

# Generativity in Later Life: Perceived Respect From Younger Generations as a Determinant of Goal Disengagement and Psychological Well-being

Sheung-Tak Cheng

Department of Applied Social Studies, City University of Hong Kong, Kowloon.

**It was hypothesized that actions to benefit the next generation would not lead to well-being unless they are perceived to be valued and respected and that the lack of perceived respect would further lead to disengagement from generative goals. Older persons responded to measures of generative concern, action, perceived respect, and psychological well-being at 2 time points 12 months apart. Structural equation modeling showed that at both time points, the effect of action on well-being was completely mediated by perceived respect. Moreover, a lack of perceived respect at baseline predicted a decrease in generative concern 12 months later, suggesting that, in later life, continuing concern is partly dependent on the attitudes of younger generations. When their attitudes are unfavorable, a downward spiral in generativity development and well-being is possible.**

**Key Words:** Elderly—Generativity—Goal disengagement—Hong Kong Chinese—Psychological well-being—Respect.

ACCORDING to E. H. Erikson (1950/1963), the human life cycle evolves through eight sequential stages from infancy to late adulthood on the basis of biologically and culturally determined timing. In later adulthood, the major psychosocial crisis to be resolved is ego integrity versus despair. Ego integrity is achieved by accepting how things have turned out, and by finding order and meanings, in life. It is also the cumulative product of the previous seven stages because the successful resolution of the earlier psychosocial crises, including generativity versus stagnation in midlife, forms the foundation for a sense of completeness and coherence in old age.

However, after having experienced old age himself, E. H. Erikson (1997) believed that generativity has a more important role to play in later life than he initially thought. “Much of their [older people’s] despair is, in fact, a continuing sense of stagnation” (p. 63). Indeed, research suggests that generativity may be the single most important factor in achieving ego integrity. In a recent study, a small sample of 78 women aged 70–91 years provided self-report measures of ego integrity and generativity (James & Zarrett, 2006). These measures were analyzed with the data on identity formation obtained through an unstructured interview 45 years earlier. Results showed that generativity was the only variable predicting ego integrity, whereas identity, number of major or chronic illnesses, and sociodemographic variables had no independent effects. However, information on the other Eriksonian constructs was not available, and the different data collection methods for the key variables made data interpretation difficult.

To date, only one study is known to have examined how ego integrity is predicted by the achievement of the other

seven psychosocial tasks. Using the Inventory of Psychosocial Balance, Hannah, Domino, Figueredo, and Hendrickson (1996) studied the predictors of ego integrity in 520 men and women aged 55–84 years cross-sectionally. In a multivariate analysis, ego integrity was predicted by five tasks, namely, generativity, intimacy, identity, autonomy, and trust, but generativity alone accounted for 78% of the variance in ego integrity.

Thus, despite the paucity of research, there are preliminary data suggesting the importance of having achieved generativity for late-life development. In this connection, it is important to recognize that generativity development may continue into old age. According to E. H. Erikson (1997, p. 63), “[generativity in old age] should mean only a later version of a previous item, not a loss of it . . . old people can and need to maintain a *grand*-generative function . . . that minimum of vital involvement that is necessary for staying really alive.” Indeed, the commitment to nurture younger generations, as measured by daily strivings, shows an upward age trend (McAdams, de St. Aubin, & Logan, 1993; Sheldon & Kasser, 2001).

Several observations suggest that generativity may occupy a more central spot in late-life development in contemporary society. First, the delay in marriage and childbearing age suggests that many adults do not finish their parental responsibility until being young old. Second, with the increase in longevity and improvement in health care, older adults are spending more years with their grandchildren and great-grandchildren. In a thought-provoking article, Bengtson (2001) argued that ties across more than two generations were becoming more important than ties within nuclear families due to such sociodemographic

changes. Thus, it is conceivable that older persons will be more and more involved in child-rearing responsibilities as grandparents or great-grandparents. Finally, current rhetoric and professional wisdom promotes the image of active aging and encourages older people to participate socially, such as working as volunteers (Rowe & Kahn, 1997; United Nations, 2002). Indeed, unlike midlife generativity that tends to be dominated by the parenting role, generativity in later life is often extended beyond the family, in the form of assistance to unrelated others and civic engagement (Keyes & Ryff, 1998; Rossi, 2001). All these trends suggest that generativity, a topic relatively missing in the gerontological literature, is an increasingly salient phenomenon in later life, beyond the theoretical assertion that humans are motivated to transcend the mortal self by leaving a legacy behind through constructing a better world (Erikson, Erikson, & Kivnick, 1986; Kotre, 1984; McAdams, 1985).

#### *Generativity and Psychological Well-being: The Role of Perceived Respect*

Generativity has been studied from different perspectives (e.g., Bradley, 1997; Kotre, 1984; Peterson & Klohnen, 1995; Peterson & Stewart, 1993; Ryff & Heincke, 1983). A perspective that has generated much interest in recent years is the seven-facet model by McAdams and de St. Aubin (1992). A central concept in this model is *generative concern* (i.e., conscious concern for the next generation), which is the result of motivational forces (cultural demand and inner desires for symbolic immortality). Generative concern leads to concrete goals and actions to benefit the next generation, as well as narrative constructions of the generative self. Although studies are few, preliminary data based primarily on Western samples of younger and midlife adults show that generative concern is moderately to strongly associated with psychological well-being, but the concrete actions appear to be unrelated to well-being, despite its strong correlation with generative concern (Grossbaum & Bates, 2002; McAdams et al., 1993). Given the importance of generativity for late-life development, it is not surprising that generative concern is predictive of well-being. However, the relationship between generative acts and well-being may be more complex.

Scholars have noted that the resource differential between one generation and the next declines, if not reverses, as one advances from middle to late adulthood (Morgan, Schuster, & Butler, 1991). Because of this, generative capacity also decreases as one ages (Stewart & Vandewater, 1998). Thus, when action does not result in a positive impact, well-being may be diminished rather than enhanced. Because generativity is often manifested in a social context (e.g., assistance to others in need), the judgment of impact, therefore, largely depends on others' feedback. In this connection, it is important to consider the declining status of older persons

in contemporary societies and the normative feedback that they receive from younger generations.

In today's rapidly changing world, older people may be seen as having little to offer to the problems and issues faced by younger people, and their role as keepers of traditional wisdom is greatly diminished. K. Erikson noted that "the pace of technological change and the growth of human knowledge are now climbing so sharp an incline almost everywhere in the world that the skills and outlooks of the present generation may be of limited value for the worlds their children will soon occupy" (Erikson, 2004, p. 53). McAdams, Hart, and Maruna (1998) referred to this phenomenon as *generativity mismatch*. In many developing societies, the disparity in educational attainment between generations contributes further to a loss of status by older people.

To investigate how generativity is actualized in this context, Cheng, Chan, and Chan (2008) asked 71 older men and women of different socioeconomic levels in Hong Kong to participate in focus group meetings, in which they talked about their thoughts about younger generations and the society and what they wanted to do for them. When doing so, many commented on the educational disparity between younger people and themselves (approximately 40% of older people in Hong Kong are without formal education and another 40% attained some primary education; Census and Statistics Department, 2002). In reality, their attempts to help were often brushed aside or even criticized by their own offspring who were accustomed to different lifestyles and ways of doing things. To avoid conflict and to preserve harmony, they withdrew to more passive and minor generative roles, such as waiting for invitation to offer assistance or confining themselves to routine household tasks (harmony was seen as essential for maintaining the continuous support from children in case their conditions deteriorate). Importantly, although legacy can be achieved by creating ideas and products (E. H. Erikson, 1950/1963), Hong Kong's older persons, cognizant of the gap between their expertise and social development, identify primarily with the transmission of moral and behavioral codes, mostly by sharing stories of hardship in the old days and being a model of character, as a way of creating a more lasting influence.

These findings illustrate the changing cultural norms and the larger social forces that transform modern societies, which widen the gap between older and younger generations in terms of knowledge, skills, values, lifestyles, and financial resources, and devalue older people's contributions to societies. At the same time, they reveal the day-to-day interactions between older people and their offspring and other community members, and the general lack of respect and appreciation for their work, within this larger social context. The major premise of this article is that the pursuit of generative goals and the feelings of well-being are both tied to the degree of respect older persons receive for their generative acts. This perspective is consistent with McAdams and de St. Aubin's (1992) view that generativity

is situated in a “psychosocial space that subsumes person and environment” (p. 1004) and with E. H. Erikson’s (1997) contention that “an individual life cycle cannot be adequately understood apart from the social context in which it comes to fruition” (p. 114).

### *Study Hypotheses*

In this study, I propose, first, that generative acts per se would not predict well-being because it is the expressed regard for these acts that truly matters. In other words, I postulate that whether actions result in well-being depends on the extent to which they are welcomed, appreciated, and valued by others, particularly the younger generations. For this reason, the feeling of respect should completely mediate the relationship between action and well-being ( $H_1$ ). In this article, I focus on respect as perceived by older persons themselves because arguably, what matters for well-being is the subjective feelings that one’s status needs have been met (see Steverink & Lindenberg, 2006), not the actual levels of respect displayed by others.

Second, I argue that, unlike during midlife parenting when one’s sense of responsibility for the next generation remains strong regardless of reactions from children, generative responsibility in old age is low in cultural demand (McAdams & de St. Aubin, 1992) and hence much less emphasized in modern societies. Thus, older adults’ motivation to sustain interest in the welfare of the next generation may depend on their perception that younger people desire such concern from the older generation. A lack of positive regard from the younger generations suggests that one’s generative goals are not going to be realized. Because successful aging depends on the disengagement from unattainable goals and the channeling of resources to attainable ones (Baltes & Baltes, 1990; Brandtstädter & Greve, 1994; Heckhausen & Schulz, 1995), it can be reasonably argued that feelings of disrespect would lead to subsequent disengagement from generative goals ( $H_2$ ). In other words, although generativity is supposed to be intrinsically motivating, its pursuit in an unwelcoming environment will eventually wear out one’s motivation and lead to goal disengagement. In the present study, this is operationalized as the decrease in generative concern over time. Because generative concern has a large effect on behavior, this implies a downward spiral of generativity development over time due to negative reactions from others.

Note that in the work of McAdams and colleagues (1993), generative goals were measured in terms of daily strivings (i.e., generative commitment). However, although they proposed that commitment was a more proximal predictor of generative action, it had only a weak correlation with action ( $r = .20$ ) in a sample of young, midlife, and older adults. On the contrary, the relationship between concern (an antecedent of commitment) and action was strong ( $r = .53$  in the same sample; McAdams et al., 1993). For a study aimed at investigating how goal disengagement influences subsequent

behavior, concern may be a more appropriate measure of generative goals.

## **METHODS**

### *Participants and Procedure*

One hundred ninety persons older than 60 years were recruited on a convenience basis from social centers for older persons. Each was interviewed individually using the unfolding method (i.e., first indicating the direction of response before choosing the options on a frequency or Likert scale) for approximately 30 min, after satisfactory performance on the Mini-Mental State Examination (i.e., score  $\geq 20$ ; Chiu, Lee, Chung, & Kwong, 1994; Folstein, Folstein, & McHugh, 1975). All except two were successfully interviewed 12 months later; these 188 individuals constituted the sample for this study. Missing data were few and did not differ by gender, educational level, and measurement occasion; they were replaced using the multiple imputation procedure in LISREL.

The sample had a mean age of 73.0 ( $SD = 5.93$ ; range = 60–89 years) and more women (67.6%) than men (32.4%). Almost half (47.3%) were married and another 42.0% were widowed. One third (34.0%) were living alone. Consistent with the educational level of this age cohort, 38.3% had no formal education and another 46.3% had some primary education. Because this sample was based in social centers having more women, it was more female dominant than the general population, and for this reason, had more people who were widowed rather than married.

### *Pilot Study: Development of Items*

To develop measures of perceived respect and generative acts for the local population, I content-analyzed verbatim records of the focus group discussions reported in Cheng, Chan, and Chan (2008) and came up with 36 items for perceived respect and 44 for generative acts (see *Measures* for rating scales). For reasons already mentioned, the list of acts used for this research did not include idea or product creation but included attempts to pass on moral and behavioral codes that are traditionally valued. Through individual interviews, these items were administered to a separate sample of 126 older persons (32 men, 94 women;  $M_{age} = 73.6$ ,  $SD = 6.92$ , range = 60–89 years) along with the following measures: a back-translated Loyola Generativity Scale (LGS, a measure of generative concern; McAdams & de St. Aubin, 1992), a brief version of the Generative Behavior Checklist (GBC; McAdams & de St. Aubin, 1992), an 8-item checklist of *other activities* unrelated to generativity (e.g., watching movies, inviting friends and relatives for a meal at home), and a 10-item version of the Marlowe–Crowne Social Desirability Scale (Crowne & Marlowe, 1960; Strahan & Gerbasi, 1972). The brief GBC consisted

Table 1. Product–Moment Correlations and Internal Consistencies, Pilot Study

	1	2	3	4	5
1. LGS	(.76)				
2. Generative acts	.59	(.87)			
3. Perceived respect	.43	.35	(.75)		
4. Social desirability	.10	.17	.17	(.70)	
5. GBC	.58	.72	.28	.07	(.68)
6. Other activities	.13	.18	-.01	.11	.26

Note: LGS = Loyola Generativity Scale; GBC = Generative Behavior Checklist. Correlations  $\geq .17$  are significant at the .05 level. Figures on the diagonal are Cronbach's alpha coefficients. The alpha coefficient was not computed for other activities as these were a heterogeneous set of activities not intended to tap a common underlying construct.

of 11 items that were most strongly correlated with the LGS in an American sample (McAdams & de St. Aubin, 1992).

Respect and generative act items that had low item-total correlations and those that were rarely endorsed (e.g., "Made a decision that had positive effects on many people") were removed, resulting in 15 items for perceived respect and 20 for generative acts. Both these measures were internally consistent and showed expected convergent and discriminant correlations (Table 1). Importantly, the new measure of generative acts was highly correlated with GBC, although the two had only a moderate degree of overlap in content, and this correlation coefficient was significantly higher than the one with LGS (Fisher's  $Z$  transformation of  $r_s = 1.80$ ,  $p < .05$ ). This measure also correlated with LGS at virtually the same magnitude as GBC. It was weakly correlated with other activities, suggesting that this measure of behavior frequency was not contaminated by general activity level. Moreover, perceived respect was only moderately correlated with LGS and generative acts, suggesting that it measures something unique in one's generative experience. Finally, although generative acts and perceived respect were significantly correlated with the Marlowe–Crowne scale, such correlations were very small indeed, suggesting that these measures (along with LGS) were by and large free of social desirability bias. Items for generative acts and perceived respect, translated into English, are listed in the Appendix.

### Measures

*Perceived respect.*—Three (item numbers 2, 8, and 12; see Appendix) of the 15 items developed were specifically concerned with how one's civic acts, mostly voluntary activities, were evaluated by relevant individuals or organizations. Thirty-one individuals without volunteer experience could not answer these questions. The other 12 items were concerned with the reactions of one's offspring or the younger generations in general (without specifying whom). Statistical analyses were therefore performed on the two sets of items separately. For the sake of convenience, I will call the former

*perceived respect–civic* and the latter *perceived respect–nonspecific*. Time 1 (T1) and time 2 (T2) alpha coefficients were .63 and .65, respectively, for the civic measure, and .74 and .80, respectively, for the nonspecific measure.

*Generative acts.*—For similar reasons, 4 (item numbers 3, 4, 10, and 19; see Appendix) of the 20 items were grouped together to form a measure of *generative act–civic* (T1  $\alpha = .67$ , T2  $\alpha = .70$ ) and the remaining 16 for measuring *generative act–nonspecific* (T1  $\alpha = .88$ , T2  $\alpha = .90$ ).

*Generative concern.*—The LGS contains 20 items (e.g., "I try to pass along the knowledge I have gained through my experience," "I feel as though my contributions will exist after I die") rated on a 4-point scale from 0 *never applies to me* to 3 *very often applies to me*. Alpha coefficients equaled .84 at both times.

*Psychological well-being.*—The positive relations, purpose in life, personal growth, and self-acceptance subscales of a Chinese version of the Ryff Psychological Well-being Scales (Cheng & Chan, 2005; Ryff, 1989) were used. This Chinese version has four items per subscale, with each item rated on a 5-point scale of 1 *strongly disagree* to 5 *strongly agree*. Emerging data suggest that positive relations, purpose in life, and personal growth are important correlates of biological markers of psychological health (Ryff et al., 2006). These three attributes, together with self-acceptance, are consistently highly intercorrelated across studies using representative population samples (Keyes, Shmotkin, & Ryff, 2002; Springer & Hauser, 2006), suggesting that these qualities together tap a core dimension of psychological health. I therefore focus on measuring these four qualities rather than the entire spectrum of positive qualities in the Ryff model. In this study, the 16 items were summed to form an overall measure of psychological well-being, with T1 and T2 alphas equal to .78 and .81, respectively.

*Other information* obtained included age, gender, marital status, educational level, living status, and self-rated health rated on a 5-point scale of 1 *poor* to 5 *excellent*.

### Data Analytic Strategy

The theoretical model (Model 1) was tested with structural equation modeling, separately for civic acts and nonspecific acts. All T2 latent factors were predicted by their counterparts in T1. At both time points, generative concern, generative action, and perceived respect were treated as antecedent factors for psychological well-being. Concern was an antecedent for action, which in turn was an antecedent for respect. If respect completely mediated the relationship between action and well-being, then the direct path from action to well-being should be nonsignificant, whereas the path from action to respect and that from respect to well-being should be significant ( $H_1$ ). Additionally, the Sobel

Table 2. Descriptive Statistics and Product-Moment Correlations

		1	2	3	4	5	6	7	8	9	10	11	12
Time 1													
1.	Psychological well-being		<b>.64</b>	<b>.38</b>	<b>.42</b>	<b>.39</b>	<b>.30</b>	<b>.62</b>	.53	.40	.46	.52	.40
2.	Generative concern	<b>.61</b>		<b>.55</b>	<b>.31</b>	.36	.40	.45	<b>.69</b>	.58	.47	.42	.40
3.	Generative act-nonspecific	<b>.53</b>	<b>.62</b>		.39	<b>.36</b>	.35	.38	.37	<b>.67</b>	.41	.32	.26
4.	Generative act-civic	<b>.36</b>	<b>.46</b>	.39		.10	<b>.23</b>	.28	.46	.22	<b>.58</b>	.20	.29
5.	Perceived respect-nonspecific	<b>.46</b>	.44	<b>.40</b>	.28		.62	.35	<b>.21</b>	.48	.27	<b>.58</b>	.47
6.	Perceived respect-civic	<b>.51</b>	.44	.25	<b>.27</b>	.49		.42	<b>.39</b>	.36	.32	.62	<b>.59</b>
Time 2													
7.	Psychological well-being	<b>.59</b>	.48	.44	.28	.46	.41		<b>.62</b>	<b>.48</b>	<b>.50</b>	<b>.58</b>	<b>.43</b>
8.	Generative concern	.53	<b>.66</b>	.52	.43	<b>.31</b>	<b>.27</b>	<b>.64</b>		<b>.59</b>	<b>.70</b>	.58	.53
9.	Generative act-nonspecific	.46	.52	<b>.68</b>	.33	.38	.23	<b>.47</b>	<b>.56</b>		.52	<b>.57</b>	.37
10.	Generative act-civic	.40	.46	.33	<b>.67</b>	.32	.34	<b>.50</b>	<b>.56</b>	.32		.47	<b>.56</b>
11.	Perceived respect-nonspecific	.44	.44	.44	.26	<b>.63</b>	.38	<b>.59</b>	.49	<b>.52</b>	.34		.60
12.	Perceived respect-civic	.38	.38	.24	.32	.28	<b>.44</b>	<b>.57</b>	.51	.22	<b>.48</b>	.39	
	<i>M</i>	3.41	1.36	0.96	1.06	2.44	2.73	3.37	1.32	0.90	1.13	2.43	2.78
	<i>SD</i>	0.51	0.53	0.69	0.84	0.38	0.53	0.49	0.50	0.72	0.88	0.39	0.50

Note: Correlations above the diagonal are for men ( $n=61$ ; but for  $r$ s involving civic acts or respect,  $n=54$ ) and those below for women ( $n_s=127$  and  $103$ , respectively). Despite different sample sizes,  $r_s \geq .23$  are significant at the .05 level. Coefficients boldfaced pertain to relationships included in the structural equation models. *M* and *SD*, based on averaged scores across items, are presented for men and women combined.

(1982) test was conducted to see if these mediating pathways were significant. Finally, T2 concern was predicted by T1 respect to see if perceived respect led to subsequent disengagement from generative goals ( $H_2$ ).

To rule out the possibility that respect led to changes in action directly, without altering levels of concern, I tested an alternate Model 2, which was identical to Model 1 except that T2 action was predicted by T1 respect, with the path from T1 respect to T2 concern removed (hence same  $df$ ). If Model 2 did not fit the data as well as Model 1, the argument that lack of respect leads to disengagement from generative goals would be bolstered.

Indicators for the latent variables were formed by randomly splitting a scale into three roughly equal parts (i.e., parcels), with each parcel equal to the average score of the chosen items. The exception was psychological well-being, for which the indicators were composite scores of the four subscales (positive relations, purpose in life, personal growth, and self-acceptance). Item parcels are more reliable than the individual items themselves, are less likely to suffer from distribution problems, and improve the ratio of sample size to indicators (Little, Cunningham, Shahar, & Widaman, 2002), thus improving the reliability of the factor scores being estimated.

Initially, age, gender, marital status, education, living status, and self-rated health were included as covariates. Because the findings were basically the same with and without these covariates, they were removed to simplify the model. Their removal, as well as the use of parcels, reduced substantially the number of parameters to be estimated for this relatively small sample.

The covariance matrix of the indicators was subject to maximum likelihood estimation using LISREL version 8.52. Following more recent evaluations of goodness-of-fit indexes (Hu & Bentler, 1999; Marsh, Hau, & Grayson,

2005), I report the chi-square statistic, comparative fit index (CFI), nonnormed fit index (NNFI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR). Additionally, the Akaike information criterion (AIC) is reported for model comparison (the chi-square difference test could not be used when two models have identical  $df$ ). The AIC is a modification of the chi-square statistic with a penalty for model complexity; an AIC difference of  $\geq 10$  is a strong indication that one model is inferior to the other (Burnham & Anderson, 2002).

## RESULTS

### Preliminary Analyses

Three sets of preliminary analyses were conducted. First, descriptive statistics are presented in Table 2. The level of generative concern reported by this sample appeared to be lower than that reported for an American older sample (McAdams et al., 1993), but it is difficult to say whether such an observation represented a genuine difference across societies, given the dissimilar sample characteristics (the American sample was younger and more educated) and the lack of evidence on construct equivalence across the two cultures. Nonetheless, the current data suggested a moderate level of concern and a relatively low level of behavioral attempt, regardless of domain, to nurture the younger generations. It was noteworthy that, based on the subsample of participants with civic involvement, the frequency of civic acts was even slightly higher than that for nonspecific acts; this difference was not significant at T1,  $t(156)=0.86$ ,  $ns$ , but was significant at T2,  $t(156)=2.75$ ,  $p < .01$ . Likewise, they perceived significantly more respect for their civic acts than for nonspecific acts (T1  $t=7.42$ , T2  $t=8.77$ , both

Table 3. Goodness of Fit of Structural Equation Models

	$\chi^2$	<i>df</i>	CFI	NNFI	SRMR	RMSEA	AIC
Nonspecific domain							
Model 1	631.68	284	.96	.96	.08	.08	739.11
Model 2	686.46	284	.96	.95	.09	.08	785.95
Civic domain							
Model 1	517.01	284	.96	.95	.08	.07	627.42
Model 2	571.97	284	.95	.94	.10	.08	682.77

Note: All chi-square statistics are significant at the .001 level. See Figures 1 and 2 for Model 1. Model 2 differed from Model 1 by the absence of the path from T1 respect to T2 concern and the addition of the path from T1 respect to T2 acts. CFI = comparative fit index; NNFI = nonnormed fit index; SRMR = standardized root mean square residual; RMSEA = root mean square error of approximation; AIC = Akaike information criterion.

*dfs* = 156, both *ps* < .001). In addition, no T2 variables were significantly different from their T1 counterparts.

Second, because studies show that women are generally more involved in generative acts, both inside and outside the home (e.g., Keyes & Ryff, 1998; McAdams & de St. Aubin, 1992), I first examined whether the relationships among the study variables were different between men and women. Intercorrelations among the study variables are shown in Table 2, separately for men and women. Aside from the test–retest correlations and the concurrent correlations between well-being and concern, the correlational coefficients tended to be moderate. Different from Western findings (Grossbaum & Bates, 2002), generative act, whether civic or nonspecific, was moderately to strongly correlated with psychological well-being. Correlations corresponding to the structural paths specified in the structural equation models are boldfaced for easy reference. None of these correlational coefficients differed between men and women, as revealed by Fisher's *Z* tests. On the whole, the findings suggested that it was appropriate to combine men and women in subsequent analyses.

Third, it was crucial to demonstrate that the same latent constructs were being assessed over time before moving on to the structural analyses. This series of analyses was limited to the 157 individuals with full data on all measures. Action and respect in both civic and nonspecific domains were analyzed together in one confirmatory factor analysis. Results showed that the indicators related to the same factors across the two time points (i.e., factor pattern invariance):  $\chi^2(262, N = 157) = 410.96, p < .01$ ; CFI = .98, NNFI = .97, SRMR = .05, and RMSEA = .06. Further constraining the factor loadings to be equal between the two time points resulted in a nonsignificant increase in  $\chi^2 = 11.69 (\Delta df = 19, p > .05)$ , along with CFI = .98, NNFI = .97, SRMR = .06, and RMSEA = .05. Thus, factor loadings were also invariant, meaning that the same constructs were being measured by the items between the two time points, and civic and nonspecific acts were distinguishable from each other. Based on the common metric completely standardized solution, all parcels were highly loaded ( $\geq .55$ ) on their respective factors.

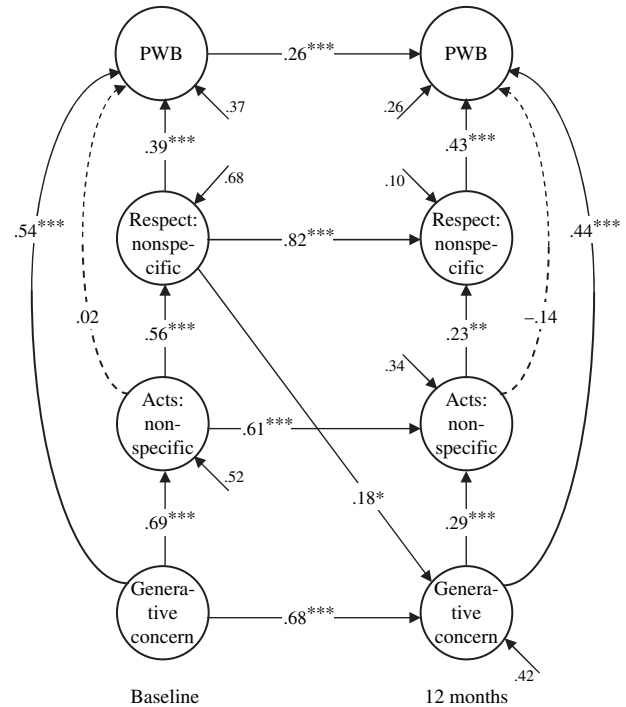


Figure 1. Structural relationships among the latent variables, focusing on nonspecific acts and associated respect. PWB = psychological well-being. Paths that were nonsignificant ( $p > .05$ ) are indicated by dotted lines. \* $p < .05$ , \*\* $p < .01$ , and \*\*\* $p < .001$

### Evaluating the Structural Equation Models

Table 3 shows that Model 2 did not fit the data as well as Model 1; whether in the nonspecific or the civic domain, the AIC difference was well over 10. Hence, respect affected subsequent action through modifying generative concern, not directly. The fit indexes suggested that Model 1 fit the data rather well (Browne & Cudeck, 1993; Hu & Bentler, 1999; Marsh et al., 2005).

As can be seen from Figures 1 and 2, the results, regardless of whether civic or nonspecific acts or respect was analyzed, were very similar. One striking finding was the moderate temporal stability for psychological well-being, which if compared with the correlation using raw score composites in Table 2, was rather low. This suggested that a good proportion of the observed stability of psychological well-being was due to the simultaneous stabilities of generative concern, generative acts, and perceived respect and their combined effects on well-being. At T1, 55%–63% of the variance in psychological well-being was explained by these three factors together. At T2, 70%–74% of the variance in well-being was explained by the model as a whole.

At both time points, generative action had no effect on psychological well-being, whereas action was positively associated with perceived respect from others, which in turn was positively associated with well-being. Perhaps because the targets of civic acts (e.g., voluntary services) often changed or because actual performance varied across tasks,

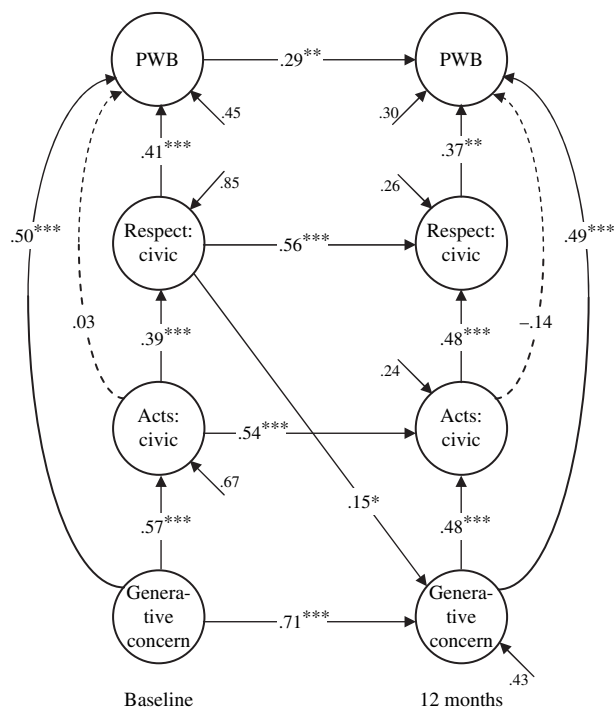


Figure 2. Structural relationships among the latent variables, focusing on civic acts and associated respect. PWB = psychological well-being. Paths that were nonsignificant ( $p > .05$ ) were indicated by dotted lines. \* $p < .05$ , \*\* $p < .01$ , and \*\*\* $p < .001$

there was less stability for respect in the civic domain, leaving more residual variance to be explained by action at T2. For the mediating pathways involving nonspecific acts and associated respect, the Sobel test produced critical ratios of 3.21 ( $p < .01$ ) and 2.32 ( $p < .05$ ) for T1 and T2, respectively. For the mediating pathways in the civic domain, the critical ratios were 2.31 and 2.16, respectively, for T1 and T2 (both  $ps < .05$ ). Thus, the hypothesis that perceived respect completely mediates the relationship between generative acts and psychological well-being was supported by data. The concurrent (T1) indirect effect size that generative acts had on well-being was .22 for nonspecific acts and .16 for civic acts, whereas the indirect effect sizes on changes in well-being (T2) were .10 and .18, respectively.

Moreover, T1 respect had a small effect size ( $< .20$ ) on T2 generative concern, regardless of action domain, supporting the hypothesis that a lack of felt respect for one's generative acts would lead to disengagement from generative goals. Hence, perceived respect at T1 predicted positive changes in well-being after 12 months. On the contrary, a lack of perceived respect resulted in a slight reduction in well-being across this interval, leading further, via the T2 concern → acts → respect → well-being pathway, to reductions in generative acts, respect, and well-being. Thus, an upward or downward spiral in generativity development and well-being depends partly on the felt respect for one's generative acts.

## DISCUSSION

To my knowledge, this is the first study investigating the prospective relationship between generativity and well-being and the disengagement from generative goals in later life. In the study, I postulate that the relationship between generative action and well-being is mediated by the degree to which one's actions are valued and respected by others. I also suggest that the perception of respect for one's actions has the effect of promoting further generativity development, whereas a perceived lack of respect would lead to disengagement from generative goals.

Replicating the Western literature (Grossbaum & Bates, 2002; McAdams et al., 1993), the factor most predictive of psychological well-being was generative concern. Different from the Western literature, I found that generative behavior was moderately to strongly correlated with well-being at the bivariate level. After controlling for concern and respect, however, behavior no longer accounted for well-being. Its indirect effects by way of perceived respect, however, were significant and were of small to moderate magnitudes. It was noteworthy that action was positively related to perceived respect, which in turn was positively related to well-being. The ability to engage in more generative acts echoed what Stewart and Vandewater (1998) called the capacity to be generative, which explained why these individuals were more respected by those around them. These patterns existed at both T1 (concurrent) and T2 (changes over 12 months). Thus, perceived respect completely mediated the concurrent relationship between behavior and well-being, and change in respect also completely mediated the relationship between behavioral change and well-being change over time. After all, why should one endeavor to guide younger people when one feels that they do not want to listen? This line of research thus adds an interesting dimension to extant theories of generativity.

Not only did perceived respect mediate the relationship between action and well-being but it also predicted generative concern over time. The nature of this effect, albeit a small one, was that if one felt respected by younger people, one's concern for them would increase over time. On the contrary, a lack of respect would lead to subsequent disengagement from generative goals, as indicated by a decrease in generative concern, and a downward spiral of generativity development and well-being over time. Unlike midlife generativity for which there is strong cultural demand, which may override, at least partially, the effect of reactions from children, late-life generativity may be deeply embedded in the day-to-day interactions with younger people whose gestures convey to older people whether their generative actions are still desired. When younger people are perceived to be receptive and show respect, the preservation of generative self into old age will be more likely. Once again, this result reinforces the importance of the social context in the realization of

generativity in later life. Because social and cultural environments provide relevant normative expectations as well as opportunities for guiding younger generations (McAdams & de St. Aubin, 1992), future research on generativity should be grounded in the social and cultural text in which the study takes place.

It was interesting that those who had civic participation reported more perceived respect for their civic than nonspecific acts at both time points and a higher frequency of civic than nonspecific acts at T2 also. Although the targets of nonspecific acts were not specified, the fact that such actions were rated so differently from civic acts suggested that participants were primarily referring to the noncivic, or family, domain when rating these behaviors. If this were true, then despite the traditional status accorded to older people in Chinese families (Cheng & Chan, 2006), most of the participants appeared to see more opportunities for generative involvement outside the family than inside, and felt more respect from professionals, neighbors, and the people they served than from children and grandchildren. It is reasonable to assume that civic involvement, such as volunteer work, is more self-selected, so that older people are more likely to stay away from tasks that are unrewarding. Nevertheless, our participants also saw a relatively weak connection between the respect and the frequency of generative acts in the nonspecific domain (Figure 1), suggesting further that respect was not perceived to be forthcoming in this domain. As Cheng, Chan, and Chan (2008) have shown, older persons are often criticized for their generative acts within the family and, because of this, are deprived of the respect so crucial for a sense of filial piety from children (Cheng & Chan, 2006). There is much to say about revitalizing our traditional respect for older persons in the family.

The foregoing discussion leads to an interesting question about the cross-cultural generalizability of the present findings. Cultures differ in terms of the norms of respect for elders. Although respect for elders is a value endorsed in most, if not all, societies, its salience in terms of regulating social behaviors may vary. Compared with Asian cultures, which have been heavily influenced by Confucianism (Cheng & Chan, 2006), Western societies tend not to value what Streib (1987) called "automatic respect" for older persons. Would the same effects due to perceived respect be observed in Western samples? It will be important to place this line of research in a cross-cultural context to see if the findings hold across cultures.

Although opening a new line of inquiry, this research suffers from several potential limitations. First, to provide a more complete picture of the goal disengagement process, future research should also measure generative goals at the behavioral level, that is, daily strivings (McAdams et al., 1993). Second, evidence for disengagement from generative goals came from a longitudinal data set that had only two waves spanning 12 months. A longer interval with more data waves will provide more definite conclusions about the

long-term changes in generativity due to perceived respect. Third, because the future cohorts of older people will be more educated (Cheng, Chan, & Phillips, 2008), it is not certain whether they will be more able than the present cohort to command respect from the younger generations. Fourth, it is conceivable that respect from different sources (children, professionals, community members, etc.) might carry different impacts and deserves to be studied separately. Fifth, this was a relatively small convenience sample. Future research should use a larger, more representative sample.

Finally, respect was measured from the point of view of older persons only, which might be biased. Although the simultaneous perspectives of other people (e.g., those of children) are informative, it may be the respect that is subjectively felt by the older person that truly matters. Future research might reveal how felt respect is related to avowed respect by children and others. On the whole, the present findings suggest that there is a social dimension to generativity and that the degree to which one's generative behaviors are valued by others determines to some extent the continuous engagement with generative goals and the experience of psychological well-being in later life.

## Appendix Items

### *Generative acts*

1. I take care of children and grandchildren when they are ill.
2. Taking care of my offspring's daily life, including preparing meals.
3. Participate in volunteer work and continue to serve the community.
4. Visit other people in need, like patients.
5. Be a role model to the next generation.
6. Learn new things so as to make myself useful to the younger generations.
7. Take care of the grandchildren when their parents are not available.
8. Do housework for my children.
9. Teach the younger generations how to get along with others and handle various matters.
10. Participate in community educational activities.
11. Take initiative to comfort young people in distress.
12. Share my past experience, whether bitter or sweet, with the next generation.
13. Teach the next generation not to spend money on unnecessary items.
14. Teach the next generation to know right from wrong, and to observe rules and regulations.
15. Pass on my skills and talents to the next generation.
16. Counsel younger people who are emotionally disturbed.



17. Encourage the younger generations to learn new things and develop multiple interests.
18. Teach younger generations to do voluntary work and to serve others.
19. Give a hand to needy people in the community.
20. Do something that benefits others.

#### *Perceived Respect*

1. Others don't want my help because they think I am too old (–).
2. Sometimes, I think that the organizations in which I do service do not value my volunteer work (–).
3. I have no way of getting younger generations to accept my guidance (–).
4. The younger generations do not need my assistance (–).
5. I am unable to teach the younger generations to observe rules (–).
6. I am helpful in the eyes of my neighbors.
7. I want to help the next generation, but I don't have the ability to do so (–).
8. Sometimes, I felt that those who received my services did not appreciate my work for them (–).
9. The younger generations don't like "old people's ways" of seeing and doing things (–).
10. The younger generations defer to experts more than they would to older people (–).
11. My children and children-in-law endorse my way of taking care of the grandchildren.
12. Professionals generally think that senior volunteers are not helpful (–).
13. The younger generations do not appreciate my thoughts and concern for them (–).
14. Older people have no status at home (–).
15. I wish to help the next generation but they don't appreciate it (–).

(–) = scored in the reverse.

#### FUNDING

The preparation of the manuscript was supported in part by City University strategic grant no. 7001652.

#### ACKNOWLEDGMENTS

I am grateful to Alfred Chan for his valuable assistance in data collection, and to Coty Lee and three anonymous reviewers for their helpful comments on an earlier version of the manuscript.

#### CORRESPONDENCE

Address correspondence to Sheung-Tak Cheng, PhD, Department of Applied Social Studies, City University of Hong Kong, 83 Tat Chee Avenue, Kowloon, Hong Kong. Email: tak.cheng@cityu.edu.hk

#### REFERENCES

Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes & M. M. Baltes (Eds.), *Successful aging:*

- Perspectives from the behavioral sciences* (pp. 1–34). Cambridge, MA: Cambridge University Press.
- Bengtson, V. L. (2001). Beyond the nuclear family: The increasing importance of multigenerational bonds. *Journal of Marriage and Family*, *63*, 1–16.
- Bradley, C. L. (1997). Generativity-stagnation: Development of a status model. *Developmental Review*, *17*, 262–290.
- Brandtstädter, J., & Greve, W. (1994). The aging self: Stabilizing and protective processes. *Developmental Review*, *14*, 52–80.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 445–455). Newbury Park, CA: Sage.
- Burnham, K. P., & Anderson, D. R. (2002). *Model selection and multi-model inference: A practical information theoretic approach* (2nd ed.). New York: Springer-Verlag.
- Census and Statistics Department. (2002). *Hong Kong 2001 population census main report, Vols. I & II*. Hong Kong, China: Author.
- Cheng, S.-T., & Chan, A. C. M. (2005). Measuring psychological well-being in the Chinese. *Personality and Individual Differences*, *38*, 1307–1316.
- Cheng, S.-T., & Chan, A. C. M. (2006). Filial piety and psychological well-being in well older Chinese. *Journal of Gerontology: Psychological Sciences*, *61B*, P262–P269.
- Cheng, S.-T., Chan, A. C. M., & Phillips, D. R. (2008). The ageing situation in Asia and the Pacific: Trends and priorities. In United Nations Department of Economic and Social Affairs (Ed.), *Regional dimensions of the ageing situation* (pp. 35–69). New York: United Nations.
- Cheng, S.-T., Chan, W., & Chan, A. C. M. (2008). Older people's realisation of generativity in a changing society: The case of Hong Kong. *Ageing & Society*, *28*, 609–627.
- Chiu, H. F. K., Lee, H. B., Chung, W. S., & Kwong, P. K. (1994). Reliability and validity of the Cantonese version of Mini-Mental State Examination: A preliminary report. *Journal of the Hong Kong College of Psychiatrists*, *4* (Suppl. 2), 25–28.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, *24*, 349–354.
- Erikson, E. H. (1997). *The life cycle completed: Extended version with new chapters on the ninth stage of development by Joan M. Erikson*. New York: Norton.
- Erikson, E. H. (1963). *Childhood and society* (2nd ed.). New York: Norton. (Original work published in 1950).
- Erikson, E. H., Erikson, J. M., & Kivnick, H. Q. (1986). *Vital involvement in old age*. New York: Norton.
- Erikson, K. (2004). Reflections on generativity and society: A sociologist's perspective. In E. de St. Aubin, D. P. McAdams, & T.-C. Kim (Eds.), *The generative society: Caring for future generations* (pp. 51–61). Washington, DC: American Psychological Association.
- Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975). "Mini-mental state": A practical method for grading the cognitive state of patients for the clinician. *Journal of Psychiatric Research*, *12*, 189–198.
- Grossbaum, M. F., & Bates, G. W. (2002). Correlates of psychological well-being at midlife: The role of generativity, agency and communion, and narrative themes. *International Journal of Behavioral Development*, *26*, 120–127.
- Hannah, M. T., Domino, G., Figueredo, A. J., & Hendrickson, R. (1996). The prediction of ego integrity in older persons. *Educational and Psychological Measurement*, *56*, 930–950.
- Heckhausen, J., & Schulz, R. (1995). A life-span theory of control. *Psychological Review*, *102*, 284–304.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*, 1–55.
- James, J. B., & Zarrett, N. (2006). Ego integrity in the lives of older women. *Journal of Adult Development*, *13*, 61–75.
- Keyes, C. L. M., & Ryff, C. D. (1998). Generativity in adult lives: Social structural contours and quality of life consequences. In D. P. McAdams

- & E. de St Aubin (Eds.), *Generativity and adult development*. Washington, DC: American Psychological Association.
- Keyes, C. L. M., Shmotkin, D., & Ryff, C. D. (2002). Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality and Social Psychology, 82*, 1007–1022.
- Kotre, J. (1984). *Outliving the self: How we live on in future generations*. Baltimore: Johns Hopkins University Press.
- Little, T. D., Cunningham, W. A., Shahar, G., & Widaman, K. F. (2002). To parcel or not to parcel: Exploring the question, weighting the merits. *Structural Equation Modeling, 9*, 151–173.
- Marsh, H. W., Hau, K. T., & Grayson, D. (2005). Goodness of fit in structural equation models. In A. Maydeu-Olivares & J. J. McArdle (Eds.), *Contemporary psychometrics: A festschrift for Roderick P. McDonald* (pp. 225–340). Mahwah, NJ: Lawrence Erlbaum.
- McAdams, D. P. (1985). *Power, intimacy, and the life story: Personological inquiries into identity*. New York: Guilford.
- McAdams, D. P., & de St. Aubin, E. (1992). A theory of generativity and its assessment through self-report, behavioral acts, and narrative themes in autobiography. *Journal of Personality and Social Psychology, 62*, 1003–1015.
- McAdams, D. P., de St Aubin, E., & Logan, R. L. (1993). Generativity among young, midlife, and older adults. *Psychology and Aging, 8*, 221–230.
- McAdams, D. P., Hart, H. M., & Maruna, S. (1998). The anatomy of generativity. In D. P. McAdams & E. de St Aubin (Eds.), *Generativity and adult development: How and why we care for the next generation* (pp. 7–43). Washington, DC: American Psychological Association.
- Morgan, D. L., Schuster, T. L., & Butler, E. W. (1991). Role reversals in the exchange of social support. *Journal of Gerontology, 46*, S278–S287.
- Peterson, B. E., & Klohnen, E. C. (1995). Realization of generativity in two samples of women at midlife. *Psychology and Aging, 10*, 20–29.
- Peterson, B. E., & Stewart, A. J. (1993). Generativity and social motives in young adults. *Journal of Personality and Social Psychology, 65*, 186–198.
- Rossi, A. S. (2001). Domains and dimensions of social responsibility: A sociodemographic profile. In A. S. Rossi (Ed.), *Caring and doing for others: Social responsibility in the domains of family, work, and community* (pp. 97–134). Chicago: University of Chicago Press.
- Rowe, J. W., & Kahn, R. L. (1997). Successful aging. *Gerontologist, 37*, 433–440.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*, 1069–1081.
- Ryff, C. D., & Heinicke, S. G. (1983). Subjective organization of personality in adulthood and aging. *Journal of Personality and Social Psychology, 44*, 807–816.
- Ryff, C. D., Love, G. D., Urry, H. L., Muller, D., Rosenkranz, M. A., Friedman, E. M., Davidson, R. J., & Singer, B. (2006). Psychological well-being and ill-being: Do they have distinct or mirrored biological correlates? *Psychotherapy and Psychosomatics, 75*, 85–95.
- Sheldon, K. M., & Kasser, T. (2001). Getting older, getting better? Personal strivings and psychological maturity across the life span. *Developmental Psychology, 37*, 491–501.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation modeling. In S. Leinhardt (Ed.), *Sociological methodology* (pp. 290–312). San Francisco: Jossey-Bass.
- Springer, K. W., & Hauser, R. M. (2006). An assessment of the construct validity of Ryff's Scales of Psychological Well-Being: Method, mode and measurement effects. *Social Science Research, 35*, 1080–1102.
- Steverink, N., & Lindenberg, S. (2006). Which social needs are important for subjective well-being? What happens to them with aging? *Psychology and Aging, 21*, 281–290.
- Stewart, A. J., & Vandewater, E. A. (1998). The course of generativity. In D. P. McAdams & E. de St. Aubin (Eds.), *Generativity and adult development: How and why we care for the next generation* (pp. 75–100). Washington, DC: American Psychological Association.
- Strahan, R., & Gerbasi, K. C. (1972). Short, homogeneous versions of the Marlowe-Crowne Social Desirability Scale. *Journal of Clinical Psychology, 28*, 191–193.
- Streib, G. F. (1987). Old age in sociocultural context: China and the United States. *Journal of Aging Studies, 1*, 95–112.
- United Nations. (2002). *Report of the Second World Assembly on Ageing*. New York: Author.

Received March 1, 2008

Accepted July 27, 2008

Decision Editor: Rosemary Blieszner, PhD