

Classification of Latent Profiles and Exploration of Influencing Factors in Career Preparation Among Multicultural Adolescents

Research Overview

This study classified latent profiles based on the level of career preparation among multicultural adolescents and examined how self-esteem and life satisfaction, perceived parental, peer, and teacher support, and bicultural acceptance attitudes influence profile membership, within an ecological systems perspective.

Keywords: Career preparation, Multicultural Adolescents, Latent Profile Analysis

Purpose of Study

The purpose of this study is to derive latent profiles of career preparation among multicultural adolescents, identify the characteristics of each group, and examine how self-esteem and life satisfaction, perceived parental, peer, and teacher support, and bicultural acceptance attitudes influence profile membership, within an ecological systems perspective. Furthermore, this study seeks to provide theoretical and practical implications for supporting career preparation in the context of the growing global population of multicultural adolescents.

Research Methods

To this end, data from the fifth year (8th grade) of the Multicultural Adolescents Panel Study II, comprising 1,842 participants, collected by the National Youth Policy Institute, were utilized. A three-step latent profile analysis approach was employed to identify latent profiles and validate various influencing factors.

Results and Discussion

The main findings of this study are summarized as follows.

First, the classification of latent profiles for career preparation among multicultural adolescents revealed three distinct profiles—“low,” “medium,” and “high”—based on their characteristics. It was also found that Groups 1, 2, and 3 all shared a consistent level of career readiness. A majority of second-year middle school multicultural adolescents (71.2%) belonged to Group 2, followed by 14.6% in Group 1, while the smallest group, Group 3, comprised 14.2%. This distribution indicates that the majority of multicultural adolescents remain at an intermediate level of career preparation, suggesting that second-year middle school multicultural students are in a transitional phase where career exploration and preparation are ongoing. Conversely, the relatively low proportion of the high-level group indicates that only a limited number of students have reached a state of sufficient career preparation, implying the need for systematic career education and support.

[Insert Figure 1 and Table 1 and 2 about here]

Second, the results of a multinomial logistic regression analysis conducted to verify the factors predicting the classification of latent profiles of career preparation are as follows. First, regarding individual factors, it was found that the higher a student's self-esteem and life satisfaction, the significantly higher the probability of belonging to the group with high career preparation competencies. This implies that the more positively an individual perceives their own values and abilities and the greater their overall satisfaction with life, the more actively they engage in career exploration and preparation.

The results showed that the higher the level of perceived parental support, the more significantly the likelihood of belonging to the group with high career readiness increased. This implies that adolescents' career readiness improves as parents maintain a consistent interest in their children's career paths and academic performance and provide emotional

and practical support. Therefore, families need to actively participate in their children's career exploration process and provide continuous encouragement and support.

Furthermore, both perceived peer support and teacher support emerged as factors that significantly increase the probability of belonging to the group with high career readiness competencies. This demonstrates that positive interactions with peers serve as a crucial social resource in the development of career readiness competencies. It is interpreted that perceived teacher support contributes to raising the level of career preparation by providing students with direction and information during the learning and career guidance process. In other words, these results reaffirm that social networks within the school play a crucial role in adolescents' career development.

Furthermore, the results showed that the higher the level of bicultural acceptance attitude, the greater the probability of belonging to the high-level group. This suggests that the more multicultural adolescents positively embrace their cultural identity, the more their career preparation and adaptability improve, implying the importance of differentiated educational interventions that incorporate the cultural context of multicultural adolescents.

In summary, differences in career preparation among multicultural adolescents were explained by factors across individual, parental, peer, teacher, and multicultural domains. These findings highlight the need for integrated career education policies grounded in an ecological systems perspective and responsive to cultural diversity, particularly in the context of the growing global population of multicultural adolescents.

[Insert Table 3 about here]

Figure 1
Career preparation Competencies Profiles

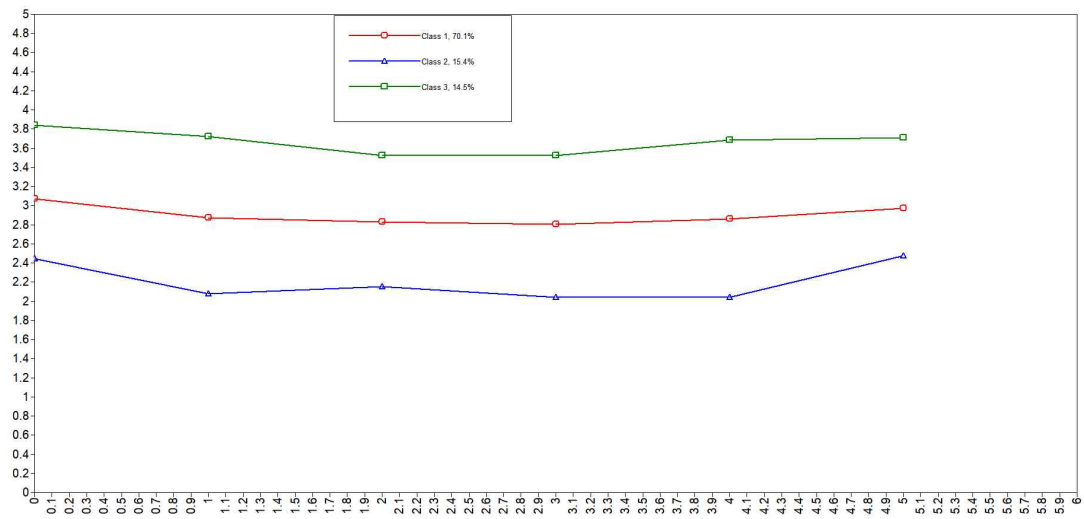


Table 1

Fit of Statistics of Latent Profile Analysis Models

Category		Number of profiles		
		2	3	4
Information criteria	AIC	18518.612	17075.099	16532.744
	BIC	18623.466	17218.583	16714.858
	SABIC	18563.104	17135.982	16610.018
Quality of classification	Entropy	0.809	0.871	0.849
LMRT	p-value	<.001	<.001	<.001
BLRT	p-value	<.001	<.001	<.001
Class	Class1(%)	1416(76.9%)	269(14.6%)	37(2.0%)
	Class2(%)	426(23.1%)	1312(71.2%)	1125(61.1%)
	Class3(%)		261(14.2%)	219(11.9%)
	Class4(%)			461(25.0%)

Note. AIC = Akaike information criterion; BIC = Bayesian information criterion; SABIC = sample-adjusted BIC; LMRT = Lo-Mendell-Rubin adjusted likelihood ratio test, BLRT = Bootstrapped Likelihood Ratio Test. The final profile solution is shown in bold.

Table 2

Mean Differences in Career preparation across Profiles(ANOVA Results)

Career preparation	Class 1 (n ₁ =269)	Class 2 (n ₂ =1312)	Class 3 (n ₃ =261)	F	Post-hoc test
	M(SD)	M(SD)	M(SD)		
Optimism	2.41(0.57)	3.07(0.37)	3.85(0.32)	858.685***	1<2<3
Perseverance	2.04(0.55)	2.88(0.44)	3.73(0.44)	858.685***	1<2<3
Curiosity	2.13(0.58)	2.82(0.51)	3.54(0.54)	480.672***	1<2<3
Adaptability	2.01(0.53)	2.80(0.48)	3.53(0.54)	611.798***	1<2<3
Challenge orientation	2.01(0.57)	2.86(0.46)	3.71(0.44)	848.943***	1<2<3
Communication skills	2.45(0.57)	2.97(0.41)	3.73(0.55)	603.508***	1<2<3

Note. Post-hoc tests using the Games-Howell procedure indicated significant mean differences, shown as inequalities (e.g., 1<2<3) where adjacent groups differ at p<.05.

***p<.001.

Table 3

Multinomial Logistic Regression Predicting Career preparation's Latent Profile Membership (R3STEP Method)

	Ref = Class 1						Ref = Class 2		
	Class 2 vs 1			Class 1 vs 3			Class 2 vs 3		
	Logit	se	odds	Logit	se	odds	Logit	se	odds
Bicultural acceptance attitude	-1.128	.274	.324	1.013	.321	2.753	2.141	.422	8.507
Self-esteem	-1.105	.281	.331	1.275	.296	3.578	2.380	.403	10.809
Life satisfaction	-.269	.227	.764	.553	.269	1.739	.822	.344	2.276
Perceived parental support	-.359	.235	.698	.582	.243	1.790	.941	.334	2.563
Perceived peer support	-.676	.160	.509	.551	.216	1.735	1.227	.264	3.410
Perceived teacher support	-.003	.139	.997	.730	.239	2.075	.733	.270	2.082

Note. SE = Standard error; OR = Odds ratio. Coefficients significant at $p < .05$ are shown in bold.