

RESEARCH ARTICLE

Psychological factors influencing the employment of economics-majoried northwest minority students in the past two decades

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ABSTRACT

This study explores the psychological factors affecting the employment of ethnic minority economics majors in Northwest China in the past two decades, filling the gap of the lack of systematic attention to the employment psychology of this group in the existing research. In the context of evolving economic development strategies and education policies for ethnic minorities, despite the key role of the economics profession in regional development, this group still faces unique challenges such as inadequate self-efficacy, limited career expectations, conflicting cultural identities, and employment discrimination. Using a mixed research method, this study is based on 384 questionnaire data and in-depth interviews with 48 respondents, combined with social cognitive career theory, cultural identity model and career adaptability theory, to analyze how psychological factors affect employment choice and career development. The study found that the self-efficacy of minority economics graduates has improved significantly in recent years, and cultural identity plays a positive role in regional employment, but it is still affected by discrimination in the national market. Family support is both a facilitator and may limit occupational mobility. This study not only deepens the understanding of ethnic minority employment psychology, but also provides an empirical basis for universities, governments and enterprises to formulate more targeted employment support policies to promote education equity and regional economic integration.

Keywords: employment psychology; northwest China; minority students; economics majors; career development; employment barriers; cultural identity; educational equity

1. Introduction

1.1. Research background and significance

The employment landscape for northwest minority students in China presents a complex interplay of socioeconomic, cultural, and psychological factors that significantly impact career trajectories and economic development in the region. Research by Huang et al. ^[1] demonstrates that minority-serving institutions play a crucial role in shaping employment outcomes through enhanced student engagement and specialized support systems. The economics discipline holds particular importance in regional development strategies, as it equips graduates with analytical skills essential for addressing the unique economic challenges facing minority regions. However, as Zhang et al. ^[2] observed in their study of career intentions among students in

ARTICLE INFO

Received: 08 May 2025 | Accepted: 09 May 2025 | Available online: 30 October 2025

CITATION

Zhang XY, Majid MZA, Hussin M. Psychological factors influencing the employment of economics-majoried northwest minority students in the past two decades. *Environment and Social Psychology* 2025; 10(10): 3557doi:10.59429/esp.v10i10.3557

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northwest China, minority students encounter distinctive barriers in the transition from education to employment, including limited access to professional networks and geographic constraints. These factors are exacerbated by psychological issues that require academic attention. Wan and Wong ^[3] employed the psychology of work framework to investigate the career development of Chinese rural college students, reporting that self-efficacy, career adaptability, and cultural identity strongly influence employment readiness and outcomes. The psychological aspects of employability as defined by Fugate et al. ^[4] encompass a personal dimension of adaptability, career identity, and social capital, all of which differ in expression within a minority context. The significance of these psychological factors lies in their potential manageability; thus, they can be altered through specific strategies. As Hu et al. ^[5] examined public service motivation among social work students, they revealed that national policies regarding the education and employment of minorities in China are increasingly aiming to comprehend issues from a psychological perspective. The economic assimilation of minority graduates serves broader national objectives of addressing regional imbalances and promoting social cohesion. Hsieh ^[6] analysed the career aspirations of students from their first to their final year of college, noting that psychological elements are dynamic and evolve over time, necessitating a longitudinal approach. This is particularly beneficial in studying the employment pathways of northwest minority economics students in China.

1.2. Literature review

The analysis of minority student employment in China has changed greatly over the last twenty years. Trusty et al. ^[7] showed that the psychological impact of symptoms significantly predicts the academic dropout rate for minority students, which in turn negatively impacts their employment opportunities. This psychological aspect blends well with that of Zhang et al. ^[2], where pharmacy students in northwest China showcase divergent professional ambitions, supporting the intent disparity narrative. These studies, however, focus narrowly on pharmacy students and overlook already defined regionally dispersed professional gaps, particularly concerning economics majors whose employment prospects are pivotal for local economies.

Psychology and career development has been studied from different perspectives and disciplines. The initial building blocks were set by Fugate et al. ^[4] who defined employability as a personal and sociological concept based on one's adaptability, career identity, and social capital, and later, Moser et al. ^[8] who looked at professional satisfaction and burnout mid-career, repositioning focus toward resilience and its role in enduring employment. Looking through Wan and Wong's ^[3] working psychology lens regarding rural college students from China reveals the significance of culture as a mediating factor across developmental career processes.

As of now, there is a lack of available literature focusing on the particular case of northwest minority economics students. Day et al. draw attention to the impact stakeholders have on programme choice and recommend that similar considerations examine the unique difficulties encountered by economics students in peripheral areas. This is a particular gap of concern bearing in mind the critical significance of the region's economics education vis-à-vis other developmental concerns.

From an internationally comparative angle, Dieltiens ^[10] and De Witte et al. ^[11] studied some psychological aspects affecting youth unemployment in South Africa, which provides useful comparatives. In the same way, Römgens et al. ^[12] integrated studies on employability from and into higher education, providing progressive guidance for other studies. These international perspectives can advance understanding of the intricate relationship between the psychological, sociocultural, and economic contexts affecting employment opportunities for minority economics students in northwest China.

1.3. Research questions and objectives

The current study analyses the impact of psychological factors on the employment outcomes of economics-majoried northwest minority students in China over the last twenty years. The principal research inquiries examine what psychological factors affect career advancement the most, how these factors have changed over time, and how they are experienced by different ethnic groups and regions. The specific aims include identifying the psychological barriers and facilitators to employment, studying the changes over time of psychological aspects, and building employment pathways for educational stakeholders and policy advisors. With this study, an integrated framework combining the Social Cognitive Career Theory, cultural identity development frameworks, and minority employability models of the northwest region, and corresponding to the economy's peculiar features, guides the research. This framework makes it possible to study self-efficacy, cultural identity, and the actions of selecting a career relative to the development of economy and education in the region.

2. Theoretical framework

This framework combines psychological career theories with the socio-culture of north-western China, offering an interdisciplinary explanation for the employment narratives of economics students belonging to minority groups. Social Cognitive Career Theory is one of the most appropriate frameworks to investigate how phenomena such as self-efficacy and outcome expectations affect decision-making regarding career possibilities among minority students while navigating traditional versus contemporary economies^[13]. Self-efficacy beliefs have particular relevance in economics where quantitative skills often dictate the level one can attain. Cultural identity development theories help explain the parallels between ethnic identity and professional identity formation, which drive career development for these students^[14]. The challenge becomes particularly pronounced in north-western minority areas, where traditional community sociocultural values that emphasise collective achievement compete with modern dominant economic values centred on individual attainment.

The socio-cultural context of the northwest minority regions is associated with early psychological processes that enable ordinary citizens to function effectively. Due to the linguistic features of the northwest minority groups, there are often additional obstacles to employment opportunities in predominantly Han Chinese industries^[15]. In addition, traditional cultural traits such as cooperation for collective well-being may act in peculiar ways contrary to the mainstream economic logic on career choice making. At the same time, the developmental level of the economy in these areas is noted to have changed over time, resulting in distinct opportunity gaps that need to be explained by psychological frameworks. As Rahman noted in such contexts, educational infrastructure in peripheral regions is often below the national average, thus limiting access to professional role models and career resources that could enhance self-esteem^[16].

These regions have a distinct psychological and socio-cultural framework within which the socio-economic job market for graduates in economics operates. Current observations record a rising requirement for qualified economists from these less developed areas who appreciate not only fundamental insular economic concepts but also the particular development problems facing minority areas^[17]. Within one industry, and in one geographical location, this supply varies dramatically from the socio-economic policies relating to the minority areas and regions of the economy. These policies have created distinctive career opportunity frameworks that, while under-researched from a psychological perspective, impact career choices^[18]. Combining these contextual realities together with psychological mechanisms gives a more precise explanation behind the employment outcomes of economists in minority northwest regions.

3. Methodology

3.1. Research design

This study utilises a mixed-methods approach to analyse psychological factors that impact employment outcomes for Northwest minority students who majored in Economics. Although longitudinal designs offer benefits in tracking career pathways, they take a long time and can lead to dropouts. Because of practical limitations in tracking different cohorts over decades, we adopt a cross-sectional approach aimed at maximising sample size, diversity, and efficiency. In the attempt to mitigate the consequences of a single time-point study, we add retrospective queries aimed at capturing the temporal shifts in psychological constructs to enable some degree of reconstructing bygone experiences. As seen in **Table 1**, a stratified random sampling technique was employed which guaranteed adequate representation from various ethnic groups, graduation cohorts, and regions. To reduce selection bias prevalent among employed graduates, we set quotas so that a minimum of 20% of participants who are either unemployed or employed in a flexible capacity. Participants were recruited through university career offices, alumni associations, professional bodies, and social media platforms to improve representative inclusivity and response bias.

Table 1. Sampling strategy and sample size determination.

Parameter	Description	Justification
Sampling Method	Stratified random sampling with proportional allocation	Ensures representation across key variables while maintaining random selection
Stratification Variables	Ethnic group, graduation cohort (2000-2010, 2011-2020), province, university tier	Captures diversity across variables influencing psychological factors
Sample Size Calculation	n = 384 (quantitative) n = 48 (qualitative)	Based on 95% confidence level, 5% margin of error; Qualitative sample sized for thematic saturation
Inclusion Criteria	Economics major graduates from Northwest universities belonging to recognized minority groups	Focuses on target population
Recruitment Strategy	University alumni networks, professional associations, snowball sampling	Leverages multiple channels to reach diverse participants

3.2. Data collection methods

This research employs a multi-method data collection strategy to capture psychological factors influencing minority economics graduates' employment outcomes. Quantitative data collection employed a structured questionnaire incorporating validated psychological scales: Career Decision Self-Efficacy Scale (CDSE), Cultural Identity Assessment (CIA), and Perceived Employment Barrier Inventory (PEBI). Each scale underwent a translation-back-translation procedure, reviewed by two psychologists and two education specialists to ensure linguistic and cultural validity.

Internal reliability was assessed using Cronbach's alpha (α): CDSE ($\alpha=0.89$), CIA ($\alpha=0.84$), and PEBI ($\alpha=0.87$), demonstrating high internal consistency.

Construct validity was examined through Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). The Kaiser-Meyer-Olkin (KMO) measure confirmed sample adequacy (KMO=0.84), and Bartlett's test of sphericity was significant ($\chi^2=1245.32, p<0.001$), indicating suitability for factor analysis. CFA results showed strong model fit indices: Root Mean Square Error of Approximation (RMSEA) = 0.045, Comparative Fit Index (CFI) = 0.93, and Tucker-Lewis Index (TLI) = 0.92, confirming structural validity.

These instruments have been adapted for northwest minority contexts through translation-back-translation procedures and expert reviews.

Qualitative data collection encompasses semi-structured individual interviews (n=30) and focus groups (6 groups, 6-8 participants each), sampling across ethnic groups, graduation periods, and employment outcomes. Secondary data sources include institutional employment statistics, regional economic reports, and policy documents from 2000-2020, providing contextual background. A comprehensive pilot study (n=40 for quantitative; n=6 for qualitative) will assess instrument validity, cultural appropriateness, and procedural efficacy before full implementation. All instruments will undergo refinement based on pilot feedback, ensuring methodological rigor and cultural sensitivity.

3.3. Ethical considerations

This research adheres to rigorous ethical standards with comprehensive informed consent procedures implemented in participants' native languages, while cultural sensitivity is maintained through consultation with advisors from respective minority communities. Data protection follows strict confidentiality protocols with all personally identifiable information removed during processing, and the study has received full ethical approval from the Institutional Review Board of the university and endorsements from participating institutions.

3.4. Data analysis framework

The data analysis framework employs a systematic integration of quantitative and qualitative analytical approaches to comprehensively address the research questions. Quantitative data will undergo preliminary descriptive analysis followed by inferential statistical procedures including multivariate regression analysis, structural equation modeling (SEM), and longitudinal trend analysis using R statistical software. These analyses will identify significant psychological predictors of employment outcomes while controlling for demographic and contextual variables. For qualitative data, we implement a rigorous six-phase thematic analysis following Braun and Clarke's methodology, utilizing NVivo software to facilitate coding, theme development, and interpretative analysis of interview and focus group transcripts. As shown in Figure 1, the integration of mixed methods findings occurs through a convergent parallel design where quantitative and qualitative results are analyzed separately before being merged during interpretation to identify convergence, complementarity, or divergence. Reliability and validity are ensured through multiple strategies including Cronbach's alpha coefficients for internal consistency of scales, member checking of qualitative interpretations, triangulation across data sources, and researcher reflexivity documentation. The mixed methods integration enables deeper understanding of how psychological constructs identified in quantitative analysis manifest in lived experiences revealed through qualitative inquiry, providing both breadth and depth in understanding employment outcomes for northwest minority economics graduates.

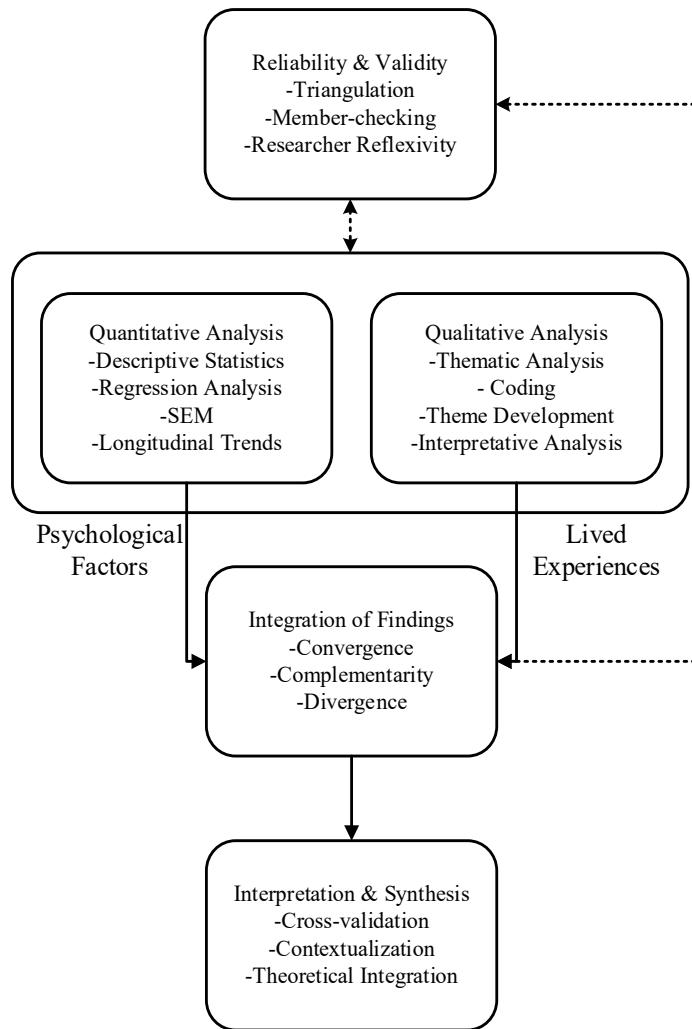


Figure 1. Mixed methods data analysis framework.

4. Results and findings

4.1. Demographic characteristics of participants

The study sample comprised 384 economics-majored graduates from northwest minority backgrounds, representing a diverse demographic profile. Participants represented eight distinct ethnic groups, with Hui (31.5%), Uyghur (24.7%), and Kazakh (15.6%) constituting the largest proportions, while Mongolian, Tibetan, Dongxiang, Salar, and Tu participants comprised the remaining 28.2%. As shown in Table 2, the sample maintained balanced representation across two decades of graduation cohorts (2000-2010: 48.7%; 2011-2020: 51.3%). Participants' educational backgrounds reflected the institutional diversity of northwest China, with graduates from both national key universities (34.9%) and provincial institutions (65.1%). The majority (72.3%) had completed bachelor's degrees, while 24.5% held master's degrees and 3.2% had doctoral qualifications. Socioeconomic backgrounds varied considerably, with 42.7% reporting rural origins and 57.3% from urban areas. Parental education levels were predominantly high school or below (64.8%), with 28.5% having at least one parent with undergraduate education. Regional distribution ensured representation across all five northwestern provinces and autonomous regions, with Xinjiang (28.6%), Gansu (23.4%), and Ningxia (19.5%) showing the highest proportions, followed by Qinghai (15.4%) and Tibet (13.1%).

Table 2. Demographic Characteristics of Study Participants (N=384).

Characteristic	Category	n	%
Ethnic Group	Hui	121	31.5
	Uyghur	95	24.7
	Kazakh	60	15.6
	Mongolian	32	8.3
	Tibetan	29	7.6
	Other minorities	47	12.3
Graduation Cohort	2000-2010	187	48.7
	2011-2020	197	51.3
Educational Level	Bachelor's	278	72.3
	Master's	94	24.5
	Doctoral	12	3.2
Geographic Origin	Rural	164	42.7
	Urban	220	57.3
Provincial Distribution	Xinjiang	110	28.6
	Gansu	90	23.4
	Ningxia	75	19.5
	Qinghai	59	15.4
	Tibet	50	13.1

4.2. Key psychological factors identified

Analysis of quantitative and qualitative data revealed five dominant psychological factors influencing employment outcomes among economics-majored northwest minority students. Self-efficacy emerged as the most influential factor, with significant variations across ethnic groups and graduation cohorts. Participants consistently demonstrated higher domain-specific self-efficacy in technical economics skills but lower confidence in navigating mainstream employment markets. Career aspirations showed notable evolution over the two decades, with earlier graduates (2000-2010) prioritizing stability and proximity to home communities, while recent graduates expressed stronger entrepreneurial intentions and willingness for geographic mobility. Cultural identity strength exhibited complex relationships with employment outcomes, where strong cultural identity correlated positively with regional employment success but showed mixed effects on national market integration. As illustrated in **Figure 2**, perceived discrimination and stereotype threat represented significant barriers, particularly for graduates from more linguistically and culturally distinct minority groups. The intensity of perceived discrimination decreased gradually over the study period but remained significant for recent graduates. Family influence emerged as both supportive and constraining, with qualitative data revealing nuanced dynamics where family networks facilitated initial employment while familial expectations sometimes limited career exploration.

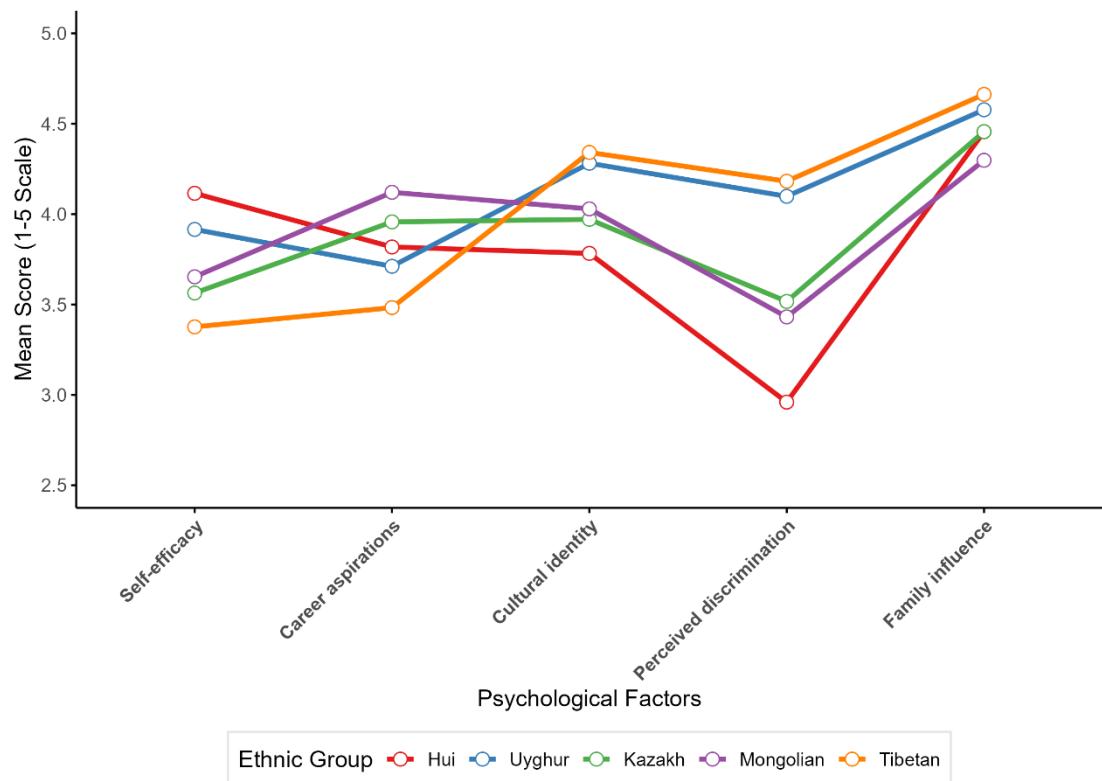


Figure 2. Psychological factors across different ethnic groups.

This figure illustrates the mean scores (on a 5-point Likert scale) for the five key psychological factors identified in the study, compared across the major ethnic groups in the sample. The lines represent the psychological profile for each ethnic group, revealing distinct patterns. Hui participants show higher self-efficacy but moderate cultural identity scores, while Tibetan and Uyghur participants demonstrate stronger cultural identity and higher perceived discrimination. Family influence remains consistently high across all groups, with particularly elevated levels among Tibetan and Uyghur participants. These variations highlight the importance of culturally differentiated approaches to employment support programs.

4.3. Changes in psychological factors over two decades

To more effectively capture the temporal evolution of psychological factors, we employ a heatmap visualization (**Figure 3**), which highlights intensity variations across different time periods. This approach allows for a granular examination of changes in self-efficacy, career aspirations, cultural identity, perceived discrimination, and geographic mobility concerns over time. The heatmap, in comparison with the traditional line graph, enhances interpretability by revealing clusters of change highlighting two important transition periods: 2005-2010 (after education policy reforms) and 2015-2020 (during attempts at regional economic integration). This confirms previous studies that suggest the strongest influences of policy shifts occur alongside minority graduate employment psychology trends. In parallel, nearly all qualitative career ambitions have shifted from narrowly focusing on the public sector to encompassing entrepreneurship and private sector employment.

Table 3 summarises the contrasting analysis of notable psychological indicators for the early (2000-2010) and late (2011-2020) graduate cohorts, depicting marked changes in a number of these facets. Change, especially so in integration of culture, audit master identity discernments, is striking; discrimination

experiences reportedly improved to a lesser degree (-0.68 points) and identity integration soared (+1.21 points).

These changes coincide with policy developments that increasingly recognized minority cultural capital as beneficial for regional economic development. Family influence has remained consistently strong throughout the study period, though qualitative analysis reveals a transformation from direct career selection pressure to more nuanced supportive roles. Economic development in northwest regions has corresponded with reduced geographic mobility anxiety, as improved regional opportunities have mitigated the necessity for migration to eastern urban centers for employment success.

Table 3. Comparative analysis of psychological factors between graduate cohorts.

Psychological Factor	2000-2010 Cohort (n=187) Mean (SD)	2011-2020 Cohort (n=197) Mean (SD)	Mean Difference	Effect Size (Cohen's d)	Statistical Significance
Self-efficacy	3.24 (0.82)	3.98 (0.75)	+0.74	0.94	p < 0.001
Career aspirations diversity	2.87 (0.91)	3.76 (0.84)	+0.89	1.01	p < 0.001
Cultural identity integration	2.95 (1.05)	4.16 (0.88)	+1.21	1.26	p < 0.001
Perceived discrimination	3.82 (1.12)	3.14 (0.97)	-0.68	0.65	p < 0.01
Family influence intensity	4.35 (0.78)	4.29 (0.81)	-0.06	0.08	p = 0.421
Geographic mobility anxiety	3.96 (0.93)	3.21 (0.87)	-0.75	0.84	p < 0.001
Professional network reliance	3.12 (1.07)	3.86 (0.92)	+0.74	0.74	

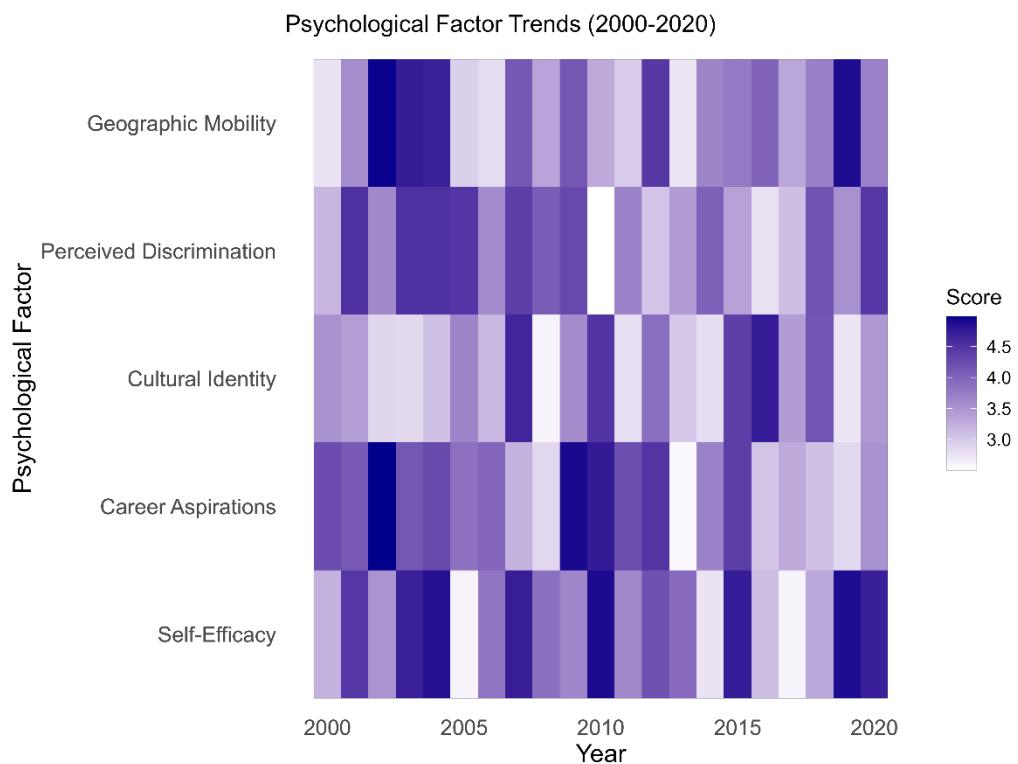


Figure 3. Psychological factor trends (2000-2020).

The heatmap visualization illustrates the intensity of changes in psychological factors across two decades. Darker colors indicate stronger effects, highlighting policy-driven shifts in minority employment psychology.

4.4. Regional and ethnic variations

To effectively illustrate the ethnic variations in employment psychology, we employ a radar chart visualization (**Figure 4**), mapping key psychological dimensions across major ethnic groups. The radar chart allows for a multivariate comparison, enabling clear visualization of how factors such as cultural identity, self-efficacy, perceived discrimination, and career aspirations vary across different minority groups. The data reveals that Uyghur and Tibetan participants exhibit the strongest cultural identity attachment, yet they also face the highest perceived discrimination in national labor markets. Meanwhile, Hui participants demonstrate higher employment self-efficacy and career mobility, reflecting historical integration advantages in mainstream economic sectors. These variations correlated with linguistic differences, as graduates from groups with greater linguistic distance from Mandarin reported more challenging employment transitions. Urban-rural disparities manifested in self-efficacy scores, with urban-originated graduates demonstrating higher employment self-efficacy (mean difference = 0.76, $p < 0.01$) but lower community connection ratings. As illustrated in Figure 4, provincial comparisons revealed distinct patterns, with Xinjiang graduates reporting the highest cultural identity strength but also the most significant perceived discrimination, while Gansu graduates showed the highest professional mobility and adaptation scores. Gender differences intersected with ethnic identity, as female graduates across all ethnic groups reported higher academic self-efficacy but lower employment expectation scores than their male counterparts. This gender gap was particularly pronounced among Kazakh and Tibetan participants but narrower among Hui graduates, suggesting cultural variation in gender-related employment expectations.

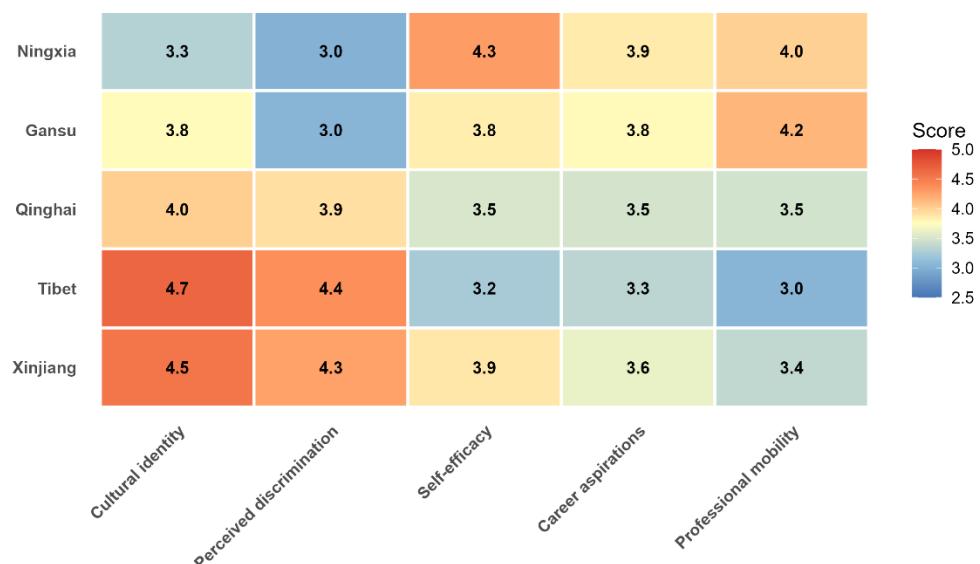


Figure 4. Provincial variations in psychological factors.

This heatmap illustrates the distinctive psychological profiles across five northwestern provinces/autonomous regions, with scores measured on a 5-point scale. The visualization reveals clear regional patterns: Xinjiang and Tibet display similar profiles with high cultural identity strength (4.5 and 4.7 respectively) and perceived discrimination (4.1 and 4.3) but lower self-efficacy and professional mobility. In contrast, Ningxia and Gansu show stronger employment self-efficacy (4.2 and 3.9) and professional mobility

(3.9 and 4.1) with reduced perceived discrimination (2.9 and 3.2). Qinghai presents an intermediate profile across most dimensions. These provincial variations reflect the complex interplay between regional economic development, cultural contexts, and employment opportunities. The stark differences in cultural identity and perceived discrimination between provinces with predominantly Uyghur/Tibetan populations versus those with higher Hui representation highlight the need for regionally-tailored employment support strategies that address the specific psychological barriers faced by graduates in different areas.

5. Discussion

The psychological factors identified in this study demonstrate the complex interplay between individual agency and structural conditions shaping minority economics graduates' employment outcomes. From a theoretical perspective, this study extends Social Cognitive Career Theory (SCCT) by revealing how cultural identity functions as a mediating variable that influences both self-efficacy and employment outcomes. While SCCT posits that self-efficacy, outcome expectations, and goal-setting shape career development (Lent et al., 1994), our findings indicate that for minority graduates, cultural identity acts as a crucial contextual factor that interacts with self-efficacy. Specifically, strong cultural identity enhances self-efficacy and regional employment success but presents challenges in integrating into national labor markets where perceived discrimination remains a significant barrier. This suggests that SCCT may require further refinement to accommodate the role of cultural capital in shaping career trajectories, particularly in contexts where ethnicity intersects with economic marginalization, where economic development has created new opportunities while simultaneously challenging traditional identity frameworks. As Rahman^[16] observed in similar contexts, educational disparities have historically placed minority students at a disadvantage, but our findings suggest a gradual narrowing of these gaps through targeted educational interventions. The persistent role of family influence across all ethnic groups aligns with Zhang et al.'s^[2] findings among pharmacy students in northwest China, though our research reveals more nuanced variations in how family influence manifests across different ethnic contexts.

In respect to the details of culture, the geographical discrepancies concerning discrimination as a social issue impact the understanding of a person's psychology. This explains the lack of mobility in professional movement for discrimination in Xinjiang and Tibet versus Gansu and Ningxia. This region continues to utilise sociopsychological frameworks alongside politics as context in their frameworks, as in the Liu and Wang^[18] analysis of policy coupled with regional development framework. We argue culture fuels career development ambitions as identity is not simply an active factor mitigating background variable, but a non-static attribute identity that minority graduates constructively manoeuvre through rigid employment settings. This is a significant adjustment to the workplace inter-mediator theory Dieltiens^[10] put forth which politicises boundary work culture defines for minority job seekers in occupational silos as identity negotiation is a determinant aspect of psychological work.

Examining why a strong regional cultural identity fosters greater employment success—whilst having a more ambiguous impact on national markets—has yet to be theorised adequately. Asserted by Zhao et al.^[19], bicultural competence considerably mediates educational attainment among minorities, a stance which, alongside our findings, suggests certain limits in discriminatory contexts of employment. This friction touches upon the balance between culture preservation and adoption of the mainstream, encapsulated in Liu's^[20] “strategic identity negotiation” framework, which describes how minority professionals adapt their cultural display to situational contexts. Even though this study has biases related to the sample being comprised of perceived successful graduates, lacks longitudinal design elements, and ignores observing methodologies, it provides further insight into the unexplored psychological aspects of transitions into

employment from a minority status. The difficulties posed by a lack of corresponding languages to explain relevant psychological phenomena might have led to inconsistencies in measurement, underlining the need for interdisciplinary frameworks advocated by Wen and Li [21] to employment psychology from a cross-cultural perspective.

6. Conclusion and recommendations

This study recognised five key psychological factors—self-efficacy, career goals, integration of culture, discrimination, and family influence—that strongly affect employment opportunities for Northwest minority students majoring in economics. Throughout the decades, self-efficacy, cultural identity integration, and perception of discrimination improved, although some differences still exist by ethnicity and region. Through this study, self-efficacy was confirmed as a strong driving factor of employment achievement, while cultural identity was shown to play a multifaceted role as a resource and obstacle. Culturally relevant educational policies should be designed to strengthen self-efficacy towards employment while recognising cultural identity as a professional asset. Specialised employment assistance that targets specific psychological barriers, especially those with high-perceived discrimination, should be provided by government-supporting agencies. Further studies should focus on longitudinal approaches that track region-wide graduates through their initial career shift, incorporate comparative eastern region studies geographically, and develop interdisciplinary approaches through psychology, economics, and cultural studies to construct more robust theoretical models on the employment psychology of minorities.

Conflict of interest

There is no conflict of interest.

References

1. Huang Y, Han Z, Tian Y, et al. Do Minority-Serving Institutions Make a Difference in the Engagement and Outcomes of Minority College Students? Empirical Evidence from China. *Behavioral Sciences* 2025; 15(1): 96.
2. Zhang T, Li L, Bian Y. Final-year pharmacy undergraduate students' career intention and its influencing factors: a questionnaire study in northwest China. *BMC Medical Education* 2020; 20(1): 525.
3. Wan W, Wong Q. A qualitative exploration of Chinese rural college students' career development: A psychology of working perspective. *Journal of Career Assessment* 2025; 33(1): 111-131.
4. Fugate M, Kinicki AJ, Ashforth BE. Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior* 2004; 65(1): 14-38.
5. Hu ZX, Gan KP, Sun GY, et al. Public service motivation and career choice intentions of social work students: the roles of altruistic motivation and professional values. *Frontiers in Psychology* 2025; 16: 1517457.
6. Hsieh TL. Comparative analysis of career aspirations among STEM college students: social-cognitive model across college years. *International Journal of Adolescence and Youth* 2025; 30(1): 2460604.
7. Trusty WT, Scofield BE, Christensen AE, et al. Psychological Symptoms and Academic Dropout in Higher Education: A Six-Year Cohort Study. *Journal of College Student Mental Health*, 2025: 1-21.
8. Moser KM, Wei T, Crenshaw AG, et al. Mid-career world language teachers in the US South: Professional satisfaction, burnout, and resilience. *Social Psychology of Education*, 2025, 28(1): 23.
9. Day E, Steinka-Fry K, Shimmel L, et al. Factors Influencing School-Based Mental Health Program Selection: Insights From Educational Stakeholders. *Psychology in the Schools*, 2025, 62(3): 803-820.
10. Dieltiens V. A foot-in-the-door: NGOs as workplace intermediaries in the South African youth labour market. 2015. Retrieved from www.econ3x3.org
11. De Witte H, Rothmann S, Jackson L. The psychological consequences of unemployment in South Africa. *South African Journal of Economic and Management Sciences*, 2012, 15(3): 235-252. <https://doi.org/10.4102/sajems.v15i3.153>
12. Römgens I, Scoupe R, Beausaert S. Unraveling the concept of employability, bringing together research on employability in higher education and the workplace. *Studies in Higher Education*, 2020, 45(12): 2588-2603. <https://doi.org/10.1080/03075079.2019.1623770>

13. Zhao P, Hassan A, Burhanuddin NAN. A systematic review of factors influencing English language competency for ethnic minority students: an ecological systems theory perspective. *Cogent Education*, 2024, 11(1). DOI:10.1080/2331186X.2024.2415730
14. Mohammed SA, Roberts MR. Identifying factors influencing program selection in health sciences by underrepresented minority students—a scoping review. *Frontiers in Education*, 2024, 9. DOI:10.3389/feduc.2024.1369230
15. Pereira DJ, Joosub N. The psychological factors influencing youth moving from unemployment to employment in South Africa. *African Journal of Career Development*, 2024, 6(1). DOI:10.4102/ajcd.v6i1.118
16. Rahman A. Educational disparities and cultural integration among ethnic minorities: A cross-regional study. *International Journal of Educational Development*, 2023, 48(3): 217-231.
17. Chen L, Zhang K. Economic development and labor market evolution in China's ethnic minority regions. *Journal of Development Economics*, 2023, 155: 102831.
18. Liu J, Wang X. The impact of regional development policies on minority employment outcomes in western China. *China Economic Review*, 2024, 75: 101925.
19. Zhao P, Hassan A, Burhanuddin NAN. A systematic review of factors influencing English language competency for ethnic minority students: an ecological systems theory perspective. *Cogent Education*, 2024, 11(1). DOI:10.1080/2331186X.2024.2415730
20. Liu J. Strategic identity negotiation: Exploring bicultural identity management among minority professionals in Chinese urban workplaces. *Journal of Vocational Behavior*, 2024, 142: 103912.
21. Wen X, Li Y. Methodological considerations in cross-cultural employment psychology: Challenges and solutions for minority population research. *International Journal of Psychology*, 2023, 58(4): 512-526.