

RESEARCH ARTICLE

Generational comparison: Demographic drivers of organizational commitment under visionary leadership among Millennial and Generation Z young professionals

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Abstract

As Millennial and Generation Z professionals increasingly co-exist in the global workforce, understanding how demographic factors shape their organizational commitment has become a critical concern. This study employs a demographic-generational comparative framework to examine organizational commitment among Millennial (born 1981–1996) and Generation Z (born 1997–2012) young professionals. The central focus addresses how key demographic drivers—educational attainment, rural-to-urban migration background, and family structure—differentially affect three commitment dimensions: affective, continuance, and normative commitment. These effects are examined within a visionary leadership context. A stratified probability sampling design was employed to collect 600 valid responses, with multi-group confirmatory factor analysis applied to test measurement invariance across cohorts. Multi-group structural equation modeling and relative weight analysis were used to identify generational difference effects. The results indicate that educational attainment had a stronger effect on affective commitment among Millennials ($\beta = 0.41$) than among Generation Z respondents ($\beta = 0.33$). Rural-to-urban migration background and migrant identity explained substantially greater variance among Generation Z, with relative weights of 21.3% and 17.5%, respectively, representing a marked increase compared to the Millennial cohort. The path coefficient from visionary leadership to affective commitment differed across generations ($\Delta\beta = 0.17, p < 0.001$). Despite this generational divergence, the boundary effects of demographic moderating variables demonstrated a systematic pattern across cohorts. These results contribute important empirical evidence to the intersection of international demography and youth labor behavior research and offer evidence-based guidance for designing differentiated leadership intervention policies targeting young professionals across distinct generational cohorts.

Keywords: Generational comparison; Millennials; Generation Z; Visionary leadership; Organizational commitment; Demographic drivers; Relative weight analysis

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1. Introduction

The global labor market is currently undergoing a profound structural transformation. Marked generational shifts in workforce composition are changing how organizations

function and how employees behave in fundamental ways. Millennial (born 1981–1996) and Generation Z (born 1997–2012) young professionals have together become the dominant force in the global workforce since the turn of the century. Their simultaneous presence in shared workplace environments—what might be described as a dual-cohort convergence—has drawn sustained attention from human resource scholars, as this configuration presents a rare natural experiment. Demographers have long sought to understand how age, educational attainment, rural-to-urban migration background, and family structure drive individual behavior. Recent work demonstrates that educational level and sociodemographic background exert meaningful and differentiated effects on individual decision-making (Fitria *et al.*, 2026); heterogeneous demographic effects have been documented across health behavior, cognitive response, and related domains (Sia *et al.*, 2026). This growing cross-disciplinary evidence base justifies applying demographic analytical frameworks to the study of organizational behavior among young professionals (Douglas *et al.*, 2026). A notable gap remains, however: demographic drivers shape commitment differently across generations.

Millennials and Generation Z occupy adjacent positions on the historical timeline from a generational-demographic perspective, yet their formative experiences diverged substantially. Millennials came of age during the rise of the internet and the global financial crisis, with their occupational values shaped by a macroeconomic environment marking the tail end of the demographic dividend. Generation Z grew up under accelerating low-fertility trends and pervasive digital technology, tending to exhibit stronger individual autonomy and greater occupational mobility (Wu & Shi, 2025). Such generational differences extend beyond values. They are also embedded in structural divergences across objective demographic characteristics—educational attainment, rural-urban migration status, and family life-cycle stage. Research indicates that combined sociodemographic factors can produce nonlinear and complex effects on individual behavioral outcomes (Khariri *et al.*, 2026). This complexity suggests that single-dimensional generational comparisons are unlikely to fully capture the demographic roots of commitment differences between the two cohorts (Islam *et al.*, 2026) and that building a multi-dimensional generational comparative framework is theoretically necessary.

Visionary leadership occupies a prominent position in organizational behavior research, given its emphasis on articulating a compelling future vision. How this leadership style can enhance organizational commitment

among younger employees remains a critical concern. How individuals perceive and respond to leadership behaviors is shaped by their own demographic characteristics. Cross-disciplinary findings suggest that demographic background influences how individuals receive and process external information and interventions (Radeva *et al.*, 2026), implying that young professionals with different demographic profiles may respond differently to the same leadership environment. However, demographic generational heterogeneity has rarely been incorporated as a core moderating variable, leaving the boundary conditions of existing findings unclear and limiting their practical utility for designing targeted leadership interventions.

The present study addresses both gaps identified above through integrated theoretical examination, drawing on generational demographic theory, visionary leadership theory, and organizational commitment theory. It examines how core demographic drivers—educational attainment, rural-to-urban migration background, and family structure—differentially affect organizational commitment among Millennial and Generation Z young professionals, with visionary leadership serving as the critical contextual variable. The two research questions provide a systematic analytical structure: (i) Do demographic characteristics differentially drive organizational commitment across Millennial and Generation Z cohorts, and if so, in what direction and to what magnitude? (ii) Do these generational differences reflect a systematic structural divergence, or do they represent random variation attributable to individual-level heterogeneity? The study thus contributes new evidence to the intersection of international demography and organizational behavior research.

1.1. Literature review

Generational demography provides the core theoretical foundation for this study. Birth cohorts, historical imprinting, and population-size dynamics collectively shape how individual behavior develops. The structural development and quality improvement of youth populations have emerged as key areas in international demographic scholarship (Mu *et al.*, 2024). Millennials and Generation Z constitute the two largest cohorts of young professionals in the contemporary labor market. Their internal demographic heterogeneity forms the basic premise for understanding differences in organizational commitment (Leon *et al.*, 2026); demographic factors interact in complex ways to jointly shape behavioral outcomes (Coggan *et al.*, 2026). Generational demographic differences extend beyond age or birth-cohort boundaries alone. Multi-dimensional sociodemographic characteristics—educational attainment, family structure,

and rural-to-urban migration background—determine how young professionals orient themselves behaviorally, making them an indispensable demographic foundation for the theoretical framework developed here (Kumar *et al.*, 2026).

Three theoretical frameworks jointly guide this study. First, generational demographic theory, rooted in Mannheim's (1952) classical sociology of generations, holds that individuals who share a common birth cohort are exposed to the same historical and social events during their formative years, producing durable and cohort-specific value orientations and behavioral dispositions. This framework provides the conceptual basis for treating Millennials and Generation Z as structurally distinct analytical units rather than a homogeneous youth population. Second, visionary leadership theory, as operationalized by Rafferty and Griffin (2004), conceptualizes visionary leadership as a multi-dimensional construct centered on articulating an idealized future vision, inspiring collective identification, and fostering employees' sense of purpose and belonging. This theory predicts that visionary leadership enhances organizational commitment by satisfying employees' higher-order motivational needs. Third, Allen and Meyer's (1990) three-component model of organizational commitment distinguishes affective, continuance, and normative commitment as analytically separable dimensions, each driven by different psychological and sociodemographic antecedents. Together, these three frameworks establish the theoretical logic connecting generational demographic heterogeneity, visionary leadership perception, and differentiated organizational commitment outcomes examined in this study.

A growing body of literature confirms that demographic characteristics systematically moderate individual perceptions, attitudes, and behavioral responses across education, health, and organizational behavior research (Ma, 2025). Among youth populations, such mechanisms tend to generate particularly complex patterns. Sociodemographic background variables—parenting styles, family structure, and related factors—influence behavioral outcomes through mediating pathways such as emotional regulation (Ma'ruf *et al.*, 2025), a finding with direct relevance for understanding how organizational commitment forms among Generation Z young professionals. Moreover, macro-level demographic differences between generational cohorts can amplify or attenuate the direct effects of demographic factors on organizational commitment through intergenerational value transmission (Song *et al.*, 2025). Nevertheless, the underlying mechanisms behind commitment differences

between the two cohorts remain underexplored in multi-dimensional terms.

Prior research on visionary leadership and organizational commitment has largely focused on the positive predictive effects of leadership style on employee commitment. However, the moderating role of demographic heterogeneity in this relationship has received far less attention than the evidence warrants. Demographic backgrounds shape employee perceptions, producing meaningfully different responses to leadership behavior across individuals (Mofokeng *et al.*, 2025). Generation Z came of age in an environment defined by digital integration and accelerating globalization; as a result, their competency structures and occupational values differ markedly from those of Millennials (Xie & Hu, 2025). This structural generational divergence may affect how strongly each cohort perceives visionary leadership and how efficiently that perception translates into commitment. Cross-disciplinary evidence further supports incorporating demographic moderation into leadership–commitment frameworks (Cavrini *et al.*, 2025).

A review of existing literature reveals two notable gaps. First, generational demographic comparative studies focused specifically on Millennials and Generation Z young professionals are relatively scarce; most research treats generational cohorts as a single undifferentiated group, overlooking how structural demographic divergence between generations differentially shapes organizational commitment. Second, the generational moderating effects of demographic drivers under visionary leadership conditions have not been systematically tested, leaving the demographic boundary conditions of leadership effectiveness unclear. This study addresses both gaps. Drawing on generational demographic theory, visionary leadership theory, and organizational commitment theory, it develops a generational comparative analytical model incorporating educational attainment, rural-to-urban migration background, and family structure as key demographic drivers, with the aim of generating new empirical contributions at the intersection of international demography and organizational behavior research.

2. Data and methods

2.1. Study population

This study targeted two distinct generational cohorts of young professionals currently active in the Chinese labor market: Millennial professionals born between 1981 and 1996, and Generation Z professionals born between 1997 and 2012. Eligible participants were full-time employees aged 18 years or above at the time of data collection,

working across four industry sectors—manufacturing, services, information technology, and education—and distributed across three regional economic gradients: eastern coastal, central inland, and western underdeveloped areas. Participants were required to have a minimum of one year of continuous employment within their current organization to ensure meaningful organizational experience. Individuals in self-employment, freelance, or informal labor arrangements were excluded from the target population. This dual-cohort population definition reflects the study's core objective of capturing structural demographic divergence between two generationally distinct professional groups within a shared institutional and labor market context.

2.2. Sampling strategy and sample demographic characteristics

This study employed a composite sampling strategy that combines stratified probability sampling with purposive sampling, with the aim of balancing statistical representativeness with the precision needed for generational comparison. Birth cohort serves as the primary stratification dimension, defining Millennial professionals (born 1981–1996) and Generation Z professionals (born 1997–2012) as two independent target sub-populations. Industry categories—manufacturing, services, information technology, and education—constitute the second stratification layer; the regional economic gradient—eastern coastal, central inland, and western underdeveloped areas—serves as the third. Systematic stratification of this kind reduces confounding from industry concentration and regional disparities (Ionson *et al.*, 2025). Sample size decisions were drawn on two key considerations: the minimum sample requirements for multi-group structural equation modeling (MG-SEM) and the principle of equal cohort allocation. Accordingly, a target of at least 250 valid questionnaires per generational sub-sample, yielding a combined target of 600 responses, was set to ensure the statistical power needed for subsequent multi-group comparisons.

The survey instrument included a dedicated demographic information module collecting gender, highest educational qualification, household registration type (urban or rural *hukou*), current residential area classification, marital status, number of children, average monthly household income, and years of employment, thereby constructing a comprehensive demographic profile of both cohorts (Stark *et al.*, 2025). Chi-square goodness-of-fit tests were used to compare sample demographic distributions against youth employment population data published by the National Bureau of Statistics; where structural deviations exceeded acceptable thresholds,

demographic weighting coefficients were applied to ensure adequate external validity at the population level.

Chi-square goodness-of-fit tests confirmed a meaningful alignment between the sample's demographic distributions and youth employment population data published by the National Bureau of Statistics. Where structural deviations exceeded acceptable thresholds, demographic correction was applied through post-stratification weights computed using an iterative proportional fitting (raking) algorithm. The marginal distributions of the 2020 Chinese Population Census across three dimensions—industry category, regional gradient, and educational attainment—served as the calibration benchmarks. Weight values ranged from 0.74 to 1.38 across respondents, indicating that moderate calibration adjustments were sufficient to correct for distributional deviations without introducing extreme leverage effects.

2.3. Measures

This study used three categories of core variables: demographic characteristics, visionary leadership, and organizational commitment. Demographic variables received either categorical or continuous treatment depending on the nature of the data. Gender, household registration type, and marital status were coded as binary or multi-category dummy variables. Educational attainment followed a four-level structure aligned with China's current qualification framework: senior secondary and below, associate degree, bachelor's degree, and postgraduate degree or above. Income and employment years were standardized.

Visionary leadership was measured using the scale developed by Rafferty and Griffin (2004), with items adapted to better reflect Chinese workplace conditions. The final instrument contained 20 items across 5 dimensions, all rated on a 5-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree") (Liu *et al.*, 2025). Because scale functioning may differ across generational groups, measurement invariance testing was conducted to examine configural, metric, and scalar invariance before any substantive analysis, thereby establishing cross-cohort comparability.

Organizational commitment was assessed using the three-dimensional scale developed by Allen and Meyer (1990), covering affective, continuance, and normative commitment, with 18 items rated on a five-point Likert scale (Sous *et al.*, 2025). This instrument provides adequate coverage of the commitment construct. All scales underwent pilot testing for reliability and validity prior to full administration. Internal consistency reliability was evaluated using Cronbach's alpha, and construct validity

was examined through confirmatory factor analysis, confirming that the measurement instruments performed adequately within the target sample.

2.4. Research design and philosophical paradigm

This study is grounded in a post-positivist philosophical orientation that acknowledges the objective existence of social reality while recognizing the inherent epistemological limits researchers face in understanding complex social phenomena. This position supports a methodology that balances objective measurement with contextual interpretation. Accordingly, the study adopted a cross-sectional survey design as its primary framework, complemented by a systematic literature review and statistical modeling in an integrated multi-method approach.

The rationale for a cross-sectional design is straightforward: the primary objective is to capture group-level differences in demographic characteristics, visionary leadership perceptions, and organizational commitment levels between Millennial and Generation Z young professionals at a single point in time. Cross-sectional designs are operationally well-suited to large-sample, multi-variable, cross-group simultaneous comparison (Zhao, 2024). Nonetheless, methodological care is critical for reliable generational comparison. Age effects, period effects, and cohort effects represented potential sources of confounding; the study addressed these explicitly at the design stage by defining generational boundaries through birth year and incorporating survey time-point control variables into statistical models to isolate cohort differences.

Because organizational commitment is highly context-dependent, industry type, organizational size, and regional economic development level were treated as important stratification control dimensions. This layered approach supports reliable generational comparison while maintaining demographic representativeness, ensuring that the sample reflects the broader Chinese young professional population and establishing the data foundation required for subsequent MG-SEM (Boutros *et al.*, 2025).

2.5. Data analysis strategy

The statistical work followed a sequential analytical plan comprising three progressive stages: descriptive analysis, measurement model testing, and structural model comparison. This progression directly addresses the core research question concerning differential demographic effects across generational contexts.

At the descriptive analysis stage, frequency distributions

and central tendency statistics were used to examine the demographic profiles of both cohorts. Independent samples *t*-tests, Mann–Whitney *U* tests, and Chi-square tests assessed initial group differences in demographic variables, visionary leadership perception means, and three-dimensional organizational commitment means between Millennials and Generation Z (Aladenika *et al.*, 2025), providing the empirical foundation for subsequent modeling.

At the measurement model testing stage, confirmatory factor analysis validated the factor structures of the visionary leadership and organizational commitment scales within each generational sub-sample. Multi-group confirmatory factor analysis then evaluated measurement invariance assumptions in a stepwise fashion, comparing configural, metric, and scalar model fit indices using ΔCFI (comparative fit index) ≤ 0.010 and $\Delta RMSEA$ (root mean square error of approximation) ≤ 0.015 as decision criteria, thereby ensuring the validity of subsequent cross-group comparisons.

At the structural model comparison stage, MG-SEM estimated direct effect path coefficients from demographic variables to organizational commitment for both cohorts, controlling for industry type and regional economic gradient. Relative weight analysis then quantified the proportional contribution of each demographic driver to explained commitment variance within each generational group (Tanveer *et al.*, 2025). All analyses were conducted in R 4.3.0 (R Foundation, Austria) using the lavaan, semTools, and relaimpo packages, with a uniform significance threshold (α) of 0.05 throughout the study.

To further probe robustness, MG-SEM models were additionally estimated without covariates to assess whether their inclusion had a material effect on the focal estimates. Changes in focal β coefficients were less than 0.03 across all paths, confirming the stability of the main results.

3. Results

3.1. Sample demographic characteristics and generational distribution

3.1.1. Demographic profile comparison of the two cohorts

A total of 600 valid questionnaires were collected, with the Millennial sub-sample (born 1981–1996) comprising 300 respondents. The Generation Z sub-sample (born 1997–2012) included an equal number of 300 respondents across the significant demographic dimensions examined. The findings demonstrated notable structural differences between the two groups across all core dimensions (Table 1).

In light of the evidence, the gender composition indicates that both cohorts were broadly balanced, with females accounting for 52% and males for 48% among Millennials, and 51% male and 49% female among Generation Z (no significant difference). Furthermore, educational attainment showed a clearer generational pattern, with the proportion of Generation Z respondents holding a bachelor's degree or higher (82%) significantly higher than that for Millennials (70%), suggesting the cumulative effect of higher education expansion on younger cohort qualification levels.

Additionally, urban–rural background also differed between cohorts, with Generation Z showing a significantly higher proportion of urban household registration (76%) than that of Millennials (68%), suggesting the progressive demographic accumulation of urbanization across generations (Jia *et al.*, 2025). Marital data demonstrated significant generational differences in status. The most significant differences appeared in marital and parental status: among Millennials, 61% were married and 54% had children; while among Generation Z, only 29% were married and 21% had children. These results suggest a generational shift toward delayed marriage and delayed parenthood. Nevertheless, the results appear to reflect a clear rejection of both marriage and parenthood in some

cases among the younger cohort examined.

3.1.2. Demographic distribution of visionary leadership perception

Next, we examined mean scores on the visionary leadership perception scale (maximum score: 5) across demographic subgroups within each cohort. The analysis showed that four core demographic dimensions—gender, educational attainment, residential area type, and marital status—might exhibit substantial variation across groups. Regarding gender-based results, female Millennials reported a slightly higher mean perception score ($M = 3.62$) than their male counterparts ($M = 3.58$), whereas among Generation Z, females reported a marginally higher score ($M = 3.41$) than males ($M = 3.38$), indicating a key directional pattern. However, within-group gender differences did not reach statistical significance in either cohort ($p > 0.05$), indicating that gender exerts a broadly consistent—and limited—influence on visionary leadership perception across both generations.

Educational attainment showed a clear stepwise pattern in both cohorts, indicating that qualification levels affect scores. Perception scores rose progressively with higher qualification levels, suggesting that this relationship is robust. Specifically, Millennials with senior secondary

Table 1. Demographic characteristics of Millennial and Generation Z young professionals ($n = 300/\text{group}$)

Demographic variable	Category	Millennials (%)	Generation Z (%)	χ^2	p
Gender	Female	52	49	0.54	0.462
	Male	48	51		
Educational attainment	Senior secondary and below	8	4	18.73	<0.001
	Associate degree	22	14		
	Bachelor's degree	52	64		
	Postgraduate degree or above	18	18		
Residential area	Urban	68	76	5.01	0.025
	Rural	32	24		
Marital status	Married	61	29	61.44	<0.001
	Unmarried	39	71		
Parental status	Has children	54	21	66.24	<0.001
	No children	46	79		

Notes: Chi-square tests were used to compare the distribution of each demographic variable across the two generational groups. $p < 0.05$ indicates statistical significance.

education or below reported the lowest mean perception score ($M = 3.21$), while postgraduate-level respondents reported the highest score ($M = 3.89$). Generation Z displayed the same trend but with lower scores: 3.05 and 3.68, respectively. Given the consistent generational gaps, Generation Z mean scores were approximately 0.2 points lower than those of Millennials with equivalent educational levels, suggesting a key systematic difference. Generational gaps appeared most pronounced at the bachelor's degree level ($t = 4.87, p < 0.001$) and postgraduate level ($t = 3.92, p < 0.001$) (Abdelbary *et al.*, 2025).

Urban employees reported higher visionary leadership perception scores than rural employees across both cohorts. The urban–rural mean-score gap among Millennials ($\Delta M = 0.29$) was slightly narrower than that among Generation Z ($\Delta M = 0.33$). These results suggest that urbanization may amplify visionary leadership perception to a somewhat greater degree among the younger cohort. Regarding marital status, married Millennials reported a notably higher mean perception score ($M = 3.74$) than their unmarried peers ($M = 3.44$). This gap was smaller among Generation Z ($M = 3.39$ [married] vs. $M = 3.36$ [unmarried]). These findings demonstrated a generational pattern in how family role status influences leadership perception, suggesting an attenuation in the moderating role of marital status across generational cohorts. Additionally, the results also suggest a broader generational shift in the relevant influence of family status on leadership perception.

Overall, the results indicate significant generational differences in leadership perception outcomes across both cohorts.

3.1.3. Cross-sectional demographic profile of organizational commitment levels

Drawing on Allen and Meyer's (1990) three-dimensional model, the mean scores for affective, continuance, and normative commitment were examined across both cohorts. Millennials scored significantly higher than Generation Z across all three commitment dimensions and across all demographic subgroups; the generational gap was most pronounced on the affective commitment dimension.

By gender, female Millennials reported a significantly higher mean affective commitment score ($M = 3.74$) than female Generation Z ($M = 3.42, t = 4.91, p < 0.001$); a similar pattern appeared among males ($M = 3.71$ [Millennials] vs. $M = 3.39$ [Generation Z], $t = 4.67, p < 0.001$). Educational attainment followed a consistent stepwise pattern: mean scores increased monotonically with qualification levels across both cohorts and all three commitment dimensions. Postgraduate Millennials reported the highest mean

affective commitment score ($M = 4.02$), while Generation Z respondents with senior secondary education or below reported the lowest mean normative commitment score ($M = 2.88$). The gap between these two extremes reached 1.14 points, indicating a strong demographic stratification effect driven by educational level (Silveira *et al.*, 2026).

Urban employees in both cohorts scored higher than rural employees across all three commitment dimensions. Among Millennials, the urban–rural gap in mean affective commitment scores (ΔM) was 0.31 ($M = 3.82$ [urban] vs. $M = 3.51$ [rural]); the equivalent gap (ΔM) among Generation Z was slightly wider at 0.34, indicating that the urban advantage in commitment is marginally more pronounced among the younger cohort. Marital and parental status demonstrated a consistent directional effect: married respondents and those with children reported higher mean affective and continuance commitment scores in both cohorts, underscoring the role of family structure. Among all subgroups, Millennial parents achieved the highest mean affective commitment score ($M = 3.91$), while Generation Z respondents without children recorded one of the lowest mean normative commitment scores across all groups ($M = 3.12$). Taken together, these patterns indicate that the moderating role of family structure on organizational commitment differs substantially between the two cohorts (Ju *et al.*, 2024).

3.2. Differential generational effects of demographic drivers on organizational commitment

3.2.1. Educational attainment and organizational commitment: Divergence in generational demographic pathways

Educational attainment plays a core role as a demographic driver, systematically shaping organizational commitment across both cohorts. The mean scores for affective commitment, continuance commitment, and normative commitment all increased monotonically with higher qualification levels (Table 2). The rates of increase and the absolute mean values diverged in consistent patterns across generations. Regarding affective commitment, Millennials showed a cross-qualification gain (ΔM) of 0.84, from senior secondary and below ($M = 3.18$) to postgraduate level ($M = 4.02$). The equivalent gain among Generation Z appeared smaller ($M = 2.97$ to $M = 3.74, \Delta M = 0.77$).

Additionally, the significant hierarchical regression findings confirm this difference. The standardized regression coefficient for educational attainment predicting affective commitment demonstrated that Millennials showed higher values ($\beta = 0.41, p < 0.001$) than Generation Z ($\beta = 0.33, p < 0.001$). Meanwhile, continuance commitment showed a slightly different pattern than

Table 2. Generational comparison of educational attainment effects on three-dimensional organizational commitment ($n = 300/\text{group}$)

Educational level	Millennials			Generation Z			Generational AC gap
	AC	CC	NC	AC	CC	NC	
Senior secondary and below	3.18	3.31	3.09	2.97	3.12	2.88	+0.21**
Associate degree	3.48	3.52	3.38	3.21	3.34	3.11	+0.27***
Bachelor's degree	3.79	3.61	3.52	3.51	3.32	3.24	+0.28***
Postgraduate degree or above	4.02	3.78	3.71	3.74	3.51	3.45	+0.28***
β (Education $\rightarrow$ AC)	0.41***	0.36***	0.33***	0.33***	0.27***	0.29***	-

Notes: β denotes standardized regression coefficients. ** $p < 0.01$, *** $p < 0.001$.

Abbreviations: AC: Affective commitment; CC: Continuance commitment; NC: Normative commitment.

affective commitment. Among Generation Z, the increase from a bachelor's degree to the postgraduate level ($\Delta M = 0.19$) was marginally larger than the corresponding Millennial gain ($\Delta M = 0.17$), and Generation Z showed a modest plateau effect in continuance commitment at the bachelor's degree level ($M = 3.32$). In light of these results, the patterns appear relevant to understanding generational differences in commitment trajectories.

The findings showed that higher education yields diminishing returns for continuance commitment among Generation Z, potentially reflecting broader credential inflation. Both cohorts demonstrated a positive association between qualification levels and mean normative commitment scores. Specifically, Generation Z with senior secondary education or below showed a mean normative commitment score below the scale midpoint of 3.0 ($M = 2.88$), suggesting that lower-educated Generation Z workers face a clear demographic disadvantage in normative organizational identification (Moradi *et al.*, 2025). Generation Z showed that credential mismatch has a greater impact on commitment, with qualification mismatch significantly reducing affective commitment among bachelor's degree-level Generation Z ($\Delta R^2 = 0.06$, $p < 0.01$). The same effect appeared substantially weaker among Millennials ($\Delta R^2 = 0.02$, $p = 0.08$). These findings indicate that Generation Z organizational commitment is more sensitive to education-job fit quality, and that

generational differences have implications for talent management.

3.2.2. Urban-rural migration background and floating population identity as generational moderators of organizational commitment

Urban-rural migration background and floating population identity function as key demographic factors specific to the Chinese institutional context. Both variables showed systematic generational moderation in the development of organizational commitment across the two cohorts. Respondents were classified into four migration identity groups based on the cross-tabulation of household registration type (urban or rural *hukou*) and actual place of residence (urban or rural): urban *hukou*-urban residence (local urban residents), rural *hukou*-urban residence (floating population), urban *hukou*-rural residence (reverse migrants), and rural *hukou*-rural residence (rural stayers).

Results showed that local urban residents scored highest across cohorts (affective commitment: Millennials: $M = 3.89$; Generation Z: $M = 3.63$). In contrast, rural stayers scored lowest in affective commitment (Millennials: $M = 3.31$; Generation Z: $M = 2.94$). In general, the rank ordering of the four groups was identical across generations. The mean scores for Generation Z were markedly lower than those of Millennials across all groups. Furthermore,

Generation Z showed lower mean scores across groups. The Generation Z rural stayers' mean score ($M = 2.94$) fell below the scale midpoint of 3.0, indicating a pronounced demographic disadvantage. Besides, the generational gap was widest among the floating population group (rural *hukou*-urban residence), where the significant difference in mean affective commitment scores (ΔM) reached 0.33. The equivalent gap (ΔM) among local urban residents was 0.26. These results indicate that the floating population group shows the most pronounced generational divergence in affective commitment.

Interaction term testing showed that the migration identity-by-generation interaction significantly contributes to explaining affective commitment variance ($\Delta R^2 = 0.04$, $p < 0.01$). Our results demonstrated that the gap between floating population Millennials ($M = 3.55$) and their Generation Z counterparts ($M = 3.21$) was the largest among the four migration groups ($\Delta M = 0.34$). In light of these results, the stabilizing effect of urban migration experience on continuance commitment has weakened considerably for the younger cohort. The normative commitment gap (ΔM) between Generation Z rural stayers ($M = 2.86$) and Millennial local urban residents ($M = 3.64$) reached 0.78. The cross-group gap between Generation Z rural stayers ($M = 2.86$) and Millennial local urban residents ($M = 3.64$) was the largest disparity observed across any dimension in this section. Therefore, the evidence shows that the urban-rural migration background produces the greatest generational demographic divide in normative organizational identification (Ambunda & Neliwa, 2025). These key result patterns are consistent with earlier findings on commitment variance (Ju *et al.*, 2024).

3.2.3. Family structure variables (marital status, parental status, and household size) as generational drivers of organizational commitment

Family structure serves as a consequential sociodemographic driver of organizational commitment, with effects that are directionally consistent across both cohorts but differ considerably in magnitude. This study operationalized family structure through three dimensions: marital status, parental status, and household size.

Regarding marital status, married employees in both cohorts scored higher in all three commitment dimensions than their unmarried counterparts. The affective commitment gap between married and unmarried Millennials ($\Delta M = 0.36$) was substantially wider than the equivalent gap among Generation Z ($\Delta M = 0.07$). Hierarchical regression yielded a standardized coefficient (β) of 0.29 ($p < 0.001$) among Millennials and 0.08 ($p = 0.041$) among Generation Z; the differences between these

coefficients were statistically reliable, validated by the Wald test ($z = 3.84$, $p < 0.001$), suggesting a generational attenuation in the effect of marriage on organizational commitment (Li & Tang, 2025).

Employees with children reported higher affective and continuance commitment than those without children in both cohorts, and the generational narrowing pattern persisted. Among Millennials, the affective commitment gap between parents and non-parents (ΔM) was 0.36 ($M = 3.91$ vs. $M = 3.55$, respectively); among Generation Z, this gap shrank to 0.12 ($M = 3.48$ vs. $M = 3.36$, respectively), reflecting a marked generational attenuation in parental status effects on commitment. A similar trajectory emerged on the continuance commitment dimension (Millennials: $\Delta M = 0.36$; Generation Z: $\Delta M = 0.13$), indicating that parental status plays a diminished anchoring role in shaping Generation Z organizational commitment.

Larger households (four or more members) were associated with the highest affective commitment (Millennials: $M = 3.94$; Generation Z: $M = 3.51$) and normative commitment (Millennials: $M = 3.71$; Generation Z: $M = 3.29$) across both cohorts, while smaller households (one to two members) recorded the lowest commitment means. The affective gap was wider among Millennials ($\Delta = 0.46$) than among Generation Z ($\Delta = 0.22$), indicating a systematic decline in the positive effect of household size on organizational commitment within the younger cohort (Boz & Kurnaz, 2025).

Taken together, as Generation Z moves toward delayed marriage, delayed parenthood, and smaller household structures, the demographic driving force of family structure variables on organizational commitment undergoes meaningful generational erosion, most pronounced on the affective and continuance dimensions.

3.3. Moderation analysis and robustness checks

3.3.1. Multi-group structural equation modeling results: Measurement invariance and generational differences in leadership-commitment pathways

This study shows that multi-group confirmatory factor analysis can provide the rigorous measurement precondition required to examine invariance for the visionary leadership and organizational commitment scales across the two cohorts. The MG-SEM results showed significant generational differences in leadership-commitment path coefficients (Table 3). Specifically, the configural model fit the data well in both cohorts (CFI = 0.961, RMSEA = 0.048, standardized root mean square residual [SRMR] = 0.052). Given that the factor structure of both scales was equivalent across generations, constraining

Table 3. Measurement invariance tests and generational path coefficient comparisons from multi-group structural equation modeling ($n = 300$)

Model/Pathway	CFI	RMSEA	SRMR	Δ CFI	Δ RMSEA	Conclusion
Configural model	0.961	0.048	0.052	-	-	Supported
Metric model	0.954	0.051	0.055	-0.007	0.003	Supported
Scalar model	0.945	0.055	0.059	-0.009	0.004	Supported
Visionary leadership $\rightarrow$ AC						
Millennials	-	-	-	$\beta = 0.48^{***}$	95% CI [0.38, 0.58]	-
Generation Z	-	-	-	$\beta = 0.31^{***}$	95% CI [0.21, 0.41]	$\Delta\beta = 0.17^{***}$
Visionary leadership $\rightarrow$ CC						
Millennials	-	-	-	$\beta = 0.39^{***}$	-	-
Generation Z	-	-	-	$\beta = 0.27^{***}$	-	$\Delta\beta = 0.12^{**}$
Visionary leadership $\rightarrow$ NC						
Millennials	-	-	-	$\beta = 0.36^{***}$	-	-
Generation Z	-	-	-	$\beta = 0.24^{***}$	-	$\Delta\beta = 0.12^{**}$

Notes: $\Delta\beta$ values reflect differences in generational path coefficients, tested using Wald statistics. $**p < 0.01$, $***p < 0.001$.

Abbreviations: AC: Affective commitment; CC: Continuance commitment; CFI: Comparative fit index; CI: Confidence interval; NC: Normative commitment; RMSEA: Root mean square error of approximation; SRMR: Standardized root mean square residual.

factor loadings to equality in the metric model produced no meaningful decline in fit (Δ CFI = -0.007, Δ RMSEA = +0.003). The Δ CFI values fell within accepted thresholds (Δ CFI $\leq$ 0.010).

Moreover, both cohorts interpreted the scale items in a comparable manner. The scalar model demonstrated that further constraining item intercepts to equality produced fit-index changes that might indicate acceptable bounds (Δ CFI = -0.009, Δ RMSEA = +0.004). Therefore, full scalar invariance established the rigorous measurement precondition required for subsequent mean comparisons and cross-group path coefficient interpretation. Our findings indicate that this significant measurement precondition supports subsequent mean comparisons across the two cohorts.

The results of MG-SEM showed that the standardized path coefficient from visionary leadership to affective commitment was significantly higher among Millennials

($\beta = 0.48$, $p < 0.001$, 95% confidence interval [CI]: [0.38, 0.58]) than among Generation Z ($\beta = 0.31$, $p < 0.001$, 95% CI: [0.21, 0.41]). Moreover, the significant generational difference ($\Delta\beta$) of 0.17 indicates that this gap is statistically meaningful, validated by the Wald test ($z = 4.22$, $p < 0.001$). The leadership-to-continuance commitment path also favored Millennials ($\beta = 0.39$ vs. $\beta = 0.27$), with $\Delta\beta$ of 0.12 ($z = 3.18$, $p = 0.001$). The leadership-to-normative commitment path showed a similar pattern, with $\Delta\beta$ of 0.12 ($z = 3.09$, $p = 0.002$). Differences among all three paths reached statistical significance. Interestingly, after controlling for educational attainment, urban-rural background, and marital and parental status as demographic covariates, the results remained robust (affective commitment: $\Delta\beta = 0.14$, $p < 0.001$), further confirming a systematic generational attenuation in the capacity of visionary leadership to drive affective commitment (Jurkovicová *et al.*, 2025). Given that results demonstrate robustness across covariates, the generational gap was consistent and meaningful.

Therefore, the evidence indicates that Generation Z responds differently to visionary leadership across all three commitment dimensions.

3.3.2. Stratified moderation effects of demographic variables on the leadership–commitment relationship

This section shows that the moderating effects of five demographic variables—educational attainment, gender, urban–rural background, marital status, and household size—on the relationship between visionary leadership and affective commitment (AC) warrant further examination. The significant interaction terms between each demographic variable and visionary leadership were tested within the MG-SEM framework, revealing key generational heterogeneity. The results demonstrated that higher qualification (bachelor's degree or above) significantly amplified the positive effect of visionary leadership on affective commitment relative to lower qualification (associate degree or below), with interaction coefficients (β) of 0.19 ($p < 0.001$) among Millennials and 0.11 ($p = 0.004$) among Generation Z. The $\Delta\beta$ was +0.08, tested using the Wald test ($z = 2.84$, $p = 0.004$). The significant findings showed that educational attainment amplified the leadership–commitment relationship more strongly among Millennials than among Generation Z, suggesting that this difference is meaningful.

Urban residence significantly strengthened the visionary leadership-to-affective commitment effect in both cohorts, with Millennials showing a β of 0.14 ($p < 0.001$) and Generation Z showing a β of 0.18 ($p < 0.001$). These results indicate that Generation Z shows a slightly stronger, though non-significant, moderation effect than Millennials ($\Delta\beta = -0.04$, $z = -1.41$, $p = 0.159$). This was the only demographic moderator among the six examined in which Generation Z exceeded Millennials in effect size, indicating that this distinction is particularly relevant to the study.

Our results showed that being married produced a stronger enhancement of the leadership–commitment relationship among Millennials ($\beta = 0.17$, $p < 0.001$) than among Generation Z ($\beta = 0.07$, $p = 0.031$), with $\Delta\beta$ of +0.10 ($z = 3.07$, $p = 0.002$). This pattern closely mirrored the generational attenuation in family structure driving effects reported in Section 3.2.3.

Given that the data demonstrated limited gender moderation, interaction coefficients were relatively weak in both cohorts. The Millennial coefficient reached marginal significance ($\beta = 0.08$, $p = 0.026$), while the Generation Z equivalent did not ($\beta = 0.06$, $p = 0.098$). These results showed that gender moderation approached zero among Generation Z, indicating a broader attenuation pattern.

Additionally, Millennial interaction coefficients for parental status and household size ($\beta = 0.16$ and $\beta = 0.12$, respectively) were higher than those of Generation Z ($\beta = 0.08$ and $\beta = 0.09$, respectively), suggesting that the attenuation pattern holds across family structure effects (Huang & Liu, 2025).

3.3.3. Relative weight analysis: Generational importance rankings of demographic drivers

Relative weight analysis quantified the proportional contributions of seven demographic variables—educational attainment, marital status, parental status, urban–rural background, household size, gender, and migration identity—to the explained variance in affective commitment. Importance rankings varied considerably across generations (Table 4 and Figure 1).

Among Millennials, educational attainment ranked first, with a relative weight of 28.4%, establishing it as the single largest demographic contributor to affective commitment variance. Marital status ranked second (19.7%) and parental status ranked third (16.3%), together with educational attainment, accounting for 64.4% of the explained variance. Urban–rural background ranked fourth (13.8%) and household size ranked fifth (10.2%) in the middle range, while gender ranked sixth (6.1%) and migration identity ranked seventh (5.5%), contributing relatively little.

Among Generation Z, the importance ranking underwent substantial restructuring. Educational attainment retained the top position (22.1%), though its relative weight declined by 6.3 percentage points compared to that of Millennials. Urban–rural background rose to second place (21.3%). Migration identity made the most dramatic shift, climbing from seventh among Millennials (5.5%) to third among Generation Z (17.5%), a gain of +12.0 percentage points. Marital status ranked fifth (10.4%) and parental status ranked sixth (9.8%), each declined substantially by 9.3 and 6.5 percentage points, respectively, compared with Millennials, reflecting the generational erosion in family structure driving effects documented throughout this study (Jaff & Saeed, 2025).

Robustness was assessed using bootstrap resampling ($B = 2,000$ iterations); the 95% CIs for each variable's relative weight did not overlap with those of adjacent-ranked variables, confirming that all generational ranking differences were statistically robust ($p < 0.05$). In summary, Millennials' affective commitment was primarily driven by familylife-cycle demographic factors—marital and parental status—whereas Generation Z's affective commitment was more strongly shaped by institutionally defined geographic mobility factors—urban–rural background and migration

Table 4. Relative weights and generational importance rankings of demographic drivers on affective commitment ($n = 300/\text{group}$)

Demographic driver	Millennials RW (%)	Millennials rank	Generation Z RW (%)	Generation Z rank	Δ RW (%)	Rank change
Educational attainment	28.4	1	22.1	1	-6.3	-
Marital status	19.7	2	10.4	5	-9.3	↓ 3
Parental status	16.3	3	9.8	6	-6.5	↓ 3
Urban-rural background	13.8	4	21.3	2	7.5	↑ 2
Household size	10.2	5	11.7	4	1.5	↑ 1
Gender	6.1	6	7.2	7	1.1	↓ 1
Migration identity	5.5	7	17.5	3	12.0	↑ 4
Total	100	-	100	-	-	-

Notes: RW is the relative weight, expressed as a percentage of the total explained variance. Rankings reflect the ordinal importance of each demographic driver within each generational sub-sample. Bootstrap confidence intervals ($B = 2,000$) confirmed that the estimates for all adjacent-ranked variables were non-overlapping ($p < 0.05$).

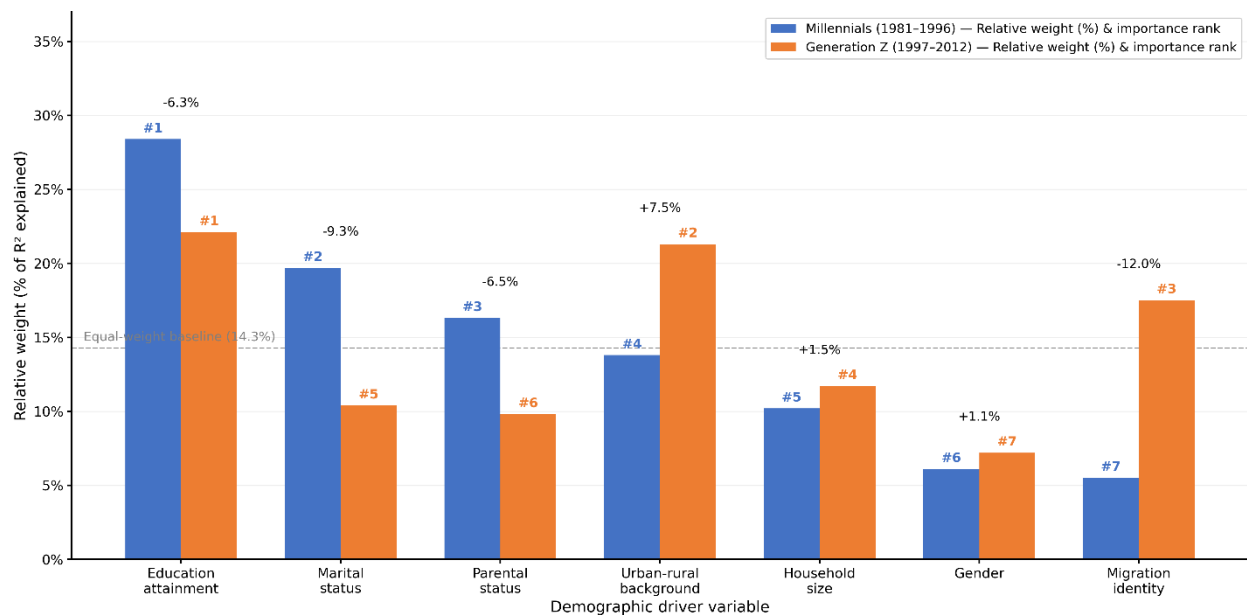


Figure 1. Relative weight analysis: Generational comparison of the relative importance (%) of demographic drivers on affective organizational commitment
Notes: Relative weights (%) represent each driver's proportional contribution to the total R^2 of affective commitment. Numbers above bars indicate importance rank within each generation. Dashed line = equal-weight baseline (100%/7 predictors $\approx 14.3\%$).

identity. This generational restructuring reflects a deep shift in the demographic mechanisms underlying organizational commitment.

4. Discussion

4.1. An explanatory framework for generational demographic differences: The central role of cohort effects

A systematic generational divergence between Millennials and Generation Z is evident in both organizational commitment levels and the importance rankings of demographic drivers. However, this divergence cannot be adequately explained by age effects or period effects alone; cohort effects, operating through formative historical experiences, are central to understanding these patterns. Millennials developed a value orientation centered on family stability and organizational identification—shaped by accelerating demographic dividend release, rapid urbanization, and mass higher education expansion in China, all of which occurred during the critical period of occupational socialization. Consequently, marital status and parental status emerged as the primary demographic drivers of Millennial organizational commitment.

Grounded in Mannheim's (1952) generational demographic theory, the cohort-effect mechanism operates through the principle of historical imprinting: individuals who experience the same macro-demographic and institutional environment during their occupational socialization period develop durable, cohort-specific value orientations that persist throughout their working lives. For Millennials, this formative environment was characterized by the accelerating demographic dividend, rapid urbanization, and mass higher education expansion in China, producing a value system centered on family stability, organizational identification, and credential-based upward mobility. These cohort-imprinted orientations explain why marital status, parental status, and educational attainment emerged as the dominant demographic drivers of Millennial organizational commitment: family life-cycle anchoring provided the motivational infrastructure through which Allen and Meyer's (1990) affective and normative commitment dimensions were activated. In contrast, Generation Z's cohort imprint was formed under conditions of accelerating low fertility, maturing urbanization, and the gradual relaxation of the *hukou* system's geographic mobility constraints. These structural shifts systematically weakened the anchoring function of family life-cycle events, redirecting the primary demographic driving force toward institutionally defined geographic identity factors—urban–rural migration background and floating population identity. This

cohort-level reconfiguration of demographic priorities is precisely what Mannheim's theory predicts: when the macro-demographic context shifts between generational formation periods, the relative weight of demographic drivers on behavioral outcomes restructures accordingly.

Generation Z presents a sharply contrasting picture. Accelerating low fertility, maturing urbanization, and the gradual loosening of institutional geographic mobility barriers systematically weakened the anchoring function of family life-cycle events on organizational commitment, while elevating the driving weight of institutionally defined geographic factors—urban–rural migration background and floating population identity. These patterns closely align with the core argument of Mannheim's classical generational theory: key demographic events during a shared historical period exert irreversible formative effects on the value orientations and behavioral patterns of a given birth cohort, effects that often exceed the gradual changes associated with individual aging.

This cohort effect interpretation must also be understood within China's specific institutional context. The *hukou* system's historical constraints and its incremental relaxation created differentiated institutional exposure precisely during the critical occupational formation periods of each cohort. As a result, Generation Z workers show measurably greater demographic sensitivity to urban–rural identity and geographic mobility experience than Millennials, leaving a clear cohort imprint on the demographic driving structure of organizational commitment. This cohort-effect explanatory framework provides solid demographic theoretical grounding for the study's core results and points toward a direction for future research: when examining generational differences in youth workforce organizational behavior, the historical intersection of macro-demographic transitions and micro-institutional change warrants treatment as a core analytical dimension in cohort-effect identification.

4.2. Boundary conditions of visionary leadership effectiveness under generational demographic heterogeneity

The MG-SEM established that the positive effect of visionary leadership on affective commitment was significantly stronger among Millennials ($\beta = 0.48$) than among Generation Z ($\beta = 0.31$). This generational gap is not a statistical artifact; it is rooted in the systematic demographic heterogeneity between the two cohorts, revealing clear generational-demographic boundary conditions for visionary leadership effectiveness.

One explanatory pathway runs through demographic heterogeneity itself. Millennials include higher proportions

of married, parenting, and larger-household members; these family demographic characteristics generate stronger needs for occupational stability and organizational belonging across the career lifespan, providing fertile emotional ground for the future-oriented narratives that visionary leadership projects and amplifying the conversion efficiency from leadership perception to affective commitment. Generation Z, by contrast, is characterized by delayed marriage, high rates of singlehood, and a dominant small-household structure. These demographic features objectively weaken the internal motivational basis for stable organizational commitment, resulting in systematically lower emotional responsiveness to visionary leadership and partially blocking the demographic conversion pathway of leadership effectiveness.

A further mechanism involves credential inflation and occupational expectation mismatch. Many highly educated Generation Z workers perceive a structural gap between educational investment returns and occupational reality; when this gap is salient, the visionary narratives articulated by leaders are less capable of bridging the cognitive disconnect, further compressing the leadership-to-commitment conversion space. One result stands out as a notable exception: the urban–rural background was the only demographic moderator in this study where Generation Z showed a stronger moderation effect than Millennials. The amplifying effect of urban residence on the leadership–commitment relationship was larger among Generation Z ($\beta = 0.18$) than among Millennials ($\beta = 0.14$), indicating that urbanization continues to perform a distinctive demographic function among the younger cohort, strengthening organizational socialization and improving the conversion rate of leadership perception into commitment, with meaningful policy implications. Collectively, the evidence confirms that visionary leadership does not deliver equivalent effectiveness across all demographic backgrounds; its organizational commitment conversion efficiency is substantially conditioned by the family structure, educational attainment, and urban–rural migration background of the target population, and precision design of leadership interventions must account for this generational demographic heterogeneity.

The generational demographic boundary conditions of visionary leadership effectiveness cluster along three dimensions. The family structure boundary: the conversion efficiency of visionary leadership into affective commitment is higher among married employees, those with children, and members of larger households, with more pronounced effects among Millennials. The geographic mobility identity boundary: an urban residential background amplifies the leadership-to-commitment conversion efficiency, and this

amplifying effect is stronger among Generation Z than among Millennials—the only demographic moderator in this study for which the Generation Z effect size exceeds that of Millennials. The educational–credential matching boundary: the marginal impact of education–job fit quality on affective commitment is stronger among Generation Z ($\Delta R^2 = 0.06$) than among Millennials ($\Delta R^2 = 0.02$), suggesting that occupational expectation mismatches arising from credential inflation compress the commitment conversion space available to visionary leadership. These three boundary conditions offer an actionable testing framework for future research: longitudinal studies can track the dynamic influence of family life-cycle transitions on leadership effectiveness boundaries, and cross-national comparative studies can examine the generalizability of these patterns across varying household registration systems and labor-market institutional contexts.

4.3. Implications

The findings of this study carry important implications at both theoretical and practical levels. Theoretically, this study advances the intersection of generational demographic theory, visionary leadership theory, and organizational commitment research by demonstrating that demographic drivers do not exert uniform effects on commitment across generational cohorts. By integrating Mannheim's (1952) cohort imprinting framework with Allen and Meyer's (1990) three-component commitment model and Rafferty and Griffin's (2004) visionary leadership theory, this study establishes a generational demographic comparative framework that moves beyond single-dimension generational labels toward a multi-dimensional structural account of how birth cohort, educational attainment, urban–rural migration background, and family structure jointly shape organizational commitment. This framework offers a replicable analytical template for future scholars examining generational heterogeneity in other organizational behavior domains, including job satisfaction, turnover intention, and work engagement. The finding that the relative weight of demographic drivers restructures substantially between Millennials and Generation Z—with family life-cycle factors declining in importance and geographic mobility factors rising—also contributes new empirical evidence to international demography scholarship on the behavioral consequences of urbanization, credential inflation, and low-fertility demographic transitions among youth populations.

At the practical level, the findings offer differentiated evidence-based guidance for organizational leaders and human resource practitioners managing multigenerational workforces. For organizations with a predominantly Millennial workforce, the results suggest that visionary

leadership interventions will be most effective when they explicitly connect the organization's future vision to employees' family stability and long-term career security needs, given that married, parenting, and larger-household Millennials show the strongest leadership-to-commitment conversion rates. Talent management practices that support work-life integration, housing benefits, and family-oriented welfare programs are therefore likely to amplify the organizational commitment returns from visionary leadership investment among this cohort. For organizations managing a predominantly Generation Z workforce, the findings suggest that visionary leadership alone is insufficient to generate strong affective commitment without addressing the structural barriers that suppress its effectiveness—most notably credential-expectation mismatch and geographic identity insecurity. Practical interventions should include transparent competency-based career pathways that reduce the perceived gap between educational investment and occupational returns, alongside organizational socialization programs that strengthen urban institutional embeddedness among employees with rural migration backgrounds, capitalizing on the finding that urban residence amplifies visionary leadership effectiveness more strongly among Generation Z than among Millennials. At the policy level, the study's findings highlight the importance of designing differentiated youth labor market policies that account for generational demographic heterogeneity rather than treating young professionals as a homogeneous group. Policymakers seeking to improve youth workforce stability and organizational commitment should consider how macro-demographic conditions—including urbanization policy, household registration reform, and higher education expansion—interact with generational cohort formation processes to shape the behavioral landscape of the youth labor force over time.

4.4. Limitations

Despite systematic empirical testing of demographic drivers and methodological efforts in measurement invariance verification and multi-method statistical analysis, several limitations in the research design warrant acknowledgment.

First, the cross-sectional design restricts causal inference, as the study relied on a single time-point survey. Although period effects were partially controlled for at the statistical level, the age-period-cohort confounding problem cannot be fully resolved within a cross-sectional data framework, and age maturation effects cannot be completely excluded from the cohort-effect interpretation. Second, geographic coverage limits external validity: respondents were predominantly drawn from urban areas in mainland

China, and coverage of deeply rural populations, ethnic minority communities, and young professionals in Hong Kong, Macao, and Taiwan was insufficient, constraining both national demographic representativeness and cross-national generalizability. Third, self-report measurement introduces common-method bias, as demographic characteristics, leadership perceptions, and organizational commitment were collected from the same respondents at the same time point. Although procedural remedies were incorporated into the survey design, common-method bias cannot be fully eliminated through statistical correction alone; future research would benefit from multi-source, multi-method approaches incorporating supervisor ratings or personnel records. Fourth, the operationalization of demographic variables is inherently static: the study did not capture how changes in family structure and urban-rural migration status accumulate over time, leaving organizational commitment trajectories and the dynamic processes of family life-cycle transitions underexplored. These limitations more clearly define the boundary conditions for the applicability of the present results and identify a methodological agenda for future research in this area.

5. Conclusion

This study examined the demographic drivers of organizational commitment among Millennial and Generation Z young professionals under visionary leadership conditions, using a generational demographic comparative framework. Moreover, the findings show that implications emerge at both theoretical and practical levels. However, the significant evidence indicates that the relative weights of educational attainment, urban-rural migration background, and family structure variables in driving organizational commitment differ substantially between the two cohorts. In light of these findings, Millennial commitment formation demonstrates that family life-cycle demographic factors appear to shape outcomes most critically. Findings show that Generation Z commitment is conditioned by a geographic mobility background. Therefore, the results show that this pattern represents a meaningful generational restructuring of demographic driving mechanisms. Furthermore, the evidence is clear that the effectiveness of visionary leadership in converting perceptions into commitment is clearly bounded by generational demographic heterogeneity. Given that the data demonstrate this heterogeneity, a precision-designed leadership intervention should treat generational demographic composition as a key consideration rather than an afterthought. Our findings also indicate that the generational landscape of the labor market continues to shift. Our study further shows that Generation Alpha

is entering the workplace as Generation Z continues to dominate. Additionally, the evidence shows that the ongoing evolution of generational demographic structures could demonstrate continued reshaping of how organizational commitment forms and through which pathways it operates. Thus, the results indicate that future research should explore longitudinal cohort designs and cross-national comparative demographic frameworks. Additionally, the significant findings demonstrate that systematic long-term tracking of generational change patterns in youth labor force behavior appears critically needed. Evidence shows the goal is to build an adaptive evidence base. Moreover, the key results show that this evidence base could inform policy responses to the global challenge of youth workforce transformation.

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Conflict of interest

The authors declare they have no competing interests.

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Methodology: Chuyao Sun, Mohd Nasir Selamat

Writing–original draft: Chuyao Sun

Writing–review & editing: Mohd Nasir Selamat, Rusyda Helma Mohd

Ethics approval and consent to participate

Not applicable.

Consent for publication

Not applicable.

Availability of data

The data that support the findings of this study are available from the corresponding author, Mohd Nasir Selamat, upon reasonable request.

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