home care workers in Korea had high job satisfaction. This could be because most direct care workers are older with relatively low education levels, making it difficult for them to change jobs [17]. Moreover, Kim and Jang [15] also showed that positive attitudes toward older people were associated with elderly care willingness. Won and Jang [18] demonstrated that reducing prejudice against older people and cultivating positive attitudes toward older adults could enhance nursing students’ care willingness.

Since there have been few studies on direct care workers to date, the purpose of this study is to provide basic information for workforce training strategies to improve preference to care for older people by identifying the factors that influence direct care workers’ elderly care willingness.

2. Materials and Methods

2.1. Research Design and Sample Setting

This study used a cross-sectional research design and collected data using self-administered questionnaires. The target population consisted of direct care workers in a southern city in Taiwan. These care workers were from home-based and community-based services and institutions. This study used stratified sampling and conducted a questionnaire survey. A self-administered questionnaire was distributed to 250 direct care workers in the city.

2.2. Instruments

The online questionnaire had three sections: 1) questions about socio-demographic characteristics, 2) direct care workers’ attitudes toward older adults, and 3) questions about one’s elderly care willingness. Socio-demographic data included participants’ gender, age, educational level, job tenure, working hours per week, and payment system.

Direct care workers’ attitudes toward older adults were collected using the 22-item “Older People Scale” (OPS) developed by Lu and Kao [11]. It included four facets of attitudes: appearance and physical, psychological and cognitive, interpersonal relations and social participation, and work and economic safety. Each item in the OPS was rated on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree). Higher aggregated scores indicated more positive attitudes toward older adults. Cronbach’s alpha was 0.91 for this instrument.

Direct care workers’ willingness to engage in elderly care was measured using the 15-item Willingness Toward Elderly Care Scale developed by Liu [19]. This assessment was validated in previous research and yielded acceptable internal consistency coefficients (Cronbach’s α = 0.84) [13]. Responses are recorded on a five-point Likert scale ranging from 1 (totally disagree) to 5 (totally agree). Items 3, 6, 7, 9, 10, 12, and 14 were negatively worded. Accordingly, in the present study, the responses recorded for these items were reverse-coded prior to data analysis. The possible total scores ranged from 15 to 75. Higher scores indicate greater care willingness. Cronbach’s alpha in this study was 0.85.

2.3. Data Analysis

SPSS version 20.0 was conducted to analyze the data. Descriptive statistics were used to examine the participants’ demographic. Attitudes toward older adults and elderly care willingness were examined using means, standard deviations, and percentages. Independent-samples t-test, one-way analysis of variance (ANOVA), Pearson’s product-moment correlation, and multiple linear regression analyses were used to investigate the relationships between the study variables. The level of significance was set at p < 0.05.

3. Results

3.1. General Characteristics of Participants and Descriptive Analyses

As shown in Table 1, 207 direct care workers participated in this study. The majority were female (87.4%), and 162 (78.3%) were over 40 years old. In total, 154 (74.4%) direct care workers had high school qualifications. Among these direct care workers, 77 (37.6%) had over six years of caring experience. There were 130 (62.8%) direct care workers working between 30 and 45 hours per week. Most direct care workers 127 (61.4%) preferred hourly wages. It can be inferred from Table 1 that only “payment system” (p = .028) showed significant group differences regarding elderly care willingness.
3.2. The Subjects’ Attitude toward Older Adults and Willingness to Care

The subjects’ point mean score for elderly care willingness was 3.91±.58. Appearance and physical attitudes toward older adults was 4.12±1.18, psychological and cognitive attitudes toward older adults was 4.18±1.18, interpersonal relations and social participation attitudes toward older adults was 4.00±1.62, and work and economic safety attitudes toward older adults was 3.98±1.24 (Table 2).

3.4. Prediction of Direct Care Workers’ Elderly Care Willingness

Table 4 presented that the best predictors of direct care workers’ elderly care willingness were junior high school (β = .203, p = .047), hourly wage (β = .148, p = .045), and appearance and physical of attitudes toward older adults (β = .302, p = .002). These explained 15.4% of the total variance.

Table 1. Descriptive statistics for predictor and outcome variables (N=207)

| Variables               | Elderly care willingness |
|------------------------|--------------------------|
|                        | N | % | Mean   | SD | F/t | P    |
| Gender                 |   |   |        |    |     |      |
| Male                   | 26 | 12.6 | 3.75 | .63 | -1.56 | .119 |
| Female                 | 181 | 87.4 | 3.94 | .57 |     |      |
| Age                    |   |   |        |    |     |      |
| ≤ 39                   | 45 | 21.7 | 3.88 | .72 | 2.04 | .133 |
| 40-49                  | 57 | 27.5 | 3.80 | .61 |     |      |
| ≥ 50                   | 105 | 50.8 | 3.98 | .48 |     |      |
| Educational Level      |   |   |        |    |     |      |
| Elementary school      | 20 | 9.7  | 3.73 | .57 |     |      |
| Junior high school     | 33 | 15.9 | 4.03 | .56 |     |      |
| High school            | 86 | 41.5 | 3.90 | .55 |     |      |
| College school         | 68 | 32.9 | 3.92 | .62 |     |      |
| Job tenure             |   |   |        |    |     |      |
| <1 yr.                 | 26 | 12.7 | 3.82 | .57 | .54  | .655 |
| 1-3 yrs.               | 55 | 26.8 | 3.97 | .55 |     |      |
| 4-5 yrs.               | 47 | 22.9 | 3.86 | .63 |     |      |
| > 6 yrs.               | 77 | 37.6 | 3.93 | .57 |     |      |
| Weekly working hrs.    |   |   |        |    |     |      |
| <30 hrs.               | 45 | 21.7 | 3.79 | .57 | 1.85 | .160 |
| 30-45 hrs.             | 130 | 62.8 | 3.97 | .59 |     |      |
| >45 hrs.               | 32 | 15.5 | 3.85 | .55 |     |      |
| Payment system         |   |   |        |    |     |      |
| Monthly salary         | 80 | 38.6 | 3.79 | .67 | -2.22 | .028* |
| Hourly wage            | 127 | 61.4 | 3.99 | .51 |     |      |

Note: *p<.05; **p<.01; ***p<.001.

Table 2. Degree of attitudes toward older people and elderly care willingness (N=207)

| Variables                                             | Number of items | Point M±SD | Range |
|-------------------------------------------------------|-----------------|------------|-------|
| Elderly care willingness                               | 15              | 3.91±.58   | 1-5   |
| Attitudes toward older adults (Appearance and physical)| 5               | 4.12±1.18  | 1-7   |
| Attitudes toward older adults (Psychological and cognitive)| 7              | 4.18±1.18  | 1-7   |
| Attitudes toward older adults (Interpersonal relations and social participation)| 7              | 4.00±1.62  | 1-7   |
| Attitudes toward older adults (Work and economic safety)| 3               | 3.98±1.24  | 1-7   |

Note: Point M±SD: M±SD/Number of Item.

3.3. Correlation Analysis

Table 3 presented the Pearson’s correlation coefficients for the main study variables. Elderly care willingness positively correlated with appearance and physical attitudes toward older adults (r = .229, p < .05). Additionally, appearance and physical attitudes toward older adults positively correlated with psychological and cognitive attitudes (r = .638, p < .01), interpersonal relations and social participation attitudes (r = .546, p < .01), and work and economic safety attitudes (r = .449, p < .01). Psychological and cognitive attitudes toward older adults were positively correlated with interpersonal relations and social participation attitudes (r = .644, p < .05), and work and economic safety attitudes (r = .349, p < .05). Interpersonal relations and social participation attitudes toward older adults were positively correlated with work and economic safety attitudes (r = .706, p < .05).

Table 3. Pearson correlation coefficient of study variables (N=207)

| Measures                                                      | 1   | 2   | 3   | 4   | 5   |
|---------------------------------------------------------------|-----|-----|-----|-----|-----|
| 1. Elderly care willingness                                   | 1   |     |     |     |     |
| 2. Attitudes toward older adults (Appearance and physical)    |     | .229* | 1   |     |     |
| 3. Attitudes toward older adults (Psychological and cognitive)|     |     | .638** | 1   |     |
| 4. Attitudes toward older adults (Interpersonal relations and social participation)|     | .050 | .546** | .644** | 1   |
| 5. Attitudes toward older adults (Work and economic safety)   |     |     |     | .099 | .449** | .349** | .706** | 1   |

Note: *p<.05; **p<.01; ***p<.001.

Table 4. Factors affecting elderly care willingness (N=207)

| Variables                  | Elderly care willingness |
|----------------------------|--------------------------|
| B                         | P                        |
| Gender (ref. Female)       |                          |
| Male                      | .086                     | .215                     |
| Age (ref. ≤ 49)           |                           |
| 40–49                     | -.075                    | .395                     |
| ≥ 50                      | .098                     | .313                     |
were more willing to care for elderly care was similar to the findings of 4.12 out of 7, which was similar to the results of the study appearance and physical attitude toward older adults was the point mean score for Chi et al. [21], who used the same measurement tool for more on-the-job training and education to increase their other jobs [17]. Thus, the government should provide education level of care workers make them hard to find care willingness. Previous study noted that relative low have junior high school education tended to exhibit higher attitude toward older adults. The point mean score for willingness was most significantly affected by junior high school, hourly wages and appearance and physical attitudes toward older adults. Moreover, it is also indispensable to provide a reasonable payment system for direct care workers to enhance their salary and increase their interest in caring for older adults.

### 4. Discussion

The purpose of this study is to provide evidence-based information to enhance the willingness of direct care workers to care for older adults and identify the factors that affect this willingness. As shown in Table 2, the direct care workers who participated in this study showed an average neutral attitude toward older adults. The point mean score for appearance and physical attitude toward older adults was 4.12 out of 7, which was similar to the results of the study by Lee et al. [20] using the same tool. The score for elderly care willingness was similar to the findings of Chi et al. [21], who used the same measurement tool for nursing students in Taiwan.

Our results indicated that care workers who simply have junior high school education tended to exhibit higher care willingness. Previous study noted that relative low education level of care workers make them hard to find other jobs [17]. Thus, the government should provide more on-the-job training and education to increase their ability and continue to strengthen their willingness to provide care.

Our findings showed that direct care workers who preferred hourly wages were more willing to care for older adults than those who preferred monthly salary. Previous studies indicated similar findings [10,16,17]. In Taiwan, direct care workers’ payment system were either paid hourly or monthly. Taiwanese care services by direct care workers usually were paid by service hours. However, some experts recommend the payment system should pay by monthly salary so that direct care workers’ salaries will be more stable. Our results indicated that most direct care workers in Taiwan prefer to hourly wages since it represents more chances to earn monetary rewards and more flexible working hours. This could be due to most direct care workers in Taiwan being of an old age and having a relatively low level of education and hope to improve their lives. Thus, it is necessary for employers and the government to design more flexible working schedule and reasonable payment system to increase direct care workers’ incentive to enter and stay in this job.

This study showed that only appearance and physical attitudes toward older adults were a significant factor affecting care willingness for them. This was consistent with the study of Kim and Jang [15], which demonstrated that attitudes toward older adults had a positive correlation with willingness to care. The findings of our study were also similar to Won and Jang’s [18] claimed that developing positive attitudes toward older adults will enhance nursing students’ care willingness. The main reason why only appearance and physical attitudes toward older adults were significantly related to elderly care willingness may result from mass media and society were overly derogatory the aging of physical appearance. Thus, it is critical for the government to provide additional courses or on-the-job training to avoid stereotypes toward older adults, especially in physical appearance.

This study has some limitations. The cross-sectional design of this study may not be generalizable. Therefore, future research could use longitudinal designs to examine these variables. In addition, future studies could use pre-post intervention designs to examine whether educational and training programs reduce ageism and enhance direct care workers’ elderly care willingness.

### 5. Conclusions

This study revealed that direct care workers’ willingness to engage in elderly care was most significantly affected by junior high school, hourly wages and appearance and physical attitudes toward older adults. In order to increase the willingness of direct care workers to provide care for older adults, we suggest designing on-the-job training to cultivate complete gerontology knowledge to develop positive attitudes toward older adults. Moreover, it is also indispensable to provide a reasonable payment system for direct care workers to enhance their salary and increase their interest in caring for older adults.

| Variables                                | Elderly care willingness |
|------------------------------------------|--------------------------|
| **Educational level** (ref. Elementary school) |                          |
| Junior high school                       | .203                     |
| High school                              | .172                     |
| College school                           | .229                     |
| **Job tenure** (ref. <1 yr.)              |                          |
| 1-2 yrs.                                 | .112                     |
| 3-6 yrs.                                 | .045                     |
| > 6 yrs.                                 | .052                     |
| **Working hours per week** (ref.<45 hrs.) |                          |
| > 45 hrs.                                | .098                     |
| **Payment system** (ref. Monthly salary)  |                          |
| Hourly wage                              | .148                     |
| Attitudes toward older adults (Appearance and physical) | .302                     |
| Attitudes toward older adults (Psychological and cognitive) | -.135                   |
| Attitudes toward older adults (Interpersonal relations and social participation) | -.064                   |
| Attitudes toward older adults (Work and economic safety) | .036                     |

| R Square                                 | 15.4%                    |

Note: *p< .05; **p<.01; ***p<.001.
This study focused on direct care workers and provided vital information to the government for retaining and recruiting direct care workers. Therefore, it is essential to reduce stereotype toward older adults among these direct care workers and nurture them appropriate knowledge about aging. The findings of the present study can be used to develop and refine training policies that aim to reduce stereotype attitudes toward older adults and increase the willingness of direct care workers. Ultimately, through workforce education and training, it may be possible to improve the workforce in LTC.

Statement of Competing Interest

The authors have no competing interests.

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