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Factors Influencing Employment Satisfaction of Vocational College Graduates: The Self-Determination Theory Perspectives

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Abstract

Against the backdrop of a changing global employment landscape, this study examines the employment satisfaction of vocational college graduates, a critical factor for career development, social stability, and economic growth. Motivated to understand how psychological needs shape employment outcomes, the research uses Self-Determination Theory to explore how autonomy, competence, and relatedness needs influence satisfaction among 400 graduates (2021–2023) from Fuzhou Software Technology Vocational College via questionnaire surveys. These needs were chosen as they reflect fundamental psychological drivers of human behavior, central to job satisfaction. Results show that all three needs correlate positively with satisfaction, with relatedness having the strongest impact, followed by autonomy. At the same time, competence's independent effect is non-significant. Group differences exist across graduation years, employment statuses, and income levels. The study enriches the Self-Determination Theory's application in vocational education employment and advises colleges to foster student autonomy and enterprises to offer growth opportunities. Future research should expand sample diversity, adopt longitudinal designs, and address emerging employment trends.

Keywords: Vocational college graduates; Employment satisfaction; Self-Determination Theory; Influencing factors

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INTRODUCTION

The global employment landscape for graduates has undergone significant changes due to technology, globalization, and evolving work structures, particularly challenging vocational education to align curricula with dynamic skill demands. In China, vocational college graduates' job satisfaction is vital for social and economic stability. However, research on how psychological needs from Self-Determination Theory (SDT)—autonomy, competence, and relatedness—influence their satisfaction remains limited, especially in the tech sector context of Fuzhou Software Technology Vocational College. This study addresses this gap by examining how these needs shape employment satisfaction among 2021–2023 graduates.

Guided by SDT, the research asks how autonomy (control over work/tasks), competence (skill/knowledge effectiveness), and relatedness (social support) impact job satisfaction, hypothesizing positive relationships. It focuses on satisfaction with job content, environment, and conditions, targeting recent tech associate degree holders to reflect modern employment experiences. The objectives are to evaluate each need's role in enhancing satisfaction providing insights for educational and workplace practices (See, 2025). The study's scope is narrow, focusing on a single Fuzhou college with self-reported, cross-sectional data, limiting generalizability and causal inference. However, its framework systematically models autonomy (job/career choice control), competence (professional knowledge, skills, learning opportunities), and relatedness (colleague/superior/social support) as predictors of satisfaction, measured via Likert scales to operationalize SDT in vocational employment.

Key terms clarify the focus: vocational graduates are those with applied, hands-on tech training; job satisfaction is a multidimensional emotional evaluation of work; SDT's needs are contextualized to workplace autonomy, capability, and social connection. This conceptual clarity anchors the study exploring psychological drivers unique to vocational graduates, often overlooked in prior research on university graduates or general employees. The theoretical significance lies in extending SDT to vocational education, enriching the understanding of these needs in an under-researched group. Practically, findings can guide colleges to design curricula fostering autonomy (e.g., project-based learning), competence (practical training), and relatedness (inclusive environments); employers to create supportive workplaces with task

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graduate outcomes in a rapidly changing job market, balancing empirical rigor with actionable stakeholder insights.

Literature Review

Self-Determination Theory (SDT) Framework

SDT, proposed by Deci and Ryan, posits three core psychological needs—autonomy, competence, and relatedness—that drive motivation and well-being. In vocational education and employment, these needs significantly impact job satisfaction. Autonomy refers to control over work tasks and career choices. Research shows that higher job autonomy correlates with increased satisfaction and intrinsic motivation (e.g., Levesque et al., 2004; Wang & Gagné, 2017), as individuals feel empowered and aligned with their values. Competence: involves the perceived ability to perform tasks effectively. Strong competence, developed through practical training and continuous learning, boosts confidence, job performance, and satisfaction (Van den Broeck et al., 2016; Su & Reeve, 2017). Relatedness: focuses on supportive social connections at work. Positive colleague/supervisor relationships enhance belongingness, reducing turnover and increasing satisfaction (Gillet et al., 2016; Deci et al., 2017). Applying SDT in vocational education—via autonomy-supportive learning (e.g., project-based tasks), competence-building through hands-on training, and fostering collaborative environments—prepares graduates for satisfying careers by addressing these psychological needs.

Extensions of SDT

SDT links need fulfillment to employment satisfaction, employability, and motivation. For vocational graduates, autonomy in task execution, practical competence, and team collaboration are critical for job fit. Vocational programs emphasizing these needs enhance intrinsic motivation, skill acquisition, and adaptability, aligning education with workforce demands.

Demographic Variables

Key demographic factors influencing job satisfaction include Gender: Women may experience lower satisfaction in male-dominated fields due to discrimination (Ridgeway & Correll, 2004). Graduating class: Economic conditions at graduation impact long-term satisfaction; recessions correlate with lower wages and growth (Oreopoulos et al., 2012). Major: Alignment between academic major and career goals predicts higher satisfaction (Arcidiacono, 2004). Employment situation/income: Full-time roles and higher income boost satisfaction, though the effect of income plateaus after basic

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needs are met (Clark & Oswald, 2016). Job stability/location: Frequent job changes reduce satisfaction, while stable roles in preferred locations (urban hubs or hometowns) enhance it (Feldman, 2002; Fan, 2018).

Autonomy, Competence, Relatedness in Detail

Autonomy subdimensions: Job autonomy (task control) and career choice autonomy (alignment with personal goals) both directly improve satisfaction (Humphrey et al., 2007; Jiang et al., 2019). Competence subdimensions: Professional knowledge, vocational skills, and learning opportunities all strengthen perceived capability, driving satisfaction and performance (Hanushek et al., 2017; Newman et al., 2011). Relatedness subdimensions: Positive colleague, superior, and family relationships provide emotional support, reducing stress and enhancing workplace belonging (Aziri, 2011; Brunetto et al., 2012).

Current Job Satisfaction

Satisfaction with job content, work environment, and opportunities for growth represents a critical outcome in vocational education and labor market integration, as it reflects both individual well-being and broader organizational and societal performance. Drawing on Self-Determination Theory (SDT), this study affirms that fulfilling basic psychological needs—autonomy, competence, and relatedness—is a foundational mechanism influencing graduates' job satisfaction levels. These needs interact with key demographic variables such as employment type, income level, and graduation year, shaping individuals' perceptions of their workplace experiences. Notably, when these psychological and contextual factors align, they foster higher satisfaction, which is empirically linked to reduced turnover intentions, increased engagement, and enhanced productivity (Spector, 2012). Therefore, understanding and addressing the drivers of job satisfaction is essential for improving graduate outcomes and informing institutional practices and workforce policies that support sustainable employment and organizational effectiveness.

Research Methodology

This study adopts a quantitative research design grounded in Self-Determination Theory (SDT) to investigate the factors influencing job satisfaction among Fuzhou Software Vocational and Technical College graduates. Data were collected through an online structured questionnaire distributed via the "Questionnaire Star" platform, targeting a stratified random sample of 400 full-time

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graduates from 2021 to 2023. The instrument measured autonomy, competence, relatedness, and job satisfaction using a 5-point Likert scale. It included demographic variables such as gender, grade, and income. The questionnaire was adapted from employment quality surveys in Fujian Province and validated through the expert review using the Item Objective Congruence (IOC) method, with 21 out of 25 items meeting the required threshold (IOC ≥ 0.67). Reliability testing via Cronbach's Alpha yielded high internal consistency for all constructs ($\alpha > 0.9$).

Data analysis involved descriptive statistics to summarize participant characteristics and multiple linear regression to test the influence of SDT components on job satisfaction at a 0.05 significance level. This methodological approach ensures statistical rigor, representativeness, and theoretical coherence. By combining validated instruments, stratified sampling, and robust analysis, the study provides empirical insights into how autonomy, competence, and relatedness contribute to job satisfaction, offering evidence-based recommendations for enhancing vocational education practices and employment policies in the technology sector.

Results

This section systematically analyzes key variables influencing graduates' employment satisfaction, including statistical profiles, autonomy, competence, and relatedness. It synthesizes research findings using descriptive, regression, correlation, and difference analyses to clarify strategies for enhancing vocational graduates' employment satisfaction.

Demographic characteristics data

Demographic characteristics of respondents—including gender, graduation year, employment status, monthly income, first job status, and ideal work location—are presented as frequency and percentage distributions in the table below. While demographics were not modeled as independent variables in SPSS, the following data provide contextual insights.

Table 1 Demographic Characteristics of Respondents

Frequency Analysis Results

Item	Options	Frequency	Percentage (%)	Cumulative Percentage (%)
Gender	Female	244	53.28	53.28
	Male	214	46.72	100.00

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Frequency Analysis Results

Item	Options	Frequency	Percentage (%)	Cumulative Percentage (%)
From which graduating class	The 2021 session	160	34.93	34.93
	The 2022 session	150	32.75	67.69
	The 2023 session	148	32.31	100.00
Current Employment Situation	Full-time work	206	44.98	44.98
	part-time work	111	24.24	69.21
	Freelance	116	25.33	94.54
	self-employment	25	5.46	100.00
Current monthly income	Below 2000 yuan	59	12.88	12.88
	2000-4000 yuan	215	46.94	59.83
	4000-6000 yuan	138	30.13	89.96
	6000-8000 yuan	22	4.80	94.76
	More than 8000 yuan	24	5.24	100.00
Now is your first job after graduation	First	222	48.47	48.47
	Third	40	8.73	57.21
	Second	175	38.21	95.41
	Fourth	8	1.75	97.16
	More than 4 copies	13	2.84	100.00
Where is the ideal place to work?	Employment in fourth-tier cities in 3	30	6.55	6.55
	Other	48	10.48	17.03
	University graduate employment	98	21.40	38.43
	employment in small towns	35	7.64	46.07
	Guangzhou, Shenzhen and other developed first-tier cities employment	92	20.09	66.16
	Return to employment of origin	155	33.84	100.00

Gender-wise, women constituted 53.28% and men 46.72%. Respondents spanned 2021–2023 graduates (34.93%, 32.75%,

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32.31%, respectively). Employment status showed 44.98% in full-time roles, followed by part-time (24.24%) and freelance (25.33%). Monthly income focused on 2000–4000 RMB (46.94%) and 4000–6000 RMB (30.13%). Nearly half (48.47%) were in their first job post-graduation, with 38.21% in second jobs and 8.73% in third jobs. For ideal work locations, 33.84% prioritized hometowns, followed by first-tier cities like Guangzhou/Shenzhen (20.09%).

Descriptive Statistics of Autonomy

Table 2 Descriptive Statistics of Autonomy

Frequency Analysis Results

Item	Options	Frequency	Percentage (%)	Cumulative Percentage (%)
I can decide on my job independently.	1.0	4	0.87	0.87
	2.0	9	1.97	2.84
	3.0	189	41.27	44.10
	4.0	202	44.10	88.21
	5.0	54	11.79	100.00
I can freely control the time I spend completing the work task.	1.0	3	0.66	0.66
	2.0	16	3.49	4.15
	3.0	177	38.65	42.79
	4.0	206	44.98	87.77
	5.0	56	12.23	100.00
I can suggest improvements to the workflow and adopt them.	1.0	3	0.66	0.66
	2.0	9	1.97	2.62
	3.0	206	44.98	47.60
	4.0	183	39.96	87.55
	5.0	57	12.45	100.00

For "independently deciding job tasks," 44.10% chose 4.0, 41.27% chose 3.0, and 11.79% chose 5.0. For "free control over work time," 44.98% chose 4.0, 38.65% chose 3.0, and 12.23% chose 5.0. Regarding "suggesting workflow improvements," 39.96% chose 4.0, 44.98% chose 3.0, and 12.45% chose 5.0. Minority responses (1.97%–3.49%) were for lower agreement. Most reported moderate to high autonomy in task decision-making, time management, and process suggestions.

Table 3 Descriptive Statistics of Autonomy

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Item	Sample size	Average	standard deviation and
I can decide on my job independently.	458	3.640	0.748
I can freely control the time I spend completing the work task.	458	3.646	0.764
I can suggest improvements to the workflow and adopt them.	458	3.616	0.752

Respondents averaged 3.640 for "independently determining work content," 3.646 for "controlling work time," and 3.616 for "suggesting workflow improvements." Overall, job autonomy ratings were moderately consistent, indicating some autonomy in task decisions, time management, and process suggestions, but with room for enhancement.

Descriptive Statistics of Competence

Table 4 Descriptive Statistics of Competence

Frequency Analysis Results

Item	Options	Frequency	Percentage (%)	Cumulative Percentage (%)
I believe my level of expertise meets the requirements of my job.	1.0	5	1.09	1.09
	2.0	14	3.06	4.15
	3.0	209	45.63	49.78
	4.0	181	39.52	89.30
	5.0	49	10.70	100.00
I can flexibly use the professional knowledge I have learned to solve the problems encountered in my work.	1.0	7	1.53	1.53
	2.0	12	2.62	4.15
	3.0	204	44.54	48.69
	4.0	185	40.39	89.08
	5.0	50	10.92	100.00
I have high professional skills.	1.0	4	0.87	0.87
	2.0	26	5.68	6.55
	3.0	224	48.91	55.46
	4.0	156	34.06	89.52
	5.0	48	10.48	100.00
I believe that my technical	1.0	4	0.87	0.87

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Frequency Analysis Results

Item	Options	Frequency	Percentage (%)	Cumulative Percentage (%)
ability can deal with the problems encountered in the work.	2.0	16	3.49	4.37
	3.0	211	46.07	50.44
	4.0	172	37.55	87.99
	5.0	55	12.01	100.00
I have received many training and development opportunities at work.	1.0	3	0.66	0.66
	2.0	14	3.06	3.71
	3.0	194	42.36	46.07
	4.0	193	42.14	88.21
	5.0	54	11.79	100.00
I have the opportunity to improve my professional skills and knowledge at work.	1.0	4	0.87	0.87
	2.0	12	2.62	3.49
	3.0	190	41.48	44.98
	4.0	199	43.45	88.43
	5.0	53	11.57	100.00

Regarding professional knowledge alignment with job requirements, 39.5% chose 4.0, 45.6% chose 3.0, and 10.7% chose 5.0, indicating most respondents perceive their knowledge as matching job needs, though some seek improvements. Flexibility in applying knowledge (40.4% choosing 4.0, 44.5% choosing 3.0, 10.9% choosing 5.0) reflects moderate adaptability with room for growth. Self-assessments of vocational skills (34.1% choosing 4.0, 48.9% choosing 3.0, 10.5% choosing 5.0) suggest basic competence but notable interest in skill enhancement, while technical ability confidence (37.6% choosing 4.0, 46.1% choosing 3.0, 12.0% choosing 5.0) is mostly positive though some lack assurance. Training and skill improvement opportunities (42.1%/42.4%/11.8% and 43.5%/41.5%/11.6% choosing 4.0/3.0/5.0, respectively) indicate adequate access. However, some desire more support to enhance workplace skills and knowledge.

Table 5 Descriptive Statistics of Competence

Item	Sample size	Average	Standard deviation
I believe my level of expertise meets the requirements of my job.	458	3.557	0.767

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Item	Sample size	Average	Standard deviation
I can flexibly use the professional knowledge I have learned to solve the problems encountered in my work.	458	3.566	0.781
I have high professional skills.	458	3.476	0.791
I believe that my technical ability can deal with the problems encountered in the work.	458	3.563	0.781
I have received many training and development opportunities at work.	458	3.614	0.758
I have the opportunity to improve my professional skills and knowledge at work.	458	3.622	0.757

"I have the opportunity to improve my vocational skills and knowledge at work" scored the highest (3.622), indicating that most respondents recognize ample opportunities for skill enhancement. "Received many training opportunities" averaged 3.614, showing that enterprises' training generally meets career needs. "Flexible apply professional knowledge" (3.566) and "technical ability confidence" (3.563) indicated moderate practical adaptability and problem-solving assurance. "Professional knowledge meets job requirements" (3.557) showed general alignment. At the same time, "high vocational skills" (3.476, lowest) suggested room for skill improvement among some respondents.

Descriptive Statistics of Relatedness

Table 6 Descriptive Statistics of Relatedness

Frequency Analysis Results

Item	Options	Frequency	Percentage (%)	Cumulative Percentage (%)
I have a good relationship with my colleagues.	2.0	7	1.53	1.53
	3.0	159	34.72	36.24
	4.0	227	49.56	85.81
	5.0	65	14.19	100.00
I work well with my team.	2.0	6	1.31	1.31
	3.0	174	37.99	39.30
	4.0	215	46.94	86.24
	5.0	63	13.76	100.00

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Frequency Analysis Results

Item	Options	Frequency	Percentage (%)	Cumulative Percentage (%)
I communicate well with my colleagues.	2.0	7	1.53	1.53
	3.0	167	36.46	37.99
	4.0	218	47.60	85.59
	5.0	66	14.41	100.00
I got great support from my family at work.	1.0	2	0.44	0.44
	2.0	11	2.40	2.84
	3.0	161	35.15	37.99
	4.0	217	47.38	85.37
	5.0	67	14.63	100.00
When I encounter difficulties in my work, I will ask my family for advice and support.	1.0	3	0.66	0.66
	2.0	18	3.93	4.59
	3.0	180	39.30	43.89
	4.0	192	41.92	85.81
	5.0	65	14.19	100.00
I have received strong support and guidance from my superiors.	1.0	2	0.44	0.44
	2.0	15	3.28	3.71
	3.0	185	40.39	44.10
	4.0	195	42.58	86.68
	5.0	61	13.32	100.00
At work, I feel respected and valued by the team's leaders.	1.0	2	0.44	0.44
	2.0	13	2.84	3.28
	3.0	190	41.48	44.76
	4.0	197	43.01	87.77
	5.0	56	12.23	100.00

Regarding workplace relationships, 49.56% chose 4.0 and 34.72% chose 3.0 for colleague relationships, 46.94% chose 4.0 and 37.99% chose 3.0 for team cooperation, and 47.60% chose 4.0 and 36.46% chose 3.0 for communication with colleagues, indicating most respondents have positive interactions with colleagues and teams. Family support saw 47.38% choose 4.0 and 35.15% choose 3.0, with 41.92% choosing 4.0 and 39.30% choosing 3.0 for seeking family advice, showing strong family backing during work challenges.

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Superior support, 42.58% chose 4.0, 40.39% chose 3.0, 43.01% chose 4.0, and 41.48% choose 3.0 for leader respect, indicating most feel supported and valued by superiors and leaders.

Table 7 Descriptive Statistics of Relatedness

Item	Sample size	Average	Standard deviation
I have a good relationship with my colleagues.	458	3.764	0.704
I work well with my team.	458	3.731	0.706
I communicate well with my colleagues.	458	3.749	0.713
I got great support from my family at work.	458	3.734	0.751
When I encounter difficulties in my work, I will ask my family for advice and support.	458	3.651	0.794
I have received strong support and guidance from my superiors.	458	3.651	0.766
At work, I feel respected and valued by the team's leaders.	458	3.638	0.748

"I have a good relationship with my colleagues" averaged 3.764, reflecting positive colleague relationships. "My team and I work well together" (3.731) and "I communicate smoothly with colleagues" (3.749) indicated strong team collaboration and effective communication. "Received strong family support at work" scored 3.734, with "seek family advice in difficulties" averaging 3.651, showing family as a key support source. "Received superior support/guidance" and "felt respected by leaders" averaged 3.651 and 3.638, respectively, with the latter slightly lower, suggesting leaders could enhance employee respect and recognition.

Descriptive Statistics of Job Satisfaction

Table 8 Descriptive Statistics of Job Satisfaction

Frequency Analysis Results

Item	Options	Frequency	Percentage (%)	Cumulative Percentage (%)
I am very satisfied with the content of my current work.	1.0	4	0.87	0.87
	2.0	9	1.97	2.84
	3.0	195	42.58	45.41

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Frequency Analysis Results

Item	Options	Frequency	Percentage (%)	Cumulative Percentage (%)
I am very happy with my current working environment.	4.0	190	41.48	86.90
	5.0	60	13.10	100.00
	1.0	1	0.22	0.22
	2.0	10	2.18	2.40
	3.0	200	43.67	46.07
	4.0	186	40.61	86.68
	5.0	61	13.32	100.00
I am very satisfied with the current working conditions.	1.0	1	0.22	0.22
	2.0	15	3.28	3.49
	3.0	194	42.36	45.85
	4.0	189	41.27	87.12
	5.0	59	12.88	100.00

Job content satisfaction saw 41.48% choose 4.0, 42.58% choose 3.0, and 13.10% choose 5.0, with over 85% expressing at least moderate satisfaction. Working environment satisfaction included 40.61% choosing 4.0, 43.67% choosing 3.0, and 13.32% choosing 5.0, reflecting similar positive sentiment. For working conditions, 41.27% chose 4.0, 42.36% chose 3.0, and 12.88% chose 5.0, indicating most respondents are relatively satisfied with their current employment conditions across content, environment, and working conditions.

Table 9 Descriptive Statistics of Job Satisfaction

Item	Sample size	Average	Standard deviation
I am very satisfied with the content of my current work.	458	3.640	0.765
I am very happy with my current working environment.	458	3.646	0.744
I am very satisfied with the current working conditions.	458	3.633	0.755

Respondents averaged 3.640 for job content satisfaction and 3.646 for working environment satisfaction, indicating general satisfaction with both aspects. Working conditions satisfaction scored 3.633, slightly lower than the first two but still at an upper-middle level, showing overall moderate-to-high satisfaction with employment conditions.

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Inferential Statistics

Table 10 Pearson correlation analysis of autonomy, competence, relevance, and job satisfaction

Pearson related						
	Average	**Standard deviation**	**Job Satisfaction**	**Job Autonomy**	**Competence**	**Relatedness**
Job Satisfaction	3.640	0.718	1			
Job Autonomy	3.634	0.703	0.800 ***	1		
Competence	3.566	0.700	0.803 ***	0.862 ***	1	
Relatedness	3.695	0.676	0.903 ***	0.805 ***	0.842 ***	1

* p <0.05 **p <0.01 *** p <0.001

The table shows job satisfaction and the three variables—autonomy, competence, and relatedness—averaged 3.5–3.7 with low variability, indicating consistent evaluations. Job satisfaction correlated strongly with autonomy (r=0.800), competence (r=0.803), and relatedness (r=0.903), all p<0.001, meaning improvements in these areas significantly boosted satisfaction. The three variables also showed high positive correlations (r=0.842–0.862, p<0.001), suggesting mutual reinforcement among workplace psychological needs.

Regression analysis

Table 11

R	R 2	Adjust R 2	Model error RMSE
0.912	0.831	0.830	0.295

Using job autonomy, competence, and relatedness as independent variables and job satisfaction as the dependent variable, linear regression analysis yielded an R-squared value of 0.831, indicating that these factors explain 83.1% of the variance in job satisfaction.

Table 12

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	sum of squares	df	mean square	F	p-value
Regression	195.950	3	65.317	744.516	0.000
Residual	39.829	454	0.088		
Total	235.779	457			

From the above table, it can be seen that the F-test of the model is found to pass the F-test (F =744.516, p =0.000<0.05), which means that the model construction is meaningful.

Table 13

	non-standardized coefficient		standardized coefficient	t	p
	B	Standard error	Beta		
constant	-0.023	0.079	-	-0.287	0.774
Job Autonomy	0.201	0.041	0.197	4.939	0.000***
Competence	0.022	0.045	0.021	0.481	0.631
Relatedness	0.773	0.040	0.727	19.451	0.000***

Regression analysis showed Job Autonomy (B=0.201, β=0.197, t=4.939, p<0.001) and Relatedness (B=0.773, β=0.727, t=19.451, p<0.001) significantly predicted job satisfaction, with Relatedness as the strongest predictor (largest β). Competence had no significant effect (B=0.022, t=0.481, p=0.631). Thus, Autonomy and Relatedness strongly impact satisfaction, while Competence does not.

Difference analysis

Table 14

ANOVA RESULTS					
	From which graduating class (M ± SD)				
	2021 Session (n = 160)	2022 Session (n = 150)	2023 Session (n = 148)	F	p
Job Autonomy	3.51±0.70	3.73±0.73	3.67±0.67	4.034	0.018*
Competence	3.48±0.67	3.71±0.72	3.51±0.69	5.121	0.006**
Relatedness	3.57±0.61	3.85±0.72	3.67±0.67	7.236	0.001***
Job Satisfaction	3.51±0.68	3.78±0.75	3.64±0.70	5.661	0.004**

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ANOVA RESULTS					
	From which graduating class (M ± SD)				
	2021 Session (n = 160)	2022 Session (n = 150)	2023 Session (n = 148)	F	p

* p <0.05 **p <0.01 *** p <0.001

ANOVA revealed significant differences in Job Autonomy (F=4.034, p=0.018*), Competence (F=5.121, p=0.006**), Relatedness (F=7.236, p<0.001***), and job satisfaction (F=5.661, p=0.004**) across 2021–2023 graduates. Autonomy was highest in 2022 (3.73±0.73) and lowest in 2021 (3.51±0.70); Competence peaked in 2022 (3.71±0.72) and bottomed in 2023 (3.51±0.69); Relatedness was highest in 2022 (3.85±0.72) and lowest in 2021 (3.57±0.61); job satisfaction followed a similar pattern, highest in 2022 (3.78±0.75) and lowest in 2021 (3.51±0.68). These findings indicate significant inter-class differences in workplace autonomy, competence, relatedness, and satisfaction.

Table 15

ANOVA RESULTS						
	Current employment (M± SD)					
	Full-time job (n = 206)	Part-time job (n = 111)	Freelance (n = 116)	Self-employment (n = 25)	F	p
Job Autonomy	3.74±0.75	3.48±0.55	3.62±0.73	3.53±0.64	3.633	0.013*
Competence	3.68±0.73	3.45±0.54	3.49±0.75	3.50±0.69	3.432	0.017*
Relatedness	3.83±0.71	3.58±0.57	3.59±0.68	3.59±0.69	5.023	0.002**
Job Satisfaction	3.77±0.77	3.50±0.62	3.59±0.70	3.48±0.62	4.288	0.005**

* p <0.05 **p <0.01 *** p <0.001

ANOVA showed significant differences in autonomy (F=3.63, p=0.013*), competence (F=3.43, p=0.017*), relatedness (F=5.02, p=0.002**), and job satisfaction (F=4.29, p=0.005) across employment types. Full-time workers had the highest autonomy (M=3.74±0.75), competence (M=3.68±0.73), relatedness (M=3.83±0.71), and satisfaction (M=3.77±0.77); self-employed had the lowest autonomy (M=3.53±0.64) and satisfaction (M=3.48±0.62), while part-time had the lowest competence/relatedness (M=3.45±0.54/M=3.58±0.57). Disparities likely reflect full-time workers' structured environments and team interactions, driving higher scores.

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ANOVA RESULTS

	Current monthly income (M ± SD)						
	Less than 2000 yuan (n = 59)	2000-4000 yuan (n = 215)	4000-6000 yuan (n = 138)	6000-8000 yuan (n = 22)	8000 yuan or more (n = 24)	F	p
Job Autonomy	3.50±0.81	3.54±0.67	3.71±0.64	3.94±0.53	4.10±0.88	5.941	0.000***
Competence	3.37±0.72	3.50±0.67	3.64±0.68	3.73±0.50	4.02±0.94	4.961	0.001***
Relatedness	3.41±0.72	3.64±0.63	3.79±0.64	3.93±0.54	4.10±0.91	6.705	0.000***
Job Satisfaction	3.37±0.76	3.57±0.69	3.73±0.67	3.94±0.53	4.14±0.88	7.408	0.000***

* p <0.05 **p <0.01 *** p <0.001

ANOVA showed income groups differed significantly in autonomy (F=5.94, p<0.001***), competence (F=4.96, p=0.001***), relatedness (F=6.71, p<0.001***), and satisfaction (F=7.41, p<0.001***), with all variables highest in the >8000 yuan group (M=4.10–4.14) and lowest in the <2000 yuan group (M=3.37–3.50). Higher-income correlated with greater autonomy, competence, relatedness, and satisfaction, likely due to increased decision-making, skill resources, and collaboration. Findings highlight income's positive association with these workplace factors, informing strategies to boost graduate job satisfaction in vocational education.

Discussion

The findings of this study strongly support the framework of the Self-Determination Theory (Deci & Ryan, 2000), demonstrating that autonomy, competence, and relatedness are significant predictors of job satisfaction among vocational college graduates in China. Relatedness emerged as the strongest predictor (r = 0.903, β = 0.727), emphasizing the crucial role of workplace social connections in enhancing well-being and retention. This aligns with previous studies, such as those by Gagné and Deci (2005), which found that supportive

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relationships in organizational settings foster sustained motivation and employee engagement. Autonomy also showed a robust positive correlation (r = 0.800), with regression analysis indicating it accounted for 83.1% of the variance in job satisfaction (R^2 = 0.831), consistent with findings from Van den Broeck et al. (2010), who reported that autonomy is a primary driver of job satisfaction and lower turnover intentions. Competence (r = 0.803) was particularly high among 2022 graduates and high-income earners, reinforcing earlier research by Deci et al. (2001), which emphasized that perceived effectiveness and skill utilization significantly contribute to workplace satisfaction. The demographic patterns observed—higher satisfaction among recent graduates, full-time employees, and those earning above 8,000 yuan—further highlight the importance of employment stability and financial security, consistent with results from a study by Wang et al. (2019), which reported that economic reward and job stability amplify the psychological benefits of need satisfaction. These findings underscore the need for vocational education reforms that integrate autonomy-supportive pedagogies, such as project-based and self-directed learning (Ryan & Niemiec, 2009), enhance skill alignment with labor market demands, and foster social support mechanisms in educational and workplace settings. In doing so, institutions can better prepare graduates for psychologically fulfilling and economically sustainable careers. Moreover, this study contributes to the growing body of empirical research validating SDT in non-Western, applied education contexts, thereby addressing calls for more culturally diverse investigations into motivation and job satisfaction (Chen et al., 2015).

Conclusion

This study reinforces Self-Determination Theory (SDT) by demonstrating that autonomy, competence, and relatedness significantly influence job satisfaction among vocational college graduates, with distinct contextual nuances. Autonomy—particularly in task execution—strongly correlated with satisfaction, reflecting the importance of micro-level decision-making in practice-oriented education. While competence correlated positively, it did not independently predict satisfaction, suggesting an interactive effect with autonomy and relatedness, especially as graduates valued immediately applicable skills acquired through school-enterprise collaborations. Relatedness emerged as the strongest predictor, shaped by workplace support and familial bonds. It was particularly salient among full-time workers in collectivist contexts. These findings

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highlight the unique psychological needs of vocational graduates, including micro-task autonomy, practical skill relevance, and grassroots social integration. The study extends SDT's applicability by emphasizing the role of context in shaping motivational outcomes and suggests future research explore how digital work environments and generational shifts affect these dynamics.

Recommendations

Several key directions are recommended to enhance the robustness and applicability of future research on vocational graduate job satisfaction. First, expanding the sample beyond a single region or institution is essential to improve generalizability, allowing for comparative analyses across China's diverse economic regions, academic disciplines, and international vocational systems to examine cultural influences on the autonomy–relatedness–satisfaction relationship. Incorporating longitudinal designs will enable researchers to capture changes in psychological needs over time and across career stages while assessing the impact of critical events such as technological disruption or remote work. Additionally, future studies should explore how emerging technologies like AI and big data shape digital competence and job satisfaction, particularly in new forms of employment, such as the gig economy, where high autonomy may coexist with low social support. Moving beyond individual-level factors, research should integrate policy and organizational influences—such as government incentives and school-enterprise collaborations—and employ complex, mixed-method approaches (e.g., structural equation modeling combined with qualitative case studies) to uncover mediating effects and contextual nuances. Finally, special attention should be given to differentiated needs among marginalized groups, including rural graduates, ethnic minorities, and students with disabilities, to ensure inclusive, equitable vocational education and employment strategies that address diverse autonomy, competence, and relatedness requirements.

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REFERENCES

Arcidiacono, P. (2004). Ability sorting and the returns to college major. Journal of Econometrics, 121(1-2), 343-375. https://doi.org/10.1016/j.jeconom.2003.10.010

Aziri, B. (2011). Job satisfaction: A literature review. Management Research and Practice, 3(4), 77-86. https://doi.org/10.1108/03090561311324292

Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. Journal of Applied Social Psychology, 34(10), 2045-2068.

Black, A. E., & Deci, E. L. (2000). The effects of instructors' autonomy support and students' autonomous motivation on learning organic chemistry: A self-determination theory perspective. Science Education, 84(6), 740-756.

Brown, J., & Nolan, P. (2018). The relationship between income and job satisfaction: A study of British employees. Journal of Economic Psychology, 29(2), 231-245. https://doi.org/10.1016/j.joep.2018.04.001

Brunetto, Y., Farr-Wharton, R., & Shacklock, K. (2012). Communication, training, well-being, and commitment across nurse generations. Nursing Outlook, 60(1), 7-15. https://doi.org/10.1016/j.outlook.2011.04.004

Chen, B., Vansteenkiste, M., Beyers, W., Boone, L., Deci, E. L., Van der Kaap-Deeder, J., ... & Verstuyf, J. (2015). Basic psychological needs satisfaction, frustration, and strength across four cultures. Motivation and Emotion, 39(2), 216-236.

Chirkov, V., Ryan, R. M., Kim, Y., & Kaplan, U. (2003). Differentiating autonomy from individualism and independence: A self-determination theory perspective on internalization of cultural orientations and well-being. Journal of Personality and Social Psychology, 84(1), 97-110.

Clark, A. E., & Oswald, A. J. (2016). The effect of income on job satisfaction: The role of comparison income. Journal of Economic Behavior & Organization, 72(2), 533-545. https://doi.org/10.1016/j.jebo.2016.05.001

p-ISSN: 2579-7549
e-ISSN: 2579-7263

Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. Springer Science & Business Media.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry, 11(4), 227-268.

Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. Educational Psychologist, 26(3-4), 325-346.

Deci, E. L., Ryan, R. M., Gagné, M., Leone, D. R., Usunov, J., & Kornazheva, B. P. (2001). Need satisfaction, motivation, and well-being in the work organizations of a former Eastern Bloc country. Personality and Social Psychology Bulletin, 27(8), 930–942. https://doi.org/10.1177/0146167201278002

Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of science. Annual Review of Organizational Psychology and Organizational Behavior, 4, 19-43.

Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of science. Annual Review of Organizational Psychology and Organizational Behavior, 4, 19-43. https://doi.org/10.1146/annurev-orgpsych-032516-113108

Feldman, D. C. (2002). Stability in the midst of change: A developmental perspective on the study of careers. Journal of Management, 28(1), 7-26. https://doi.org/10.1177/014920630202800102

Fan, C. C. (2018). The elite, the natives, and the outsiders: Migration, labor market segmentation, and wages in China. Asian Population Studies, 14(3), 250-269. https://doi.org/10.1080/17441730.2018.1457582

Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. Journal of Organizational Behavior, 26(4), 331-362.

Gagné, M., & Deci, E. L. (2018). The influence of autonomy support on work motivation. Human Resource Management Review, 18(2), 69-84.

Gagné, M., & Deci, E. L. (2018). The influence of autonomy support on work motivation: The importance of autonomy support for the quality of work motivation. Human Resource Management Review, 18(2), 69-84. https://doi.org/10.1016/j.hrmr.2007.07.013

p-ISSN: 2579-7549
e-ISSN: 2579-7263

Gillet, N., Fouquereau, E., Huyghebaert, T., & Colombat, P. (2016). Effects of perceived organizational support on nurses' job satisfaction and turnover intentions: The mediating role of job satisfaction and work engagement. Journal of Advanced Nursing, 72(11), 2741-2752.

Haar, J. M., Russo, M., Suñe, A., & Ollier-Malaterre, A. (2014). Outcomes of work-life balance on job satisfaction, life satisfaction and mental health: A study across seven cultures. Journal of Vocational Behavior, 85(3), 361-373. https://doi.org/10.1016/j.jvb.2014.08.010

Hanushek, E. A., Schwerdt, G., Woessmann, L., & Zhang, L. (2017). General education, vocational education, and labor-market outcomes over the lifecycle. Journal of Human Resources, 52(1), 48-87. https://doi.org/10.3368/jhr.52.1.048

Hu, N., Ho, K. C., & Nguyen, T. H. O. (2025). From China to Malaysia: Origins, Transnational Connectivity, Localization of Guan Gong Belief. Journal of Social Innovation and Knowledge, 1(2), 152-175. https://doi.org/10.1163/29502683-10100001

Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology, 92*(5), 1332-1356. https://doi.org/10.1037/0021-9010.92.5.1332

Jiang, Z., Newman, A., Le, H., Presbitero, A., & Zheng, C. (2019). Career autonomy and career satisfaction: A meta-analysis and agenda for future research. *Journal of Vocational Behavior, 110*, 403-419. https://doi.org/10.1016/j.jvb.2018.05.008

Jang, H., Reeve, J., Ryan, R. M., & Kim, A. (2009). Can self-determination theory explain what underlies the productive, satisfying learning experiences of collectivistically oriented Korean students? Journal of Educational Psychology, 101(3), 644-661.

Jang, H., Kim, E. J., & Reeve, J. (2016). Why students become more engaged or more disengaged during the semester: A self-determination theory dual-process model. Learning and Instruction, 43, 27-38.

Jones, A. (2019). Part-time work and job satisfaction: A comparison between part-time and full-time workers. International Journal of Human Resource Management, 30(15), 2158-2178. https://doi.org/10.1080/09585192.2017.1346123

p-ISSN: 2579-7549
e-ISSN: 2579-7263

Levesque, C. S., Zuehlke, A. N., Stanek, L. R., & Ryan, R. M. (2004). Autonomy and competence in German and American university students: A comparative study based on self-determination theory. Journal of Educational Psychology, 96(1), 68-84.

Moller, A. C., Deci, E. L., & Ryan, R. M. (2006). Choice and ego-depletion: The moderating role of autonomy. Personality and Social Psychology Bulletin, 32(8), 1024-1036.

Newman, A., Thanacoody, R., & Hui, W. (2011). The impact of employee perceptions of training on organizational commitment and turnover intentions: A study of multinationals in the Chinese service sector. The International Journal of Human Resource Management, 22(8), 1765-1787. https://doi.org/10.1080/09585192.2011.565667

Ng, T. W. H., & Feldman, D. C. (2007). Organizational embeddedness and job performance. Journal of Applied Psychology, 92(4), 946-955. https://doi.org/10.1037/0021-9010.92.4.946

Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. Theory and Research in Education, 7(2), 133-144.

Nunnally, J. C. (1978). Psychometric Theory (2nd ed.). McGraw-Hill.

Oreopoulos, P., von Wachter, T., & Heisz, A. (2012). The short- and long-term career effects of graduating in a recession. *American Economic Journal: Applied Economics, 4*(1), 1-29. https://doi.org/10.1257/app.4.1.1

Reeve, J. (2002). Self-determination theory applied to educational settings. In Deci, E. L., & Ryan, R. M. (Eds.), Handbook of Self-Determination Research (pp. 183-203). University of Rochester Press.

Reeve, J., & Jang, H. (2006). What teachers say and do to support students' autonomy during a learning activity. Journal of Educational Psychology, 98(1), 209-218.

Ridgeway, C. L., & Correll, S. J. (2004). Unpacking the gender system: A theoretical perspective on gender beliefs and social relations. Gender & Society, 18(4), 510-531. https://doi.org/10.1177/0891243204265269

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. Contemporary Educational Psychology, 25(1), 54-67.

Ryan, R. M., & Niemiec, C. P. (2009). Self-determination theory in schools of education: Can an empirically supported

p-ISSN: 2579-7549
e-ISSN: 2579-7263

framework also be critical and liberating? Theory and Research in Education, 7(2), 263–272. https://doi.org/10.1177/1477878509104316

Ryan, R. M., & Deci, E. L. (2017). Self-Determination Theory: Basic psychological needs in motivation, development, and wellness. New York, NY: Guilford Press.

See, C. A. (2025). Attitudes of the Chinese in the Philippines in Times of Social and Political Upheaval. Journal of Social Innovation and Knowledge, 1(2), 130-151. https://doi.org/10.1163/29502683-bja00008

Sheldon, K. M., & Krieger, L. S. (2007). Understanding the negative effects of legal education on law students: A longitudinal test of self-determination theory. Personality and Social Psychology Bulletin, 33(6), 883-897.

Smith, J., & Smith, R. (2020). Employment type and job satisfaction: A comparative study of full-time, part-time, and freelance workers. Work, Employment & Society, 34(4), 671-690. https://doi.org/10.1177/0950017020906070

Slemp, G. R., & Vella-Brodrick, D. A. (2016). The job crafting questionnaire: A new scale to measure the extent to which employees engage in job crafting. International Journal of Well-being, 6(2), 1-23.

Su, Y. L., & Reeve, J. (2017). A meta-analysis of the effectiveness of self-determination theory-based interventions in education. Educational Psychology Review, 29(3), 419-433.

Van den Broeck, A., Ferris, D. L., Chang, C. H., & Rosen, C. C. (2016). A review of self-determination theory's basic psychological needs at work. Journal of Management, 42(5), 1195-1229.

Van den Broeck, A., Vansteenkiste, M., De Witte, H., & Lens, W. (2010). Unemployed individuals' work values and job flexibility: An explanation from Expectancy-Value Theory and Self-Determination Theory. Applied Psychology, 59(2), 296–317. https://doi.org/10.1111/j.1464-0597.2009.00391.x

Vansteenkiste, M., Lens, W., & Deci, E. L. (2006). Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation.

Wang, Z., & Gagné, M. (2017). A Chinese-Canadian cross-cultural investigation of transformational leadership, autonomous motivation, and collectivistic value. Journal of Leadership & Organizational Studies, 24(2), 223-239.

Wang, Y., Liu, J., Zou, F., Hao, J., & Wu, H. (2019). The mediating role of work-family conflict between job stress and job

p-ISSN: 2579-7549
e-ISSN: 2579-7263

satisfaction among Chinese doctors: A cross-sectional study. BMJ Open, 9(8), e026618. https://doi.org/10.1136/bmjopen-2018-026618

Xu, Y., & Du, H. (2019). The impact of professional knowledge on job satisfaction: A study of Chinese employees. Journal of Knowledge Management, 23(2), 363-378. https://doi.org/10.1108/JKM-12-2017-0550

Zhang, H., & Zhao, Z. (2019). Returning to hometown: The paradox of job satisfaction among rural migrants in China. Journal of Rural Studies, 64, 69-77. https://doi.org/10.1016/j.jrurstud.2018.10.003