

**ATTITUDES TOWARD OLDER PEOPLE AND
COWORKERS' INTENTION TO WORK WITH
OLDER EMPLOYEES: A TAIWANESE STUDY***

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ABSTRACT

The aim of this research was to examine attitudinal barriers to the employment of Taiwanese older workers (aged 60 and above). Face-to-face interviews were conducted to collect data using structured questionnaires from a sample of full-time employees ($N = 258$). We found that: (1) positive attitudes toward older people in general, perceived subjective norm, and traditional Chinese cultural values were all related to stronger intentions to work with older employees; (2) the model derived from the theory of reasoned action emerged the best model accounting for behavioral intention among competing structural models. The associations of positive attitudes and subjective norm with intention were found after controlling for demographics, cultural values, and personal contact experiences with older people. Our results highlight the importance and urgency of more concerted research to inform public and organizational policies to better promote and manage the careers of older employees in an aging, economically developing society.

The realities of a rapidly aging society make the employment circumstances of older workers an increasingly important social issue. This is especially so for a developing country such as Taiwan. In Taiwan, advances in medical science and

*This study was financed by a grant from the National Science Council, Taiwan, ROC, NSC97-2420-H-002-200-KF3.

technology, successful promotion of health care, material prosperity, coupled with the gradual demise of Chinese family values and lifestyle, have sent the birth rate in a steady decline, but the life expectancy in a steady increase. Consequently, as early as in September 1993, Taiwan was officially an aging society as the proportion of those aged over 65 had exceeded 7% of the country's population, and further reached 9.7% in 2005. This trend will exacerbate when the post-civil war (1949) cohort enters old age in 2014. The official projected proportion of 65+ is 14.6% in 2018, and 20.6% in 2025 (Taiwan Census Bureau, 2006). In the developed world, measures to ensure equal opportunities for older employees have been introduced (Kluge & Krings, 2008). However, the issue of employment of older workers has largely been overlooked in Taiwan. This is partly because in Taiwan there still exists a statutory retirement age (65) for civil servants and employees in the public sector. It is also fueled by the commonly held projection of old age in Chinese societies being a time of leisure and retreat into family life with grandchildren. However, such images neglect the considerable prevalence of employment among older Taiwanese: 31.6% for those aged 60-64, and 7.6% for those aged 65+ in 2006 (Taiwan Census Bureau, 2006). A recent nationwide survey (Lu, 2010) found even higher percentages (41.5% and 26.5%) of those working over 60 (60-64 and 65-69 respectively). Discussions have recently commenced on whether to revise or abolish the statutory retirement age, in the hope of injecting more human resources to tackle the worsening problem of labor supply shortage in Taiwan (Chou, 2006). To compliment the policy debate, we purport that individual-level psychosocial factors should be taken into account. After all, while abiding the laws, managerial and individual decisions/choices are made by people to hire/work with older workers on daily basis. Our purpose of this study, therefore, was to explore some of these potential psychosocial barriers to the employment of older workers, specifically employees' general attitudes about older people and perceived social pressure to work with their older counterparts.

While old age may be defined in many ways, for instance, 65 as the internationally adopted marker used by the United Nations, or 60-65 as the statutory retirement age in different countries. One nationwide survey in Taiwan revealed that Taiwanese people generally regarded 60 as the defining age of being "old," not the official criterion of 65 (Lee, 1999). To better represent this culture-specific psychological reality, in the present study we defined "older workers" as those who were over 60 years of age.

The Employment Hardship of Older Taiwanese Workers

As stated earlier, for many in Taiwan paid work is still an option in old age. At the individual level, it is likely a matter of economic necessity for ordinary Taiwanese—78.1 % cited "maintaining personal and familial standard of living" as the most important reason for continued work into old age (Council of Labor

Affairs, 1999). On the other hand, more affluent Taiwanese older adults, especially those who are better educated or with expertise may desire to continue their work out of life style choices. The mental health benefit of working among older persons has already been confirmed (Christ, Lee, Fleming, LeBlanc, Arheart, Chung-Bridges, et al., 2007). Continued employment is also an important tool of social integration in old age (Ginn & Fast, 2006), and an active lifestyle even brings brain benefits for older adults (Fratiglioni, Paillard-Borg, & Winblad, 2004). At the society level, in an era when people are living longer nonwork and underemployment among older Taiwanese come at an increasing social cost. The cost comes in the form of lost productivity and tax revenue, shrinking pool of human resources, as well as public spending on entitlements to support early retirement. Taiwanese civil servants and public sector workers are entitled to full retirement benefits at as early as age 50, and the average retirement age was 55.9 in 2006 (Taiwan Census Bureau, 2006). In sum, the realities of a rapidly aging society make the employment circumstances of older workers a pressing concern for individuals and society alike.

Taiwan's ongoing industrial restructuring underscores this issue. Factory closure and company downsizing often result in unemployment for older workers (Y. S. Wu, 2002), yet their plight in the economic changes has been largely neglected. Using official employment data, Y. S. Wu (2002) noted that older workers in Taiwan suffered from higher unemployment rate, longer unemployment duration, and greater difficulties in finding jobs again, compared to younger workers. H. S. Wu (2006) further pointed out that the employment rate for Taiwanese workers aged 60-64 (33.49%) was generally lower compared to that of developed countries (e.g., United States, 50.9%), and our East Asian neighbors (e.g., Japan, 54.7%; Korea, 53.6%). Both scholars highlighted industrial restructuring and low education attainment of the older workers as main factors constraining their opportunities for finding adequate employment in the computer era. Indeed, multivariate analysis using a nationwide survey data revealed that age, gender, personal health, spousal health, and family income were significant predictors of continued employment after age 50. Gender (female) and (lower) education were also significant risk factors of employment hardship for older workers (Lu, 2010). These results highlight the importance and urgency of more concerted research to inform public labor policies, especially in an aging developing society where older workers are faced with a double challenge of economic and societal restructuring. In addition to such macro-level phenomena, are there psychosocial barriers to the employment of older workers in Taiwan?

Psychosocial Barriers to the Employment of Older Workers in Taiwan

Although there has been very little empirical research on employment hardship of older workers in Taiwan, some scholars (H. S. Wu, 2006; Y. S. Wu, 2002)

have speculated that aforementioned structural factors such as industrial restructuring and company downsizing, cutting overhead costs of pension and retirement entitlements, are potential obstacles for workers to obtain stable employment after age 50. Others (Lu, 2010; Su, 2007) have identified personal and familial factors such as the female gender, the minimal education attainment or lower skill level, poor health, sick family members as risk factors for older workers slipping into unemployment or underemployment. Yet another set of potential environmental barriers, namely attitudinal factors such as managers' and coworkers' negative expectations of the productivity of older workers, age discriminatory stereotypes, and general negative attitudes toward old people have not been rigorously examined in the Taiwanese context.

For decades, research has shown that negative attitudes and stereotypes about old people in general (McTavish, 1971; Polizzi & Millikin, 2002) and older employees in particular (Bird & Fisher, 1986; Lyon & Pollard, 1997; Rosen & Jerdee, 1976) exist in the West. Moreover, studies demonstrated that the discrimination against older employees was reflected in common HR practices, with respect to selection, promotion, compensation, and training (Kluge & Krings, 2008; McVittie, McKinlay, & Widdicombe, 2003; Perry, Kulik, & Bourhis, 1996). Although there is some evidence that attitudes toward older employees may be becoming more positive (Hassell & Perrewé, 1995; Kluge & Krings, 2008), nonetheless, older employees often still feel discriminated against because of their age (Duncan, 2003; McVittie et al., 2003), and they were somehow treated differently from their younger counterparts in HR practices (Kluge & Krings, 2008).

This suggests that changes in attitudes do not necessarily go hand-in-hand with organizational practices at work. Furthermore, the so-called new agism is taking more covert, ambiguous, and fluid forms (Duncan, 2003), and the promotion of the principle of equal opportunity in employment has not improved prospects for older workers in developed economies (McVittie et al., 2003).

In Taiwan, social gerontological research on normative aging experiences is very rare. Two notable exceptions are a large scale survey of young, middle-aged, and older adults (Lee, 1999), and a series of recent studies on the attitudes toward older people across a wide age range (Lu & Kao, 2009, 2010; Lu, Kao, & Hsieh, 2010). Lee's study (1999) focused on the general impression of life in middle to late adulthood, and found that Taiwanese people tended to perceive old age rather negatively, including losses of health, status, relationships, and ability to work. Subsequently, more negative and undesirable traits and behaviors were attributed to older people than to middle-aged people. These findings largely corroborate the other series of studies showing that people of different age groups (from adolescents to older adults) all possessed generally negative attitudes toward older people (Lu & Kao, 2009; Lu et al., 2010). Furthermore, these negative attitudes were associated with lowered

intentions among students to take up careers involving serving/helping older people (Lu & Kao, 2010). Apparently, agism the form of negative stereotypes of older people is still prevalent in the Taiwanese society and may even have behavioral implications such as career choice.

In the work context, a recent survey of Taiwanese managers (Cheng, 2007) revealed that the incongruence between older workers' values and corporate culture was the uppermost concern in managing older workers, followed by overhead concerns. Another study (Huang, 2007) further delineated managers' negative perceptions of older workers' job performance, including restriction of work location, poor health and physical strength, unwillingness to learn new knowledge and techniques, low motivation for innovation and creation. It thus seems that agism in the form of negative stereotypes of older employees is too prevalent in the Taiwanese work environment, and unlike the trend revealed in Western findings, these attitudes are not changing substantially.

The question now is whether the general working adults who are likely coworkers of older employees possess similar negative stereotypes, and in turn discriminate against or socially isolate older employees on a daily basis? Recall that new agism can take more covert, ambiguous, and fluid forms, isolation and exclusion of older employees suffered at the hands of coworkers is a common form of agism (Duncan, 2003). This behavioral consequence can be explained by the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). The attitude-behavior (A-B) correspondence has invoked great interest and debate among social psychologists. The theory of reasoned action is an important attempt to specify this process. This model is based on the assumption that behavior is rational, and it incorporates several factors that have been shown to affect the consistency between attitudes and behavior (DeLamater & Myers, 2007). According to the reasoned action model, behavior is determined by behavioral intention. Behavioral intention is primarily influenced by two factors: attitude and subjective norm. Attitude refers positive or negative feelings about engaging in a behavior. Subjective norm is the individual's perception of others' beliefs about whether a behavior is appropriate or not. In other words, subjective norm is one form of situational constraint. Some studies have supported predictions made by this model (DeLamater & Myers, 2007), and these predictions apply better to behaviors that are not habitual or under individual's control (e.g., Liska, 1984; Schifter & Ajzen, 1985).

Applying the reasoned action model to our current case, the "behavioral intention" refers to the willingness to interact and cooperate with older employees at work; "attitude" refers to an employee's general attitude toward older people; and "subjective norm" refers to his/her perception of others' beliefs about whether the behavior (interacting and cooperating with older employees) is appropriate or not. So far there are only two published studies looking at the link between attitudes toward older people and relevant behavioral intentions in Taiwan.

Hsieh (1996) found that attitudes toward older people related to subsequent intention of counseling older adults among trainee counselors. Lu and Kao (2010) found that university students' attitudes toward older people related to their future career choices to serve/work for older persons. However, both samples were students and no measures of situational constraints (subjective norm) were employed. We thus addressed this void by including both attitude and subjective norm in the study, and targeting a working population. We thus hypothesize: *More positive attitudes toward older people would be related to stronger intentions to work with older employees* (Hypothesis 1); and *Stronger perceived subjective norm would be related to stronger intentions to work with older employees* (Hypothesis 2).

In Lu and Kao's study (2010), two other factors were found to be correlates of Taiwanese students' interactional intentions regarding older people: personal experiences and traditional Chinese values. The contact hypothesis is originally formulated as a technique to reduce inter-group conflict, which postulates that through increasing intergroup contact, the likelihood of intergroup conflict may be reduced (Amir, 1976). Applying this theory, the above mentioned findings can be understood: higher quality of personal experiences with older people in social contact fostered more positive attitudes which in turn enhanced behavioral intention in the form of career choice. Thus we included personal experiences with older people in explaining behavioral intentions of employees in the present study. We hypothesize: *More positive personal experiences with older people would be related to stronger intentions to work with older employees* (Hypothesis 3).

The above study also found that traditional Chinese cultural values such as filial piety helped to explain students' intentions to interact with older people in social context (Lu & Kao, 2010). Although extant empirical results depict a general negative image of old age and older people held by a wide range of Taiwanese people, a finer grained analysis did reveal that some positive aspects of aging were acknowledged both by the older people themselves (Lu & Kao, 2009; Lu et al., 2010), and by members of other age groups (Lee, 1999). Specifically, positive attitudes and traits pertaining to psychological and cognitive aspects of aging, such as rich experiences, wisdom, and authoritative status, were attributed to older persons in general. Specific to the work situation, older employees were also perceived by managers as more conscientious, committed, and experienced compared to younger employees (Huang, 2007). We thus argue that traditional Chinese cultural values of respecting the old and accepting established social hierarchy may act as another situational constraint (social norm) which helps to strengthen status and prestige of older people (Lu & Chen, 2002). We thus also included traditional Chinese cultural values in explaining behavioral intentions of employees in the present study. We hypothesize: *Stronger Chinese traditional values would be related to stronger intentions to work with older employees* (Hypothesis 4).

METHOD

Samples and Procedures

We combined face-to-face interviews with structured questionnaires to collect data from working adults with full-time jobs. Trained interviewers (students of social work and general management) conducted home visits in Taipei city (west) and Hualian city (east) in Taiwan. Potential participants were recruited through social networks and acquainted managers of various organizations. Each student recruited and interviewed 1-3 participants as partial fulfillment of course requirements. The completion rate was 99%.

The sample ($N = 258$) consisted of 101 men and 157 women, with a mean age of 34.81 years ($SD = 11.58$). The majority (81.0%) of our participants had above college education, with an average formal education of 15.89 years ($SD = 2.08$). Most of them (66.7%) were non-managerial employees, with an average tenure of 7.75 years ($SD = 9.57$). The occupational profile of our sample is diverse, comprised of employees in service sector (24%), commerce/trading (22.9%), electronics/IT (14.3%), culture/education (12.4%), manufacturing (10.1%), public sector (4.7%), health care (3.5%), and others (8.1%).

Comparing our sample characteristics to those of a recent national survey using stratified random sampling method (Taiwan Social Change Survey [TSCS]; Lu, Kao, Chang, Wu, & Cooper, 2008), our sample was younger (TSCS: Mean = 40, $SD = 10.94$), had more years of education (TSCS: Mean = 12.70, $SD = 3.63$), and junior (TSCS: Mean = 8.54, $SD = 8.97$). While there are discrepancies between our sample and the representative national sample, our sample profile is distinct from that of university students.

INSTRUMENTS

Attitudes toward Older People

The “Older People Scale” (OPS; Lu & Kao, 2009) is the first standardized scale developed specifically for the Chinese people, assessing attitudes toward older people in general. The developers of the OPS used “60” as the marker for older people in the stem of all items, which is consistent with our definition of older workers in the present study.

Lu and Kao (2009, 2010) have provided evidence of their reliability and validity of the OPS. The 22-item brief version was used in this study. With “In general, older people (those who are over 60 years of age) are . . .” as the stem, four aspects of attitudes were assessed: Appearance and physical characteristics (5 items, e.g., “Weak and illness-prone,” reversed score), Psychological and cognitive characteristics (7 items, e.g., “possessing problem-solving ability”), Interpersonal relations and social participation (7 items, e.g., “disengaged from the society”), and Work and economic safety (3 items, e.g., “financially poor.”

reversed score). Though the content of the 22 items tapped diverse aspects, they converged on a single latent construct as shown in confirmatory factor analysis, supporting a one-factor solution (Lu & Kao, 2010). Exploratory factor analysis using data from the present sample also revealed that only one factor (Eigen value = 8.04) could be extracted accounting for 56.53% of the total variance. All 22 items loaded on this single factor ranging from .44-.70. Thus, aggregation of scores was adopted, again as advised by the original developers of the scale.

Each item in the OPS was rated on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). A higher aggregated score indicated more positive attitudes toward older people. In the present study, internal consistency alpha was .92 for the scale.

Subjective Norm

Three items were developed to assess participants' perception about the social norm (encouraging the employment of older workers) and their willingness to conform. These items are: "Do you perceive that the government encourages the employment of older workers?," "Do you think that the employment of older workers should be encouraged?," and "Are you willing to help the employment of older workers?" Respondents checked with a forced choice format (1 = *Yes*, 0 = *No*). Exploratory factor analysis revealed that only one factor (Eigen value = 1.80) could be extracted accounting for 59.89% of the total variance. All three items loaded on this single factor ranging from .69-.84. Thus, an aggregated score was used to indicate subjective norm regarding the employment of older people. In the present study, internal consistency alpha was .66 for the scale.

Personal Experiences

Three items were adopted to assess participants' personal experiences with older people in general social contexts (Lu & Kao, 2010). Respondents were asked to rate the quality of their interaction with older people in family, community, and at work (1 = *Very poor*, 10 = *Very good*). Exploratory factor analysis revealed that only one factor (Eigen value = 1.95) could be extracted accounting for 64.94% of the total variance. All three items loaded on this single factor ranging from .80-.81. Thus, an aggregated score was used to indicate the quality of personal experiences with older people. In the present study, internal consistency alpha was .73 for the scale.

Chinese Cultural Values

The "Social-oriented Self Scale" (SoSS; Lu, 2007) is the first standardized scale developed specifically for the Chinese people, assessing the conceptualization of the traditional Chinese self. The social-oriented self derives from a belief in the individual's connectedness and interdependence to others, and

emphasizes roles, statuses, positions, commitments, and responsibilities. The Confucius tradition strongly advocates the *relational* and *social* way of the self, with respecting the social hierarchy (within which older people have a prestigious position) as the core of cultural values. Lu (2007, 2008; Lu, Kao, Chang, Wu, & Zhang, 2008) have provided evidence of the reliability and validity of the SoSS as a measure of traditional Chinese cultural values for both Taiwanese and mainland Chinese. The 14-item brief version was used in this study. Sample items are “We should treat people differently to reflect the different degree of intimacy,” and “I always view people who are intimate to me as a part of myself.” Each item was rated on a 6-point scale (1 = *strongly disagree*, 6 = *strongly agree*). A higher aggregated score indicated higher endorsement on this traditional Chinese value. In the present study, internal consistency alpha was .86 for the scale.

Intention to Work with Older Employees

Three items were developed to assess participants’ willingness to work with older employees in daily work situations. With “If you have a choice, will you . . .” as the stem, four aspects of intention were assessed: be led (as a subordinate), to work in the same team (as a co-worker), and to lead (as a superior) older employees (those who are over 60 years of age) (1 = *Very unwilling*, 7 = *Very willing*). The formality of these three items was the same as the one used in Lu and Kao’s (2010) study of students’ career intentions, which was shown attributable to their general attitudes toward older people. While the response anchor of “unwilling-willing” may sound softer than the English word “will” in conveying behavioral intentions, it is a habitual Chinese expression of intention, especially when in the context of self-determination (“if you have a choice”). Using data from the present sample, exploratory factor analysis revealed that only one factor (Eigen value = 2.17) could be extracted accounting for 72.48% of the total variance. All three items loaded on this single factor ranging from .78-.92. Thus, an aggregated score was used to indicate the behavioral intention of working with older people. In the present study, internal consistency alpha was .80 for the scale.

RESULTS

As a preliminary analysis, we checked the skewness and kurtosis of all variables. Skewness varied from $-.54$ to $.60$, all within the -1 to $+1$ range. Kurtosis varied from -1.13 to $.85$, subjective norm (-1.13) being the only one slightly outside the -1 to $+1$ range. Overall, all variables seemed to conform to the normal distribution.

Before testing the four hypotheses, we computed Pearson correlations among the main research variables. Table 1 reports correlation results along with scale

Table 1. Intercorrelations among Main Variables

Variables	SEX	AGE	EDU (yrs)	Tenure	Rank	CV	ATOP	PE	SN	INT
SEX	1.00									
AGE	-.14*	1.00								
EDU (yrs)	-.18**	-.34**	1.00							
Tenure	-.14*	.81**	-.27**	1.00						
Rank	-.19**	.47**	-.04	.40**	1.00					
CV	.15*	.20**	-.13*	.16*	-.03	1.00				
ATOP	.02	.30**	-.10	.27**	.10	.17**	1.00			
PE	.00	.32**	-.16*	.32**	.16*	.32**	.30**	1.00		
SN	.01	.14*	-.04	.06	-.02	.14*	.11	.19**	1.00	
INT	.01	.21**	-.10	.17**	-.01	.30**	.26**	.28**	.28**	1.00
Scale Mean	.61	34.81	15.89	7.75	.33	67.78	96.95	19.01	1.51	13.90
SD	.49	11.58	2.08	9.57	.47	6.80	17.24	4.65	1.12	3.80

Notes: CV = cultural values; ATOP = attitudes toward older people; PE = personal experiences with older people; SN = subjective norm; INT = intention to work with older employees; SEX: 0 = M, 1 = F; Rank: 0 = employee, 1 = manager.

* $p < .05$, ** $p < .01$.

means and standard deviations. Attitudes toward older people, subjective norm, personal experiences, and traditional values (social-oriented self) all significantly correlated with the intention to work with older employees. All relations were in the expected direction.

As for demographic variables, only age and tenure correlated with the intention to work with older employees. However, age and tenure had a very high correlation ($r = .81$) themselves, thus to avoid multicollinearity, we used age only in subsequent regression analysis.

We then conducted a series of hierarchical regression analyses to test our four hypotheses. In the first step of regression, we entered demographic variables of sex, age, education years, and rank as control variables, to partial out any potential effects they may have on behavioral intentions. Second, we entered traditional values (social-oriented self). At step 3, we entered personal experiences. At the final step, we entered attitudes toward older people and subjective norm. In so doing, hypotheses ($H1$, $H2$) derived from the reasoned action model were tested after possible contributions of demographics, values ($H4$), and experiences ($H3$) were all accounted for.

The results reported in Table 2 show that none of the demographics were related to the intention to work with older employees. Traditional Chinese values (social-oriented self), but not personal experiences were related to the behavioral intention. Having controlled for effects of all the above factors, attitudes toward older people and subjective norm still had positive relations with the intention to work with older employees. Thus our *Hypotheses 1*, *2*, and *4* were supported. However, *H3* was not supported.

We proceeded with a comparison of possible theoretical models accounting for the intention to work with older employees as implied in the previous literature review. AMOS 5.0 was used to test these structural models applying the Maximum Likelihood technique. The base model (Model 3) was specified containing only two paths from attitude and subjective norm leading to intention, as predicted by the theory of reasoned action. Two competing models were then specified adding extra paths to the base model. Model 1 contained the extra path leading from personal experiences to intention, as predicted by the contact hypothesis. Model 2 contained two extra paths leading from personal experiences and social-oriented self (as predicted by the Chinese cultural values) to intention. We followed suggestions by Bentler (1990) and Raykov, Tomer, and Nesselroade (1991) regarding criteria for evaluating SEM models. Specifically, the fitness indices (GFI and AGFI) should be in the upper .90s, the relative chi-square (χ^2/df) need to fall between 2-5, and residuals (RMSEA) need to be small $<.08$). Results are summarized in Table 3. Judging from these criteria, the base model (Model 3—reasoned action) was by far the best one fitting the data. However, Model 1 and Model 2 were also acceptable on their own merit. All path coefficients were statistically significant in all three models.

Table 2. Hierarchical Regression Analysis Predicting the Intention to Work with Older Employees

Step	Predictors	Intention to work with older employees	
		ΔR^2	β
1	Sex		-.01
	Age		.08
	Education yrs.		.02
	Rank	.05*	-.06
2	Cultural values	.07**	.24**
3	Personal experiences	.03*	.10
4	Attitudes toward older people		.16**
	Subjective norm	.06**	.20**
	Total R^2		.21
	Final F (df)		3.69** (7,196)

Notes: SEX: 0 = M, 1 = F; Rank: 0 = employee, 1 = manager. Standardized coefficients β and F are taken from the final equation.

* $p < .05$, ** $p < .01$.

DISCUSSION

The main purpose of the present study was to explore the role of attitudinal factors as barriers to the employment of older workers in a Taiwanese context, with special attention toward employees' general attitudes toward older people. Our results show that the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) is a useful framework to explain employees' intentions to work with older workers on a day-to-day basis, which hopefully will lead to a more friendly work environment conducive to the employment of older workers. As predicted by the theory of reasoned action, our regression analysis revealed attitudes toward older people and subjective norm regarding the employment of older workers jointly explained 6% of the total variance in behavioral intention, after all other relevant factors were taken into account (see Table 2). Furthermore, the comparison of competing structural models showed that the one based on the theory of reasoned action was the most effective one, succinct and fitted well with empirical data. In addition to the theory of reasoned action, the contact hypothesis (Amir, 1976), originally developed for explaining intergroup conflict and resolution, was also applicable in the context of employment of older workers

Table 3. Estimates of Competing Structural Models Accounting for the Intention to Work with Older Employees

	<i>N</i>	χ^2	<i>df</i>	χ^2/df	GFI	AGFI	RMSEA
Model 1 (base + experiences)	258	7.14	2	3.57	.99	.93	.10
Model 2 (base + experiences + cultural values)	258	51.35	7	7.34	.94	.84	.15
Model 3 (base model-attitude + norm)	258	1.67	1	1.67	.99	.97	.05
Model comparison				$\Delta\chi^2$	Δdf	<i>p</i>	Better model
Model 1 vs. Model 2				44.21	5	.001	Model 2
Model 2 vs. Model 3				49.68	6	.001	Model 3
Model 1 vs. Model 3				5.47	1	.05	Model 3

(see Table 3, Model 1). Finally, the inclusion of traditional Chinese cultural values such as interpersonal relatedness and social duties added further explanatory power (7%) to the equation (see Table 2).

One of the contributions of the present study is to introduce various theoretical models to inspire and organize research of employment issues in old age, which has so far been speculative and unsystematic. To complement previous discussions centering around industrial restructuring (H. S. Wu, 2006; Y. S. Wu, 2002) and demographical risk factors (Lu, 2010), we have now extended the list of potential psychosocial barriers to the employment of older workers, such as the general attitudes toward older people, perceived social norm, personal experiences with older people, and the endorsement of traditional Chinese cultural values. While managers' negative expectations of the productivity of older workers often influence HR practices (Cheng, 2007; Huang, 2007), fellow employees' negative attitudes toward older people in general may translate into acts of covert discrimination and social isolation of older workers. Such a subtle form of new-ageism nonetheless impedes the right of older workers and their quality of work life. More attention should be paid to these emergent forms of new-ageism, as they are becoming more covert, fluid, ambiguous, and subtle (Duncan, 2003).

In the present study, using the OPS (Lu & Kao, 2009) to measure employees' general attitudes toward older people, we obtained item mean of 4.41 ($SD = 0.78$) on a 1-7 scale. This value is statistically significant from the scale mid-point of 4 ($t = 8.20, p < .001$), tilting toward the positive end. Our results thus corroborate Western findings that attitudes toward older employees are becoming more positive (Hassell & Perrewe, 1995; Kluge & Krings, 2008), though different measures were used in these studies. It is thus more appropriate to compare our results with those obtained in three recent Taiwanese studies using the OPS. Lu and Kao (2009) reported the item mean of 4.23 ($SD = 0.74, N = 991$) for a large sample with a wide age range, 4.74 ($SD = 1.09, N = 391$) for a sample of community older people (Lu et al., 2010), and 4.46 ($SD = 0.77, N = 316$) for a sample of college students (Lu & Kao, 2010). Employees in the present study have significantly more positive attitudes than those of the general population ($t = 3.60, p < .001$), significantly more negative attitudes than those of the older people themselves ($t = -4.71, p < .001$), and similar attitudes to those of university students ($t = -0.83, ns$). These results confirm that in Taiwan, although negative stereotypes of older people are slowly being dismantled, older people themselves still view aging far more positively than the way their younger counterparts view it. This cognitive and attitudinal gap may again fuel the various forms of new-ageism at work. Education can be an effective tool to close this gap. Ample Western studies have demonstrated the beneficial effects of education programs on dismantling negative stereotypes and ageism (Funderburk, Damron-Rodriguez, Levy Storms, & Solomon, 2006; Harris & Dollinger, 2001), we in Taiwan need to be more rigorous in promoting and implementing such programs at school, in the community, and at work.

Contrary to popular images of the older years being a time of retirement and leisure, evidence has shown that labor force participation among older Taiwanese is rather substantial (Taiwan Census Bureau, 2006). The recent nationwide survey (Lu, 2010) revealed even higher percentages of continued employment well into the later years than the published official labor figures. The same study also revealed substantial percentages of underemployment among the older workers throughout the later years, and in particular among less-educated and female workers. Many Taiwanese older adults now opt for continued employment due to financial needs, reflecting the changing social realities in Taiwan: older parents no longer pin their hopes on children for complete financial support and unconditional care, as sanctioned by the Chinese traditional value of filial piety (Lu, Kao, & Chen, 2006). In fact, many Taiwanese older people express deep concerns and intense anxiety over old-age poverty (Lu & Chen, 2002). In light of the financial necessity to work, older adults' employment plight deserves serious concern and institutional help. To better inform public policies and human resource (HR) practices, the specific circumstances leading to employment hardship for older people deserve more concerted research probing, and attitudinal change interventions as suggested by the present study may be needed.

However, the present study has certain limitations. First, the study design was cross-sectional, thus no causal conclusions are legitimate. However, our hypotheses were derived from well-established theoretical models and the likelihood of reserved causality is not great. Second, our interviews were conducted using structured questionnaires. Future studies may consider employing qualitative methods to explore in more detail the decision-making process of working with older employees or not, so that a fuller and richer understanding of the psychological mechanism can be revealed. Third, we used "intention" to work with older workers as the focal dependent variable, following the terminology of reasoned action model (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). What we used in the questionnaire as the response anchor is the softer Chinese word "unwilling/willing," though with personal agency in making decisions, "unwilling/willing" is the Chinese customary expression for behavioral intention. Nonetheless, we did not measure the actual behavior, for instance, frequency of working with older employees. A more rigorous test of the reasoned action model in the future should remedy this. Finally, the present study did not include views from managers and older workers themselves. Different informants should be approached in future studies to construct a more complete picture of the employment circumstances facing older workers.

Despite these limitations, the present study has important implications for the individual and society. On an individual level, while we are living longer than ever before, and facing uncertainties with pension plans and rising health care costs, many continue to work out of economic necessity or lifestyle choices. As the vulnerable sectors of the labor force usually bear the blunt of economic downsizing or industrial restructuring, the older workers have to tackle overt and

covert discriminations resulting in even graver labor market challenges. On the society level, we collectively pay an increasing price for the under-utilization of older workers, in terms of lost productivity, prolonged retirement entitlements, and increasing social welfare benefits. In sum, the realities of an aging society call for greater attention to the labor market challenges to older workers. The unique circumstances facing the older workers should be systematically examined and upon which public policies and organizational practices should be crafted to ameliorate the employment hardship of the older employees.

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