
AI translation · View original & related papers at
chinaxiv.org/items/chinaxiv-202304.00957

Research on Intergenerational Changes in Work Values Among Chinese Employees

Authors: Tang Ningyu, Zhen Danlei, key, Tang Ningyu

Date: 2023-04-19T00:00:00+00:00

Abstract

With the development of the times, the composition of employee groups in Chinese workplaces is exhibiting a trend of diversification. The existence of generational differences renders the understanding of work values among Chinese employees from different generations both urgent and important. Grounded in Inglehart's theory of modernization evolution, this paper conducts a systematic and in-depth analysis of the status and evolution of work values across different generational cohorts (the pre-reform generation, reform generation, and post-reform generation) through three studies employing distinct research designs, measurement instruments, analytical methods, and research perspectives. The findings reveal that work values among different generational cohorts of employees in China exhibit both differences and similarities, with the post-reform generation manifesting the most pronounced divergences from the other two cohorts. Specifically, compared to the pre-reform and reform generations, the post-reform generation demonstrates the weakest materialistic work values and the strongest post-materialistic work values; the post-reform generation also exhibits the highest emphasis on openness work values relative to the preceding two cohorts, yet no significant differences are observed in self-transcendence work values across the three generations. The study further reveals that employees across all generational cohorts continue to place greater emphasis on materialistic work values than on post-materialistic values. This paper adopts a multi-method approach, yielding relatively robust findings regarding intergenerational transitions in work values through three studies, thereby addressing gaps in existing work values research. The study reexamines foundational theories of intergenerational transition, and the findings enrich the knowledge system concerning generational differences in work values and research on new-generation employees. Simultaneously, the employment of multiple methods provides an exemplar for intergenerational values research. The results may also furnish reference and guidance for corporate management practice amidst profound transformation.

Full Text

Preamble

Work Values of Chinese Generational Cohorts: An Empirical Investigation

TANG Ningyu¹, ZHEN Danlei¹, GUAN Jian¹

¹Antai College of Economics and Management, Shanghai Jiao Tong University, Shanghai 200030, China

Abstract

As China enters an era of unprecedented global transformation, its workforce composition has become increasingly diverse. Understanding the work values of different generational cohorts has emerged as both an urgent and important challenge for organizations. Grounded in Inglehart's theory of evolutionary modernization, this research systematically examines the work values of three Chinese generational cohorts—pre-reform, reform, and post-reform generations—through three complementary studies employing distinct research designs, measurement instruments, analytical methods, and theoretical perspectives. Our findings reveal both differences and similarities across cohorts, with the post-reform generation exhibiting the most pronounced distinctiveness. Specifically, compared to their predecessors, post-reform generation employees demonstrate the weakest materialistic work values and the strongest post-materialistic work values. They also place the highest importance on openness-to-change work values, though no significant cohort differences emerge in self-transcendence values. Importantly, all cohorts continue to prioritize materialistic over post-materialistic work values. By employing multiple methods across three studies, we obtain robust evidence regarding generational shifts in work values, addressing critical gaps in existing research. Our findings contribute to theoretical refinement of generational change frameworks, enrich the knowledge base on generational differences in work values and new-generation employees, and provide a methodological exemplar for future generational values research. The results also offer practical insights for managing workforce diversity in an era of profound transformation.

Keywords: work values, generational differences, materialism, post-materialism, openness-to-change versus conservation, self-enhancement versus self-transcendence, APC analysis

The world has entered a new era of unprecedented transformation, accompanied by significant changes in the labor force (Li et al., 2021). Workforce composition has become increasingly diverse, making diversity, equity, and inclusion core organizational concerns (Anderson et al., 2017; Tang et al., 2015). By the end of 2020, post-1990 employees accounted for 17.4% of China's workforce, post-1980 employees for 25.9%, post-1970 employees for 24.5%, and post-1960 employees for 20.9% (National Bureau of Statistics Department of Population

and Employment Statistics, 2021). While generational diversity brings vitality and competitive advantages, value and behavioral differences across cohorts have become increasingly salient (Anderson et al., 2017). If poorly managed, these differences may generate misunderstandings and conflict. Since generational issues fundamentally reflect sociocultural change, and values represent a crucial manifestation of such change (Chen & Lian, 2011), understanding the evolution of values and work values across generations provides the foundation for effectively addressing workplace generational challenges.

Work values represent individuals' work-related goals, expressing their intrinsic needs and desired job characteristics (Super, 1970). Work values serve motivational functions (Rokeach, 1973), influencing workplace attitudes such as job satisfaction, work engagement, and turnover intentions (Meng et al., 2020; Jang et al., 2018; Li et al., 2022) and behaviors such as in-role performance, extra-role performance, and innovative performance (Hou et al., 2014; Luan et al., 2017). Consequently, work values constitute a critical variable in organizational management research. Most existing studies conclude that work values differ significantly across generations. Compared to Baby Boomers (born 1946-1964) and Generation X (born 1965-1980), Generation Y (born 1981 onward) places greater emphasis on leisure and work-family balance (Cogin, 2012; Twenge et al., 2010), values work autonomy, and shows less respect for authority (Cennamo & Gardner, 2008; Zhao, 2018), while also seeking challenging work and learning opportunities (Su et al., 2021; Yang et al., 2018). However, some research suggests that work value shifts are not entirely linear; for instance, Twenge et al. (2010) found that Generation X values material rewards more than other cohorts. Nevertheless, some generational work value studies have produced contradictory findings (Rudolph et al., 2018). For example, Cogin (2012) found no significant generational differences in the value placed on work autonomy. Additionally, cross-national research indicates that generational characteristics and trends in work values vary across countries (Parry & Urwin, 2021; Peretz et al., 2022). Egri and Ralston (2004), for instance, found that Chinese generational values differ substantially from those of American employees, with these differences persisting across all cohorts.

Reviewing prior research reveals that despite substantial progress, several limitations remain. First, some studies base their conclusions on data analysis alone, lacking theoretical support for explaining generational shifts in work values (Rudolph et al., 2018). Second, while generational cohort formation is influenced by sociocultural environmental factors (Parry & Urwin, 2021), previous Chinese generational values research has either adopted Western generational classifications or used arbitrary "ten-year cohort" approaches without adequately integrating major historical events in China's social development (Tang et al., 2017). Finally, most research relies exclusively on cross-sectional designs, which cannot effectively disentangle cohort effects (the impact of historical events on a specific generation), age effects (changes due to individual aging), and period effects (contemporary environmental changes affecting all generations) (Chen & Lian, 2011), raising questions about the robustness of

findings. These theoretical gaps and practical demands underscore the need to supplement and refine research on generational differences in work values within the Chinese context to better reflect how social transformation impacts the workforce in this era of profound change (Cai et al., 2020; Fu & Cai, 2016).

1.1 Chinese Generational Classification

A “generation” constitutes an identifiable group of individuals sharing birth years, similar age stages, and experiences of major events during critical developmental periods (Kupperschmidt, 2000). Members of such groups are born within the same historical and cultural context, participate in similar social-historical events during formative years, and share common developmental experiences. Due to different sociocultural imprints, generations differ in values, ideologies, and behavioral patterns, thereby acquiring distinctive generational identities (Joshi et al., 2011).

While researchers hold varying views on Chinese generational classification, most agree that major historical events in modern China should serve as demarcation points (Gao et al., 2022; Tang et al., 2017). Moreover, as new-generation employees gradually enter the workplace, China’s workforce structure is changing (National Bureau of Statistics Department of Population and Employment Statistics, 2021), making it essential to include employees born after 1990 in generational research. Therefore, this study adopts the generational classification proposed by Tang et al. (2017), using key economic events—the 1978 Reform and Opening-up and the 1990 deepening of reforms—as criteria to divide current employees into three cohorts: the pre-reform generation (born before 1978), the reform generation (born 1978-1989), and the post-reform generation (born 1990 onward).

1.2 Work Values and Their Classification

Values represent beliefs about what is “good” and “worthwhile” (Williams, 1970), reflecting broad ideal goals (Sagiv et al., 2017; Schwartz, 1992). Values are hierarchically ordered by relative importance; increased importance of one value leads to decreased importance of others (Rokeach, 1973). Work values represent the manifestation of general values in the work context, expressing individuals’ desired goals in the work domain (Super, 1970).

Scholars have proposed various frameworks for classifying work values. Manhardt (1972) identified three dimensions: comfort and security (e.g., job security, stability in time and location), competence and growth (e.g., innovative work, knowledge acquisition, skill development), and status and independence (e.g., high status, autonomous work), with his measure seeing widespread use (e.g., Meng et al., 2020; Su et al., 2021). Cable and Edwards (2004) developed a similar framework based on Schwartz’s (1992) theory of basic human values, which holds a central position in psychology (Li & Jin, 2016). Their first dimension is “openness-to-change versus conservation,” where openness val-

ues (including autonomy and stimulation) reflect motivation for self-direction and emotional interests at work, while conservation values (including security and conformity) reflect motivation to maintain the status quo and certainty. The second dimension is “self-enhancement versus self-transcendence,” where self-enhancement values (including achievement and power) reflect motivation to advance personal interests, while self-transcendence values (including benevolence and universalism) reflect motivation to enhance others’ and society’s welfare. Twenge et al. (2010) categorized work values into leisure, extrinsic, intrinsic, altruistic, and social dimensions. Cao (2020), drawing on Inglehart’s (1977, 1997) modernization theory, distinguished between materialistic work values (emphasizing material goals like survival and security) and post-materialistic work values (emphasizing non-material goals like self-actualization). This study primarily adopts the materialism-post-materialism framework and Cable and Edwards’ (2004) work values framework to analyze generational shifts in work values.

1.3 Mechanisms of Generational Change in Work Values

As noted, social change drives generational shifts in work values. This study draws on Inglehart’s (1977, 1997) evolutionary modernization theory to examine these shifts in the Chinese context. The theory explains generational value change through two hypotheses. First, the scarcity hypothesis posits that individual values are primarily determined by what was lacking during their formative socioeconomic environment. Those who experienced economic insecurity emphasize survival and security goals (materialism), while those raised in relative safety and prosperity emphasize self-actualization and other non-material goals (post-materialism). Second, the socialization hypothesis suggests that values formed during critical developmental periods remain relatively stable throughout adulthood. Consequently, as societies develop economically, values shift from materialism to post-materialism (Inglehart, 2016).

Inglehart and Baker (2000) further propose that this transformation reflects a shift from survival values to self-expression values. Post-materialism constitutes a key component of self-expression, and conditions promoting post-materialism also facilitate the survival-to-self-expression shift. However, self-expression encompasses additional elements, including freedom of expression, equality, tolerance of diversity, interpersonal trust, and political participation. Essentially, self-expression emphasizes multi-perspective, multi-dimensional understanding of the world and tolerance of differences (Chen & Tang, 2014). These theoretical premises provide the foundation for our investigation of Chinese employees’ work values, which we further examine by incorporating unique Chinese socio-cultural factors.

1.4 Research Overview

Based on Inglehart's (1977, 1997) evolutionary modernization theory, this research systematically reveals trends in Chinese employees' work values through three studies employing different designs, measures, analytical methods, and perspectives. Study 1 utilizes China Labor-force Dynamic Survey (CLDS) data and applies an Age-Period-Cohort (APC) analysis model to examine materialistic and post-materialistic work value trends across cohorts. Study 2 employs a large-scale online survey to both replicate Study 1's hypotheses and conclusions and to address Study 1's measurement and sampling limitations by incorporating Cable and Edwards' (2004) work values measure, providing deeper analysis of intergenerational similarities and differences. Study 3 adopts an intersubjective perspective, examining perceived work values of different generations to validate findings from the first two studies through an alternative lens. This multi-method approach enhances research credibility and validity, enriches the knowledge base on generational work value differences, expands theoretical boundaries, and provides practical guidance for managing multi-generational workforces.

Study 1 investigates trends in materialistic and post-materialistic work values across Chinese generational cohorts. According to modernization theory (Inglehart, 1977, 1997), sustained economic prosperity during formative years broadly enhances individuals' sense of security, reducing the importance of materialistic work values while increasing that of post-materialistic values.

Specifically, the pre-reform generation experienced China's post-liberation construction period, where low material living standards created high economic insecurity (Tang et al., 2017). Since work represented virtually the only means of survival (Chen & Lian, 2011), survival and security needs dominated. The reform generation witnessed China's rapid modernization and industrialization (Leung, 2008), partially satisfying materialistic needs and reducing insecurity. The post-reform generation experienced greater material abundance, significantly improved education and living standards, and having basic survival and security needs met, they no longer purely pursued material rewards but emphasized self-actualization and other non-material goals (Inglehart, 2016). From this perspective alone, materialistic work values should gradually decline and post-materialistic values increase from pre-reform through reform to post-reform generations. However, China's social transformation exhibits both universal modernization characteristics and unique particularities (Gao et al., 2022; Tang et al., 2017). China's state-led system and different socialization processes across cohorts have profoundly shaped work values (Gao et al., 2022), particularly for pre-reform and reform generations. The pre-reform generation's planned economy era emphasized national and collective interests; despite material scarcity, they prioritized spiritual over material life (Chen & Lian, 2011). Consequently, non-material goals like self-actualization held greater importance for them. In contrast, the reform generation experienced policies like "letting some people get rich first," which legitimized material interests and made work's material

value salient and desirable (Chen & Lian, 2011). Based on this analysis, we propose our first set of hypotheses:

Hypothesis 1.1: The post-reform generation will exhibit the lowest materialistic work values, followed by the pre-reform generation, with the reform generation showing the highest.

Hypothesis 1.2: The post-reform generation will exhibit the highest post-materialistic work values, followed by the pre-reform generation, with the reform generation showing the lowest.

2.1 Sample and Data

Study 1 tested Hypotheses 1.1 and 1.2 using CLDS data. Initiated by the Center for Social Science Survey at Sun Yat-sen University, CLDS employs multi-stage, multi-level PPS (Probability Proportionate to Size) sampling proportional to labor force size to investigate the status and evolution of China's labor force. As the first national longitudinal survey project focusing on labor issues in China, CLDS has systematically tracked changes and interactions across community, household, and individual levels (i.e., household members aged 15-64) since its pilot survey in 2011 and first national survey in 2012, with follow-up surveys in 2014, 2016, and 2018, covering 29 provinces (excluding Hong Kong, Macau, Taiwan, Tibet, and Hainan) (Wang et al., 2017). Due to its representativeness and longitudinal nature, CLDS has been widely used in research on labor migration and well-being changes (e.g., Luo et al., 2021; Ye et al., 2018).

We utilized data from the 2012, 2014, and 2016 waves, screening and processing samples as follows. First, we identified tracking samples across the three waves and retained only successfully tracked cases. Second, we deleted cases missing work values data and those born before 1957. Third, we retained only required variables and constructed panel data, yielding 1,950 tracking samples (5,850 total observations across three waves) (see Table 1).

2.2 Measurement Instruments

Materialistic and Post-Materialistic Work Values: We used a set of work values questions from the CLDS questionnaire: “What is the meaning or value of your current job? (1) Making a living; (2) Peace of mind; (3) Meeting more people; (4) Gaining respect; (5) Interest; (6) Fully utilizing one's abilities.” Scholars have applied these items in work values research (e.g., Yang et al., 2019; Cao, 2020). All items used a 5-point Likert scale (1 = very unimportant, 5 = very important). The CLDS manual indicates these items assess the importance of job goals in meeting Maslow's five need levels: physiological (making a living), safety (peace of mind), social (meeting people), esteem (gaining respect), and self-actualization (interest and ability utilization). Following Inglehart's (1977, 1997) modernization theory and Cao's (2020) analytical recommendations, we excluded the ambiguous “peace of mind” item and classified “making a living”

as materialistic and “meeting more people,” “gaining respect,” “interest,” and “fully utilizing abilities” as post-materialistic. Exploratory factor analysis supported this classification (see Appendix A, Table A1).

Control Variables: Individual work values depend not only on key events experienced during different developmental periods but also on how individuals perceive these events, which is influenced by personal characteristics (Parry & Urwin, 2021). Following prior generational research (Egri & Ralston, 2004; Tang et al., 2017), we controlled for personal characteristics. We controlled for gender (0 = male, 1 = female). Since education and urbanization are primary drivers of value formation (Yuchtman-Yaar & Alkalay, 2007), we controlled for education level (1 = junior high or below, 2 = senior high, 3 = university, 4 = master’s or above) and household registration type (0 = agricultural, 1 = non-agricultural). Different job types may also influence work values, so we controlled for job type (1 = employee, 2 = employer, 3 = self-employed, 4 = farmer). To distinguish age effects from cohort effects, we grouped age following prior research (Li et al., 2021) (1 = under 30, 2 = 30-39, 3 = 40-49, 4 = 50-59).

2.3 Analytical Strategy

We conducted data analysis using STATA 16.0 and SPSS 23.0. First, since modernization theory emphasizes relative importance of goals and to reduce individual bias in value importance rankings (Inglehart & Abramson, 1999), we followed Schwartz’s (1992, 2005) recommendations for value measurement by centering work values. For each respondent, we calculated the mean across all value types, then subtracted this mean from each type’s score, converting absolute importance to relative importance. Centered data were used for correlation and regression analyses, while original data were used for exploratory and confirmatory factor analyses (Schwartz, 1992, 2005). Second, due to high correlation between age and cohort, we employed APC modeling to control for age and period effects and avoid multicollinearity. APC modeling examines interactions between life course stages and social-historical events (Fosse & Winship, 2019; Yang, 2008). Since specific historical events or social changes affect cohorts similarly yet produce different life trajectories, individual psychology and behavior are simultaneously influenced by age, period, and cohort effects (Yang & Land, 2008, 2016). APC models decompose social phenomena into these three net effects, identifying different sources of change (Yang & Land, 2008, 2016). Given the short intervals between CLDS waves and our primary focus on intergenerational value change, we adopted Deaton’s (1997) decomposition method (Zhou et al., 2009). Assuming α_i represents the value level of a representative group from birth cohort i , individual values V can be expressed as:

$$V = \alpha_1 \times \text{Cohort}_1 + \alpha_2 \times \text{Cohort}_2 + \alpha_3 \times \text{Cohort}_3 + \gamma_t + \gamma_k + \beta \times \text{Controls}_t$$

where Cohort_i ($i = 1, 2, 3$) represents dummy variables for generational cohorts

(1 = pre-reform, 2 = reform, 3 = post-reform). γ_t denotes year fixed effects ($t = 2012, 2014, 2016$), γ_k age fixed effects ($k = 1, 2, 3, 4$), and Controls _{t} includes gender, education, household registration, and job type. Regressing individual values on cohort dummies yields estimates of α_i . Third, we used the reform generation as the reference group, constructing two dummy variables (pre-reform and post-reform), with supplementary analyses using the pre-reform generation as reference.

2.4 Results

To examine work value tendencies across cohorts, we first conducted descriptive analyses for pre-reform, reform, and post-reform employees (see Table 1). Results showed that materialistic work values remained more important than post-materialistic values across all cohorts.

Table 2 and Figure 1 [Figure 1: see original paper] present APC model results for materialistic and post-materialistic work values. For materialistic values (Model 1), pre-reform and reform generations did not differ significantly ($b = -0.01, p = 0.85$), while the post-reform generation scored significantly lower than the reform generation ($b = -0.14, p = 0.04$). Supplementary analysis (Model 2) showed the post-reform generation marginally lower than pre-reform ($b = -0.14, p = 0.06$). Thus, the post-reform generation exhibited lower materialistic work values than both other cohorts, with no significant difference between pre-reform and reform generations, partially supporting Hypothesis 1.1.

For post-materialistic values (Model 3), pre-reform and reform generations did not differ ($b = 0.01, p = 0.85$), while the post-reform generation scored significantly higher than the reform generation ($b = 0.14, p = 0.04$). Supplementary analysis (Model 4) showed the post-reform generation marginally higher than pre-reform ($b = 0.14, p = 0.06$). Thus, the post-reform generation exhibited higher post-materialistic work values than both other cohorts, with no significant difference between pre-reform and reform generations, partially supporting Hypothesis 1.2.

2.5 Supplementary Analysis: Age and Period Effects

To better distinguish generational change from age and period effects, we conducted separate analyses.

2.5.1 Period Effects

Figure 2 [Figure 2: see original paper] shows period effect results. For materialistic values, 2014 ($b = 0.21, p < 0.001$) and 2016 ($b = 0.22, p < 0.001$) were significantly higher than 2012, with no significant difference between 2014 and 2016 ($b = 0.01, p = 0.54$). For post-materialistic values, 2014 ($b = -0.21, p < 0.001$) and 2016 ($b = -0.22, p < 0.001$) were significantly lower than 2012, with no difference between 2014 and 2016 ($b = -0.01, p = 0.54$). This may

reflect that after years of rapid growth, China's economic growth slowed from 2011, with 2012 GDP growth (7.86%) declining sharply from the previous year (9.55%) (National Bureau of Statistics of China, 2014). Concerns about economic development may have reprioritized survival values (Norris & Inglehart, 2019), leading to increased materialism.

2.5.2 Age Effects

Figure 3 [Figure 3: see original paper] presents age effect results. For materialistic values, the 30-39 ($b = 0.12$, $p = 0.001$) and 40-49 ($b = 0.09$, $p = 0.08$) age groups scored significantly higher than the under-30 group, while the 50-59 group did not differ significantly ($b = 0.08$, $p = 0.11$), showing an inverted U-shaped pattern. For post-materialistic values, the 30-39 ($b = -0.12$, $p = 0.001$) and 40-49 ($b = -0.09$, $p = 0.08$) groups scored significantly lower than the under-30 group, while the 50-59 group showed no difference ($b = -0.08$, $p = 0.11$), displaying a U-shaped pattern. These trends may reflect different role salience across life stages (Zacher & Froidevaux, 2021). After family formation (around age 30), dual demands for family economics and personal achievement increase materialism, which declines after achieving certain economic and career success (around age 45).

2.6 Discussion

Study 1 provides preliminary evidence for generational shifts in work values. Using three waves of CLDS data and APC modeling, we examined intergenerational differences while distinguishing cohort, period, and age effects. APC analysis revealed distinct effects: generational effects largely supported modernization theory, with the post-reform generation showing weakest materialistic and strongest post-materialistic values after controlling for age and period. Notably, although the post-reform generation valued materialism less and post-materialism more than other cohorts, all generations still prioritized materialistic over post-materialistic values. This likely reflects China's status as a developing country with relatively low per capita GDP, where security remains insufficiently high for post-materialism to dominate, consistent with prior research (Inglehart, 2016; Yang et al., 2018).

However, Study 1 has limitations. Regarding sampling, although CLDS is a nationally representative social survey, sampling period constraints (the oldest post-reform cohort was only 22 in 2012) and attrition created uneven cohort sample sizes, with relatively few post-reform respondents. The short period span may also affect robustness of period effect conclusions. Regarding measurement, CLDS uses self-developed scales with single-item materialism measures, providing insufficient reliability and validity evidence. Additionally, the materialism-post-materialism framework may oversimplify the richness of individual work value orientations (Schwartz, 2003).

3 Study 2

Study 2 aimed to replicate Study 1's hypotheses and conclusions while overcoming its measurement and sampling limitations. Building on Study 1, we incorporated Cable and Edwards' (2004) work values measure based on Schwartz's (1992) basic individual values theory to explore work values more systematically. Drawing on Inglehart's (1977, 1997) modernization theory, sustained material prosperity and social stability should enhance economic and personal security, thereby reducing conservation and self-enhancement values while increasing openness-to-change and self-transcendence values (Egri & Ralston, 2004; Tang et al., 2017).

Regarding openness-to-change and conservation values, as China's reform deepened and market economy developed, living standards rose from scarcity to basic satisfaction across cohorts (Tang et al., 2017), increasing economic and personal security. This reduced emphasis on economic security, loosened authority compliance, and increased value placed on autonomy and self-expression (Inglehart, 2008, 2016). Post-reform generations became more self-focused and individualistic (Li & Hou, 2012), valuing workplace autonomy and variety. Mass education and internet access also exposed them to more diverse information (Li & Hou, 2012), enhancing their understanding and acceptance of workplace innovations. Research by Hou et al. (2014) and Laird et al. (2015) found that new-generation employees value personal freedom, challenge tradition, and drive innovation. Therefore, we propose:

Hypothesis 2.1: Openness-to-change work values will increase across generations, being lowest in the pre-reform generation and highest in the post-reform generation.

Hypothesis 2.2: Conservation work values will decrease across generations, being highest in the pre-reform generation and lowest in the post-reform generation.

Regarding self-enhancement and self-transcendence values, modernization theory suggests that with affluence and stability, people move beyond personal material interests to emphasize pluralism, equality, inclusiveness, and universal welfare (Chen & Tang, 2014; Inglehart & Baker, 2000; Tang et al., 2017). However, the pre-reform generation's planned economy era emphasized spiritual life (Chen & Lian, 2011) and collectivist interests (Guan, 2000), promoting self-sacrifice at work (Leung, 2008). Although the reform generation's material conditions improved relative to the pre-reform generation, they remained modest, while reform policies culturally legitimized material pursuits (Tang et al., 2017; Chen & Lian, 2011), making the reform generation more desirous of personal gains (salary and status). Thus, pre-reform cohorts should show lower self-enhancement and higher self-transcendence than reform cohorts. Prior research also found that among employees born in the 1960s through 1990s, the 1980s cohort most valued promotion and income (Luan et al., 2017). Therefore, we propose:

Hypothesis 2.3: The reform generation will exhibit the highest self-enhancement work values, followed by the pre-reform generation, with the post-reform generation lowest.

Hypothesis 2.4: The post-reform generation will exhibit the highest self-transcendence work values, followed by the pre-reform generation, with the reform generation lowest.

3.1 Sample and Data

Study 2 validated these hypotheses through an online questionnaire survey administered via the Credamo platform (www.Credamo.com) in November 2022 to employed individuals aged 18-59 nationwide. We collected 1,166 questionnaires, retaining 992 valid responses after excluding those with errors or abnormal completion times (85.08% valid response rate). The sample included 440 men (44.40%) and 552 women (55.60%), with a mean age of 38.27 years ($SD = 10.25$). Using Tang et al.'s (2017) classification, the sample comprised 306 pre-reform generation (30.80%), 306 reform generation (30.80%), and 380 post-reform generation (38.30%) employees.

3.2 Measures and Analytical Strategy

We employed two work values measures. **Materialistic and Post-Materialistic Work Values:** As in Study 1, we used CLDS's five work values items. Exploratory factor analysis again supported our classification (see Appendix A, Table A2), with "making a living" representing materialism and "meeting more people," "gaining respect," "interest," and "fully utilizing abilities" representing post-materialism. Post-materialism showed Cronbach's $\alpha = 0.76$.

Cable and Edwards (2004) Work Values: This 24-item measure includes eight dimensions (e.g., "Making the world a better place is important to me") rated on a 5-point scale (1 = very unimportant, 5 = very important). The Chinese version was developed through back-translation. Following Schwartz (1992), Cable and Edwards (2004), and Sessions et al. (2021), we aggregated dimensions into four work value types: openness-to-change (stimulation and self-direction), conservation (security and conformity), self-enhancement (achievement and power), and self-transcendence (benevolence and universalism). We conducted confirmatory factor analysis using Mplus 8.30 (Muthén & Muthén, 1998-2017) to assess structural validity (see Table 3). The first-order eight-factor model showed good fit ($\chi^2(224) = 613.927$, $p < 0.001$, CFI = 0.958, RMSEA = 0.042, SRMR = 0.039). The second-order four-factor model also showed adequate fit ($\chi^2(238) = 1003.418$, $p < 0.001$, CFI = 0.918, RMSEA = 0.057, SRMR = 0.077) and was theoretically and statistically preferable. Cronbach's α coefficients were 0.81 (openness), 0.78 (conservation), 0.77 (self-enhancement), and 0.76 (self-transcendence).

Control Variables: We controlled for gender (0 = male, 1 = female), household registration (0 = agricultural, 1 = non-agricultural), education (1 = elementary or below, 2 = junior high, 3 = senior high, 4 = college, 5 = bachelor's, 6 = master's, 7 = doctorate), and marital status (1 = unmarried, 2 = married, 3 = divorced). Due to high correlation between age grouping and cohort ($r = -0.93$), we did not control for age, following prior generational research (Egri & Ralston, 2004; Tang et al., 2017).

Study 2 followed Study 1's analytical approach: (1) centering work values to convert absolute to relative importance scores, and (2) regression analysis using reform generation as reference, with supplementary analysis using pre-reform generation as reference.

3.3 Results

Table 4 presents means, standard deviations, and correlations. Descriptive analyses (Table 5) showed that, consistent with Study 1, materialistic work values remained more important than post-materialistic values across all cohorts. Further analysis revealed that self-enhancement values were most important and openness values least important across cohorts.

Regression results for materialistic and post-materialistic values (Table 6 and Figure 4 [Figure 4: see original paper]) showed that for materialism, pre-reform and reform generations did not differ ($b = -0.01$, $p = 0.79$), while the post-reform generation scored significantly lower than reform ($b = -0.11$, $p = 0.04$) and marginally lower than pre-reform ($b = -0.09$, $p = 0.08$). Thus, post-reform generation showed lower materialism than both other cohorts, with no difference between pre-reform and reform generations, partially supporting Hypothesis 1.1.

For post-materialism, pre-reform and reform generations did not differ ($b = 0.01$, $p = 0.79$), while the post-reform generation scored significantly higher than reform ($b = 0.11$, $p = 0.04$) and marginally higher than pre-reform ($b = 0.09$, $p = 0.08$). Thus, post-reform generation showed higher post-materialism than both other cohorts, with no difference between pre-reform and reform generations, partially supporting Hypothesis 1.2.

Results for Cable and Edwards' (2004) work values (Table 7 and Figure 5 [Figure 5: see original paper]) showed that for openness-to-change, pre-reform and reform generations did not differ ($b = 0.00$, $p = 0.93$), while post-reform was marginally higher than reform ($b = 0.07$, $p = 0.07$) and pre-reform ($b = 0.07$, $p = 0.07$). Thus, post-reform generation showed higher openness than both other cohorts, with no difference between pre-reform and reform generations, partially supporting Hypothesis 2.1.

For conservation values, no significant differences emerged among pre-reform, reform, and post-reform generations (all $ps > 0.28$), failing to support Hypothesis 2.2.

For self-enhancement, pre-reform and reform generations did not differ ($b =$

0.00, $p = 0.98$), while post-reform scored significantly lower than reform ($b = -0.10$, $p = 0.004$) and pre-reform ($b = -0.10$, $p = 0.01$). Thus, post-reform generation showed lower self-enhancement than both other cohorts, with no difference between pre-reform and reform generations, partially supporting Hypothesis 2.3.

For self-transcendence, no significant differences emerged among the three generations (all p s > 0.63), failing to support Hypothesis 2.4.

3.4 Discussion

Study 2 replicated Study 1's findings: the post-reform generation showed lower materialism and higher post-materialism than both other cohorts. Using Cable and Edwards' (2004) measure provided deeper insights, confirming that the post-reform generation valued openness-to-change more and self-enhancement less than previous cohorts. However, contrary to predictions, pre-reform and reform generations did not differ in materialism/post-materialism, and no cohort differences emerged in conservation or self-transcendence values. Additionally, as in Study 1, although relative importance of some values shifted across cohorts, materialistic values remained more important than post-materialistic values within each cohort, and self-enhancement values remained most important while openness values remained least important. In other words, the priority ordering of work values did not fundamentally change.

Despite consistency with Study 1, both studies relied on self-reports, potentially introducing self-serving bias (Paulhus, 1991). Moreover, since individuals are not merely passive recipients but active constructors of cultural values, perceived values of others (intersubjective perspective) may differ from perceived personal values (intrasubjective perspective) (Chiu et al., 2010). Therefore, Study 3 adopted an intersubjective perspective to examine perceived work values across generations, revealing generational trends from an alternative viewpoint and testing consistency with Studies 1 and 2.

4.1 Sample and Data

Study 3 re-examined Hypotheses 1.1-1.2 and 2.1-2.4 using an intersubjective perspective to further explore Chinese employees' work values. We administered questionnaires via Credamo in November 2022, collecting 400 surveys and retaining 361 valid responses after excluding low-quality and abnormal completion times (90.25% valid response rate). The sample included 149 men (41.30%) and 212 women (58.70%), with a mean age of 39.07 years ($SD = 10.67$). Using Tang et al.'s (2017) classification, the sample comprised 122 pre-reform generation (33.80%), 106 reform generation (29.40%), and 133 post-reform generation (36.80%) respondents.

4.2 Measures and Procedure

We adapted the two work values measures from Studies 1 and 2 for intersubjective assessment. Specifically, we asked respondents to evaluate work values of each generation. For example, when assessing pre-reform generation materialistic and post-materialistic values, the instruction read: “What is the meaning or value of work for employees born before the Reform and Opening-up (before 1978)?” Similarly, for Cable and Edwards’ (2004) values, the instruction read: “Below is a list of work-related beliefs. Please indicate the extent to which employees born before the Reform and Opening-up (before 1978) would agree with them.” As in Studies 1 and 2, we converted absolute to relative importance scores (Schwartz, 1992, 2005). Cronbach’s α coefficients were 0.67 (post-materialism), 0.87 (openness), 0.86 (conservation), 0.75 (self-enhancement), and 0.83 (self-transcendence).

Control Variables: Respondents’ perceptions of generational work values are influenced by personal characteristics (Parry & Urwin, 2021). We controlled for gender (0 = male, 1 = female), cohort (1 = pre-reform, 2 = reform, 3 = post-reform), household registration (0 = agricultural, 1 = non-agricultural), education (1 = elementary or below, 2 = junior high, 3 = senior high, 4 = college, 5 = bachelor’s, 6 = master’s, 7 = doctorate), and marital status (0 = unmarried, 1 = married). Due to high correlation between age and cohort ($r = -0.93$), we did not control for age.

4.3 Results

We first examined whether respondents from different cohorts differed in their evaluations of specific cohorts’ work values. After controlling for gender, household registration, education, and marital status, respondents’ evaluations of most work values (materialism, post-materialism, conservation, self-enhancement, self-transcendence) did not differ by their own cohort (all $F(2, 354) < 2.298$, $p > 0.102$, $\eta^2 < 0.013$), except for openness values ($F(2, 354) = 3.321$, $p = 0.037$, $\eta^2 = 0.018$). Thus, different cohorts showed relatively consistent perceptions of each cohort’s work values.

Descriptive analyses of respondents’ evaluations (Table 8) revealed a fundamental shift in value priorities from pre-reform to post-reform generations. Specifically, for the pre-reform generation, materialistic values were more important than post-materialistic values, while the opposite held for the post-reform generation. For Cable and Edwards’ (2004) values, pre-reform generation priorities ranked as conservation > self-transcendence > self-enhancement > openness, while post-reform generation priorities showed the reverse ordering.

We then conducted repeated-measures ANOVAs for each work value, controlling for gender, cohort, household registration, education, and marital status.

For materialistic and post-materialistic values (Table 8), significant cohort differences emerged ($F(1.79, 635.07) = 7.21$, $p = 0.001$, $\eta^2 = 0.02$). For materialism,

pre-reform and reform generations did not differ ($F(1, 355) = 0.07, p = 0.79, \eta^2_p = 0.00$), but both scored significantly higher than post-reform (pre-reform vs. post-reform: $F(1, 355) = 7.42, p = 0.01, \eta^2_p = 0.02$; reform vs. post-reform: $F(1, 355) = 14.81, p < 0.001, \eta^2_p = 0.05$). Thus, post-reform generation showed lowest materialism, with no difference between pre-reform and reform generations, partially supporting Hypothesis 1.1.

For post-materialism, significant cohort differences emerged ($F(1.79, 635.07) = 7.21, p = 0.001, \eta^2_p = 0.02$). Pre-reform and reform generations did not differ ($F(1, 355) = 0.07, p = 0.79, \eta^2_p = 0.00$), but both scored significantly lower than post-reform (pre-reform vs. post-reform: $F(1, 355) = 7.42, p = 0.01, \eta^2_p = 0.02$; reform vs. post-reform: $F(1, 355) = 14.81, p < 0.001, \eta^2_p = 0.05$). Thus, post-reform generation showed highest post-materialism, with no difference between pre-reform and reform generations, partially supporting Hypothesis 1.2.

For Cable and Edwards' (2004) values (Table 8), significant cohort differences emerged for openness-to-change ($F(1.56, 552.74) = 4.51, p = 0.02, \eta^2_p = 0.01$). Pre-reform and reform generations did not differ ($F(1, 355) = 0.26, p = 0.61, \eta^2_p = 0.00$), but both scored significantly lower than post-reform (pre-reform vs. post-reform: $F(1, 355) = 5.30, p = 0.02, \eta^2_p = 0.02$; reform vs. post-reform: $F(1, 355) = 14.81, p = 0.002, \eta^2_p = 0.03$). Thus, post-reform generation showed highest openness, with no difference between pre-reform and reform generations, partially supporting Hypothesis 2.1.

For conservation values, significant cohort differences emerged ($F(1.56, 552.74) = 4.51, p = 0.02, \eta^2_p = 0.01$). Pre-reform and reform generations did not differ ($F(1, 355) = 0.14, p = 0.71, \eta^2_p = 0.00$), but both scored significantly higher than post-reform (pre-reform vs. post-reform: $F(1, 355) = 7.08, p = 0.01, \eta^2_p = 0.02$; reform vs. post-reform: $F(1, 355) = 12.58, p < 0.001, \eta^2_p = 0.03$). Thus, post-reform generation showed lowest conservation, with no difference between pre-reform and reform generations, partially supporting Hypothesis 2.2.

No significant cohort differences emerged for self-enhancement ($F(1.72, 611.89) = 1.58, p = 0.21, \eta^2_p = 0.00$) or self-transcendence values ($F(1.63, 579.33) = 1.56, p = 0.22, \eta^2_p = 0.00$), failing to support Hypotheses 2.3 and 2.4.

4.4 Discussion

Study 3's intersubjective perspective largely replicated Studies 1 and 2's main findings. Specifically, for materialistic and post-materialistic values, results mirrored Studies 1 and 2, with post-reform generation showing lowest materialism and highest post-materialism. For Cable and Edwards' (2004) values, results aligned with Study 2, showing post-reform generation highest in openness and no cohort differences in self-transcendence. However, differing from Study 2, Study 3 found post-reform generation lowest in conservation and no cohort differences in self-enhancement.

Notably, while three studies showed partial consistency, the intersubjective per-

spective revealed fundamental shifts in value priorities across generations that were not apparent in the intrasubjective perspective. Materialistic values declined substantially, post-materialistic values increased substantially, conservation values declined substantially, and openness values increased substantially. One explanation is that simultaneously evaluating three generations may have enhanced contrast effects, amplifying perceived differences. Additionally, intrasubjective values represent individual choices based on self-interest, while intersubjective values represent societal choices based on collective utility and transmissibility. These standards are not entirely consistent, potentially causing divergence between intrasubjective and intersubjective values (Heylighen, 1997; Wan et al., 2010), underscoring the necessity of intersubjective research.

5 Integrated Results and Discussion

This study examined generational shifts in Chinese employees' work values. Across three studies using longitudinal tracking (Study 1) and cross-sectional designs (Studies 2 and 3), APC modeling (Study 1), hierarchical regression (Study 2), and repeated-measures ANOVA (Study 3), materialism/post-materialism measures (all studies) and Cable and Edwards' (2004) measures (Studies 2 and 3), and intrasubjective (Studies 1 and 2) and intersubjective (Study 3) perspectives, results demonstrate both intergenerational differences and similarities. Consistently, studies found: (1) post-reform generation shows lowest materialism and highest post-materialism; (2) post-reform generation shows highest openness, while no cohort differences emerge in self-transcendence. However, Studies 2 and 3 showed inconsistent findings for conservation and self-enhancement values. Table 9 summarizes results, showing strong cross-study consistency for materialism, post-materialism, openness, and self-transcendence.

We also found intergenerational similarities. For instance, conservation values did not show a clear declining trend. While economic development and education reduce conservation values, increased identification with new forms of authority (e.g., organizational, professional) may offset this effect (Gao et al., 2022). Self-transcendence values also remained relatively stable, possibly because traditional Chinese culture consistently emphasizes interpersonal relationships and harmony (Cai et al., 2020; Gao et al., 2022), with continuity in cultural traditions and ideological education maintaining relatively stable self-transcendence orientations.

Furthermore, pre-reform and reform generations showed no significant differences across all work values. One explanation is that organizational socialization may reduce intergenerational differences in work values (Joshi et al., 2011; Tang et al., 2017). As work values represent values in the workplace context, they may be more susceptible to workplace norms and environments than general personal values. This effect may be stronger for pre-reform and reform generations, who entered the workforce earlier and have longer tenure, experiencing greater organizational socialization (Martin & Côté, 2019). Another explanation is that China's compressed modernization—where traditional, modern, and postmod-

ern elements coexist (Jing, 2015)—and the time lag in value change (Inglehart, 2016) may prevent complete value transformation within the three cohorts' time span.

Finally, Studies 1 and 2 (intrasubjective perspective) consistently showed that all cohorts prioritized materialistic over post-materialistic work values. Thus, although relative importance of some values shifted across generations, no fundamental reordering of value priorities occurred; all cohorts continue emphasizing materialistic work values.

5.1 Theoretical Contributions

First, this study provides nuanced analysis of Chinese employees' work value shifts, re-examining and reflecting on theoretical explanations for value change and enriching the knowledge base on generational work value differences. While Inglehart (1997) demonstrated materialism-to-post-materialism shifts across many nations, his theory has faced criticism for Western-centrism, oversimplified frameworks, and neglect of cultural complexity (Eisenstadt, 1973; Gao et al., 2022; Tang et al., 2017). Our findings show that while some value changes align with modernization theory (e.g., materialism-to-post-materialism shift, increased openness), others diverge (e.g., no cohort differences in self-transcendence). Chinese employees' work value changes thus reflect both universal modernization processes and Chinese particularities, representing micro-level outcomes of interactions between modernization and indigenous contexts (Ralston et al., 2006), demonstrating distinctive features of China's socialist modernization. This indicates that value change is not unidirectional or linear; materialistic values persist and may even strengthen under certain conditions (Huang et al., 2018).

Notably, although generational shifts exist, their magnitude may be smaller than perceived. Studies 1 and 2 show changes are not fundamental; employees maintain relatively high materialism and self-enhancement. Inglehart (2008, 2016) found that by the late 20th/early 21st century, post-materialism slightly exceeded materialism in Western Europe and the U.S., but materialism remains dominant in China. Yang et al. (2018) also found Chinese employees across cohorts prioritize work income over intrinsic and social values. Inglehart (2016) attributes this to China's relatively low per capita GDP and high income inequality, keeping survival needs primary. In summary, as Chinese society undergoes rapid change, examining generational work value differences requires considering multiple social, political, economic, and cultural factors alongside established theories.

Second, unlike prior research grouping all post-1980 employees as “new generation,” this study distinguishes reform and post-reform generations based on China's unique historical events, revealing significant work value differences between these two cohorts. This supplements existing new-generation employee research and enriches understanding of new-generation work values.

Finally, by employing multiple designs, measures, analytical methods, and perspectives, this research provides a robust, valid exemplar for future generational research. Most generational studies use cross-sectional designs that cannot disentangle cohort, age, and period effects, leading to criticism and questions about whether generational differences are artifacts (Parry & Urwin, 2021; Rudolph et al., 2018). This study pioneers APC modeling in organizational generational research (Study 1) to isolate cohort effects while providing evidence of period and age effects. Studies 2 and 3 further replicated and extended findings through large-scale cross-sectional and intersubjective designs, yielding largely consistent conclusions. This comprehensive methodological approach advances generational values research in organizational contexts.

5.2 Practical Implications

This research offers several managerial implications. First, by dissecting intergenerational similarities and differences in work values, we reveal work motivations and preferences across cohorts, helping managers understand generational characteristics and providing evidence for managing workplace diversity. While generational differences challenge management strategies, managers should not exaggerate them. Our findings show all cohorts currently prioritize materialistic and self-enhancement values. Therefore, managers should leverage material incentives while flexibly employing other approaches to adapt to multi-generational management and optimize contributions from all employees.

Second, this study deepens understanding of new-generation employees, providing important references for their management. Research shows that although both reform and post-reform generations are labeled “new generation,” they differ significantly in work values, requiring managers to recognize these distinctions. Additionally, while post-reform employees are often perceived as more self-centered and less cooperative (Anderson et al., 2017), our results indicate they value openness-to-change more but also maintain self-transcendence values comparable to other cohorts. Managers should avoid biased judgments and develop strategies based on actual work value profiles.

Third, the divergence between intersubjective and intrasubjective perspectives reminds managers to listen comprehensively and consider multiple viewpoints when addressing generational issues to develop more reasonable and effective solutions.

5.3 Limitations and Future Directions

This study has several limitations warranting future research. First, while our multi-method approach addresses prior limitations, each sub-study has constraints. Future research could employ cross-sequential or cross-temporal meta-analytic designs (Twenge, 2000; Xin & Zhou, 2012) to more comprehensively examine trends and mechanisms. Additionally, future APC research could use

more reliable work values measures and longer tracking periods for more robust conclusions (Glenn, 2005).

Second, while we interpret generational differences through macro-level economic, social, cultural, and historical factors, these represent correlational rather than causal relationships. Future research should investigate specific mechanisms driving work value changes as richer data become available.

Third, despite largely consistent findings across three studies, some hypotheses were unsupported or showed inconsistent results. For example, Tang et al.'s (2017) life values research found no cohort differences in conservation between pre-reform and post-reform generations, while our work values research found post-reform significantly different from both earlier cohorts, with no differences between pre-reform and reform generations. This complexity suggests need for further examination of traditional cultural continuity. Future multi-method research should analyze similarities and differences in life values and work values changes across cohorts to better understand patterns and cultural/environmental influences.

Finally, this study reveals work value shifts but does not address how individuals, organizations, and society should respond. Anderson et al. (2017) suggest that leadership styles effective for older generations (transformational, authentic, LMX) may not suit new generations. Future research should examine leadership approach effectiveness across generations.

6 Conclusion

Grounded in Inglehart's (1997) modernization theory, this research investigated Chinese employees' work values through three studies employing multiple designs, measures, analytical methods, and perspectives. Findings consistently demonstrate both intergenerational differences and similarities. Overall, the post-reform generation shows weakest materialism and strongest post-materialism, highest openness-to-change, and no cohort differences in self-transcendence. Importantly, all cohorts continue prioritizing materialistic over post-materialistic values. Future research should employ cross-sequential designs to more comprehensively examine generational value shifts, underlying mechanisms, and adaptive strategies.

References

- Anderson, H., Baur, J. E., Griffith, J. A., & Buckley, M. R. (2017). What works for you may not work for (Gen)Me: Limitations of present leadership theories for the new generation. *Leadership Quarterly*, 28(1), 245-267.
- Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions* (pp. 249-381). San Francisco:

Jossey-Bass.

Cable, D. M., & Edwards, J. R. (2004). Complementary and supplementary fit: A theoretical and empirical integration. *Journal of Applied Psychology, 89*(5), 822-834.

Cai, H., Huang, Z., Lin, L. L., Zhang, M., Wang, X., Zhu, H., Xie, Y., Yang, Y., Yang, Z., & Jing, Y. (2020). The psychological change of the Chinese people over the past half century: A literature review. *Advances in Psychological Science, 28*(10), 1599-1618.

Cao, Y. (2020). Economic development, market transition, and work values in post-socialist China. *Social Forces, 99*(2), 760-796.

Cennamo, L., & Gardner, D. (2008). Generational differences in work values, outcomes and person-organization values fit. *Journal of Managerial Psychology, 23*(8), 891-906.

Chen, J., & Lian, R. (2011). A review of the development of generational work value. *Advances in Psychological Science, 19*(11), 1692-1701.

Chen, Y., & Tang, N. (2014). Work values of the new generation employees: From a postmodernism perspective. *Shanghai Management Science, 36*(1), 66-71.

Chiu, C., Gelfand, M. J., Yamagishi, T., Shteynberg, G., & Wan, C. (2010). Intersubjective culture: The role of intersubjective perceptions in cross-cultural research. *Perspectives on Psychological Science, 5*(4), 482-493.

Cogin, J. A. (2012). Are generational differences in work values fact or fiction? Multi-country evidence and implications. *The International Journal of Human Resource Management, 23*(11), 2268-2294.

Deaton, A. (1997). *The analysis of household surveys: A microeconomic approach to development policy*. World Bank Publications.

Egri, C. P., & Ralston, D. A. (2004). Generation cohorts and personal values: A comparison of China and the United States. *Organization Science, 15*(2), 210-220.

Eisenberger, R., Karagonlar, G., Stinglhamber, F., Neves, P., Becker, T. E., Gonzalez-Morales, M. G., & Steiger-Mueller, M. (2010). Leader-member exchange and affective organizational commitment: The contribution of supervisor's organizational embodiment. *Journal of Applied Psychology, 95*(6), 1085-1103.

Eisenstadt, S. N. (1973). Post-traditional societies and the continuity and reconstruction of tradition. *Daedalus, 102*(1), 1-27.

Fosse, E., & Winship, C. (2019). Analyzing age-period-cohort data: A review and critique. *Annual Review of Sociology, 45*(1), 467-492.

- Fu, X., & Cai, H. (2016). Understand psychology of Chinese people and promote national cohesion of China. *Bulletin of Chinese Academy of Sciences*, 31(11), 1224-1236.
- Gao, H., Wang, P., & Tony, T. (2022). Chinese social value change and its relevant factors: An age-period-cohort effect. *Sociological Studies*, 37(01), 156-178 + 229.
- Glenn, N. D. (2005). *Cohort analysis*. SAGE Publications.
- Guan, X. (2000). China's social policy: Reform and development in the context of marketization and globalization. *Social Policy & Administration*, 34(1), 115-130.
- Gusfield, J. R. (1967). Tradition and modernity: Misplaced polarities in the study of social change. *American Journal of Sociology*, 72(4), 351-362.
- He, W., Zhou, R., Long, L., Huang, X., & Hao, P. (2018). Self-sacrificial leadership and followers' affiliative and challenging citizenship behaviors: A relational self-concept based study in China. *Management and Organization Review*, 14(1), 105-133.
- Heylighen, F. (1997). Objective, subjective, and intersubjective selectors of knowledge. *Evolution and Cognition*, 3(1), 63-67.
- Hou, X., Li, Y., & Tu, Y. (2014). Work values of Chinese millennial generation: Structure measurement and effects on employee performance. *Acta Psychologica Sinica*, 46(06), 823-840.
- Huang, Z., Jing, Y., Yu, F., Gu, R., Zhou, X., Zhang, J., & Cai, H. (2018). Increasing individualism and decreasing collectivism? Cultural and psychological change around the globe. *Advances in Psychological Science*, 26(11), 2068-2080.
- Inglehart, R. (1977). *The silent revolution: Changing values and political styles among western publics*. Princeton, NJ: Princeton University Press.
- Inglehart, R. (1997). *Modernization and postmodernization: Cultural, economic, and political change in 43 societies*. Princeton, NJ: Princeton University Press.
- Inglehart, R. (2008). Changing values among western publics, 1970-2006: Post-materialist values and the shift from survival values to self-expression values. *West European Politics*, 31(1), 130-146.
- Inglehart, R. (2016). After postmaterialism: An essay on China, Russia and the United States: A comment. *Canadian Journal of Sociology*, 41(2), 213-222.
- Inglehart, R., & Abramson, P. (1999). Measuring postmaterialism. *American Political Science Review*, 93(3), 665-677.
- Inglehart, R., & Baker, W. E. (2000). Modernization, cultural change, and the persistence of traditional values. *American Sociological Review*, 65(1), 19-51.

- James, L. (1982). Aggregation bias in estimates of perceptual agreement. *Journal of Applied Psychology, 67*(2), 219-229.
- Jang, S., Shen, W., Allen, T. D., & Zhang, H. (2018). Societal individualism-collectivism and uncertainty avoidance as cultural moderators of relationships between job resources and strain. *Journal of Organizational Behavior, 39*(4), 507-524.
- Jing, T. (2015). The time-space compression and social construction in China. *Journal of Lanzhou University (Social Sciences), 43*(05), 1-9.
- Joshi, A., Dencker, J. C., & Franz, G. (2011). Generations in organizations. *Research in Organizational Behavior, 31*(10), 177-205.
- Kupperschmidt, B. R. (2000). Multigeneration employees: Strategies for effective management. *The Health Care Manager, 19*(1), 65-76.
- Laird, M. D., Harvey, P., & Lancaster, J. B. (2015). Accountability, entitlement, tenure, and satisfaction in Generation Y. *Journal of Managerial Psychology, 30*(1), 87-100.
- Leung, K. (2008). Chinese culture, modernization, and international business. *International Business Review, 17*(2), 184-187.
- Li, L., & Jin, S. (2016). History of development and the newest reconstruction of Schwartz's theory of basic human values. *Journal of Psychological Science, 39*(1), 191-199.
- Li, N., & Yan, J. (2007). The mechanism of how trust climate impacts on individual performance. *Acta Psychologica Sinica, 39*(6), 1111-1121.
- Li, Y., Gong, Y., Burmeister, A., Wang, M., Alterman, V., Alonso, A., & Robinson, S. (2021). Leveraging age diversity for organizational performance: An intellectual capital perspective. *Journal of Applied Psychology, 106*(1), 71-91.
- Li, Y., & Hou, X. (2012). Structure of work values of millennial generation and mechanism of its impact on work behavior. *Business and Management Journal, 34*(5), 77-86.
- Li, Y., Kleshinski, C. E., Wilson, K. S., & Zhang, K. (2022). Age differences in affective responses to inclusion experience: A daily diary study. *Personnel Psychology, 75*(4), 805-832.
- Liu, H. (2019). *Advanced statistics for psychology*. Beijing: China Renmin University Press.
- Luan, Z., Yang, D., & Zhan, X. (2017). The influence of work values on employees' innovation performance: A perspective of intergeneration. *Chinese Journal of Management, 14*(3), 355-363.
- Luo, B., Hong, W., Geng, P., & Zheng, W. (2021). Empowering people, strengthening capacity and ensuring inclusiveness: Enhancing farmers' subject-

- tive well-being in reducing relative poverty. *Journal of Management World*, 37(10), 166-181 + 240 + 182.
- Manhardt, P. J. (1972). Job orientation among male and female college graduates in business. *Personnel Psychology*, 25(2), 361-368.
- Martin, S. R., & Côté, S. (2019). Social class transitioners: Their cultural abilities and organizational importance. *Academy of Management Review*, 44(3), 618-642.
- McAllister, D. J. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38(1), 24-59.
- Meng, X., Chai, P., & Huang, Z. (2020). A research on the relationship among work values, organizational justice and turnover intentions and their intergenerational differences. *Science Research Management*, 41(6), 219-227.
- Muthén, L. K., & Muthén, B. O. (1998-2017). *Mplus user's guide* (8th ed.). Los Angeles, CA: Author.
- National Bureau of Statistics of China. (2014). *China statistical yearbook 2014*. Beijing: China Statistics Press.
- Norris, P., & Inglehart, R. (2019). *Cultural backlash: Trump, Brexit, and authoritarian populism*. New York: Cambridge University Press.
- Office of the Leading Group of the State Council for the 7th National Population Census. (2021). *China population census yearbook 2020*. Beijing: China Statistics Press.
- Pan, L., & Yang, D. (2020). The influence of relative lead-member exchange on employee voice: The moderating role of generational differences. *Chinese Journal of Management*, 17(4), 518-526.
- Parry, E., & Urwin, P. (2021). Generational categories: A broken basis for human resource management research and practice. *Human Resource Management Journal*, 31(4), 857-869.
- Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of personality and social psychological attitudes* (pp. 17-59). San Diego, CA: Academic Press.
- Peretz, H., Fried, Y., & Parry, E. (2022). Generations in context: The development of a new approach using Twitter and a survey. *Journal of Occupational and Organizational Psychology*, 95(2), 239-274.
- Ralston, D. A., Pounder, J., Lo, C. W., Wong, Y. Y., Egri, C. P., & Stauffer, J. (2006). Stability and change in managerial work values: A longitudinal study of China, Hong Kong, and the US. *Management and Organization Review*, 2(1), 67-94.
- Rokeach, M. (1973). *The nature of human values*. New York: Free Press.

Rudolph, C. W., Rauvola, R. S., & Zacher, H. (2018). Leadership and generations at work: A critical review. *The Leadership Quarterly*, 29(1), 44-57.

Sagiv, L., Roccas, S., Cieciuch, J., & Schwartz, S. H. (2017). Personal values in human life. *Nature Human Behaviour*, 1(9), 630-639.

Schneider, B., White, S. S., & Paul, M. C. (1998). Linking service climate and customer perceptions of service quality: Tests of a causal model. *Journal of Applied Psychology*, 83(2), 150-163.

Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. Zanna (Ed.), *Advances in experimental social psychology* (pp. 1-65). New York: Academic Press.

Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values. *Journal of Social Issues*, 50(4), 19-45.

Schwartz, S. H. (2003). A proposal for measuring value orientations across nations. Retrieved from http://www.europeansocialsurvey.org/index.php?option=com_{content}&view=article

Schwartz, S. H. (2005). Robustness and fruitfulness of a theory of universals in individual values. In A. Tamayo & J. Porto (Eds.), *Valores e trabalho* [Values and work] (pp. 56-85). Brasilia: Editora Universidade de Brasilia.

Sessions, H., Nahrgang, J. D., Vaughton, M. J., Williams, R., & Bartels, A. L. (2021). Do the hustle! Empowerment from side-hustles and its effects on full-time work performance. *Academy of Management Journal*, 64(1), 233-259.

Su, X., Su, J., & Tian, H. (2021). The intergenerational differences in employee-organization values fit and their impacts on challenging organizational citizenship behavior. *Journal of Industrial Engineering and Engineering Management*, 35(5), 26-40.

Super, D. E. (1970). *Work values inventory manual*. Boston: Houghton Mifflin.

Tang, N., Zhang, K., & Wang, Y. (2017). *Generation and values in Chinese workplace*. Beijing: Science Press.

Tang, N., Wang, Y., & Zhang, K. (2017). Values of Chinese generation cohorts: Do they matter in the workplace? *Organizational Behavior and Human Decision Processes*, 143, 8-22.

Tang, N., Jiang, Y., Chen, C., Zhou, Z., Chen, C., & Yu, Z. (2015). Inclusion and inclusion management in the Chinese context: An exploratory study. *The International Journal of Human Resource Management*, 26(6), 856-874.

The Department of Population and Employment Statistics of the National Bureau of Statistics of China. (2021). *China population and employment statistics yearbook 2021*. Beijing: China Statistics Press.

Twenge, J. M. (2000). The age of anxiety? The birth cohort change in anxiety and neuroticism, 1952-1993. *Journal of Personality and Social Psychology*, 79(6), 1007-1021.

- Twenge, J. M., Campbell, S., Hoffman, B. J., & Lance, C. E. (2010). Generational differences in work values: Leisure and extrinsic values increasing, social and intrinsic values decreasing. *Journal of Management*, *36*(5), 1117-1142.
- Wan, C., Chiu, C.-y., Tam, K.-P., Lee, S.-l., Lau, I. Y.-m., & Peng, S. (2007). Perceived cultural importance and actual self-importance of values in cultural identification. *Journal of Personality and Social Psychology*, *92*(2), 337-354.
- Wan, C., Torelli, C. J., & Chiu, C. Y. (2010). Intersubjective consensus and the maintenance of normative shared reality. *Social Cognition*, *28*(3), 422-446.
- Wang, T., Su, T., & Chen, C. (2017). A meta-analytic review of the effectiveness of paternalistic leadership. *Human Resources Development of China*, *2017*(03), 69-80.
- Williams, R. M. (1970). *American society: A sociological interpretation*. New York: Knopf.
- Xin, Z., & Zhou, Z. (2012). A cross-temporal meta-analysis of changes in Chinese college students' interpersonal trust. *Advances in Psychological Science*, *20*(3), 344-353.
- Yang, Y. (2008). Social inequalities in happiness in the United States, 1972 to 2004: An age-period-cohort analysis. *American Sociological Review*, *73*(2), 204-226.
- Yang, C., Yang, T., Zhao, X., & Li, P. (2019). How to be happy in life? A multi-path interpretation based on the dynamic survey of labor force of urban and rural residents in China. *Human Resources Development of China*, *36*(02), 118-133.
- Yang, J., Yu, C. S., & Wu, J. (2018). Work values across generations in China. *Chinese Management Studies*, *12*(3), 486-505.
- Yang, Y., & Land, K. C. (2008). Age-period-cohort analysis of repeated cross-section surveys: Fixed or random effects? *Sociological Methods & Research*, *36*(3), 297-326.
- Yang, Y., & Land, K. C. (2016). *Age-period-cohort analysis: New models, methods, and empirical applications*. New York: Chapman and Hall/CRC.
- Ye, W., Li, X., & Zhu, H. (2018). Entrepreneurship in strange land and embeddedness of social networks. *Journal of Management World*, *34*(01), 139-156.
- Yuchtman-Yaar, E., & Alkalay, Y. (2007). Religious zones, economic development and modern value orientations: Individual versus contextual effects. *Social Science Research*, *36*(2), 789-807.
- Zacher, H., & Froidevaux, A. (2021). Life stage, lifespan, and life course perspectives on vocational behavior and development: A theoretical framework, review, and research agenda. *Journal of Vocational Behavior*, *126*, 103-115.

Zhao, Y. X. (2018). Managing Chinese millennial employees and their impact on human resource management transformation: An empirical study. *Asia Pacific Business Review*, 24(4), 472-489.

Zhou, S., Zhang, J., & Li, H. (2009). Income, consumption and saving behavior of Chinese urban households: A cohort analysis. *China Economic Quarterly*, 8(04), 1197-1220.

Appendix A

To validate our classification of five items in Studies 1 and 2, we conducted exploratory factor analysis (EFA), adhering to the statistical standard of at least 60% cumulative variance explained (Liu, 2018). Table A1 shows Study 1 results support our classification, with items 1 and 3-6 loading on two distinct factors representing materialistic and post-materialistic work values.

Table A1. Exploratory Factor Analysis Results (Study 1)

Item	Factor 1	Factor 2
1. Making a living	0.85	0.12
3. Meeting more people	0.15	0.78
4. Gaining respect	0.08	0.82
5. Interest	0.11	0.76
6. Fully utilizing abilities	0.09	0.81

Note: N = 5,850; original work values data used.

Table A2 shows Study 2 results also support our classification, with items 1 and 2-5 loading on two distinct factors.

Table A2. Exploratory Factor Analysis Results (Study 2)

Item	Factor 1	Factor 2
1. Making a living	0.88	0.09
2. Meeting more people	0.12	0.79
3. Gaining respect	0.07	0.83
4. Interest	0.10	0.77
5. Fully utilizing abilities	0.08	0.80

Note: N = 992; original work values data used.

Appendix B

We examined Cronbach's α coefficients for Study 3 measures (see Table B1).

Table B1. Work Values Reliability (Study 3)

Value Type	Pre-Reform α	Reform α	Post-Reform α	Overall α
Post-materialism	0.66	0.68	0.67	0.67
Openness	0.86	0.87	0.88	0.87
Conservation	0.85	0.86	0.87	0.86
Self-enhancement	0.74	0.75	0.76	0.75
Self-transcendence	0.82	0.83	0.84	0.83

Note: $N = 361$; original work values data used. Materialism not assessed due to single item.

Appendix C

We conducted supplementary analyses using original (uncentered) materialism and post-materialism data. Results for Studies 1-3 appear in Tables C1-C3.

Table C1. APC Model Results for Materialism and Post-Materialism (Study 1)

Variable	Materialism (Model 1)	Materialism (Model 2)	Post-Materialism (Model 3)	Post-Materialism (Model 4)
Pre-reform	0.02 (0.05)	0.00 (0.05)	-0.02 (0.05)	-0.00 (0.05)
Post-reform	-0.22* (0.09)	-0.24* (0.11)	0.05 (0.10)	0.05 (0.11)
...

Note: $N = 5,850$; standard errors in parentheses; original data.

Table C2. Generational Differences in Materialism and Post-Materialism (Study 2)

Variable	Materialism (Model 1)	Materialism (Model 2)	Post-Materialism (Model 3)	Post-Materialism (Model 4)
Pre-reform	-0.12 (0.07)	-0.09† (0.06)	0.12 (0.07)	0.09† (0.06)
Post-reform	-0.20** (0.08)	-0.08† (0.08)	0.01 (0.06)	0.11† (0.06)
...

Note: $N = 992$; standard errors in parentheses; original data.

Table C3. Descriptive Statistics and Generational Differences (Study 3)

Cohort	Materialism M (SD)	Post-Materialism M (SD)	F	² p
Pre-reform	4.21 (0.89)	3.45 (0.92)	8.55***	0.02
Reform	4.19 (0.87)	3.47 (0.91)	8.75**	0.02
Post-reform	3.98 (0.85)	3.68 (0.89)	15.26***	0.04

Note: $N = 361$; original data.

Appendix D

We examined Study 2 results controlling for age. Table D1 shows materialism and post-materialism results.

Table D1. Generational Differences Controlling for Age (Study 2)

Variable	Materialism (Model 1)	Materialism (Model 2)	Post-Materialism (Model 3)	Post-Materialism (Model 4)
Pre-reform	0.15† (0.08)	-0.15† (0.08)	-0.15† (0.08)	0.15† (0.08)
Post-reform	-0.23** (0.07)	-0.37** (0.13)	0.23** (0.07)	0.37** (0.13)
Age	-0.01* (0.01)	-0.01** (0.01)	0.01* (0.01)	0.01** (0.01)
...

Note: $N = 992$; standard errors in parentheses; centered data.

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv — Machine translation. Verify with original.