

Research on the Empirical Model of the Career Attainment of the Couriers Moderating by Social Support

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Abstract

This paper reviews the career attainment of the couriers by analyzing the career challenges faced by them based on field investigations of several courier service outlets, in-depth interviews and questionnaire survey. The simple random sampling and scientometric methods are employed in the study. The empirical analysis is made to the data of 884 samples. A theoretical model on the career attainment of the couriers is established. The results suggest that the courier identity has significant impact on the career attainment. Theoretically, this paper tests the couriers' adaptation to career attainment management; and in practice, the findings are innovative and feasible, serving as the references for the decision-making of the courier companies, governments and couriers.

Keywords

Career attainment; Career identity; Couriers.

1. Introduction

Existing studies on career attainment draw different conclusions on the interactions among the variables. No systematic theory system has been established. Individual analysis should be made to decide whether existing career attainment models are applicable among specific study objects. This paper studies the regulating role of social support in the couriers' career attainment. The findings enrich the research in this area. From the perspective of social development, career attainment affects the turnover and consequently the corporate operation. Low career attainment has adverse impact on the companies. This study selects several variables on the couriers' career attainment, exploring its generation mechanism and internal logic. Suggestions are offered on how to boost the couriers' career attainment, lower the couriers' turnover and make the courier companies more competitive.

2. Literature Review

2.1. Theories

Career attainment refers to the subjective feelings arising from work based on the spiritual and material fulfillment. It affects career stability. If the employees are slack or discontent with work, then they will become less passionate and efficient at the workplace.

The term stress originates from the Latin word *Stricu*, referring to tensions. In 1964, Kahn pioneered to introduce the concept pressure management to the organizational studies. He discussed the workplace pressure, which refers to the physiological and psychological response to the non-adaptation to work. The non-adaptation could be resulted from the working environment or the mismatch between the position and the employee's competence.

Social support helps alleviate the tension between career pressure and career attainment. There are employees who cannot obtain the sense of belonging even when they have the

required knowledge and skills. This is caused by the lack of support, which undermines the link between individual motives and actions. If proper emotional, action or information support is provided, the employees will experience less pressure or develop stronger identity, thus gaining career attainment. Kim et al. analyzed several behavioral theories, including the rational action theory, planned action theory and social cognition theory, and concluded that social support mediates and regulates the external behavior.

2.2. Express Industry

As the express industry grows, many courier companies stand out and form a three-echelon pattern: on the first echelon are SF Express and EMS, which adopt the direct-selling mode, target at the medium-high clients, and set high unit price; on the second echelon are YTO Express, ZTO Express, STO Express BEST Express and Yunda Express, which adopt the franchise mode, target at the low-medium clients, and set low unit price; and on the third echelon are small and medium sized companies, which offers differentiated services.

In 2019H1, the market shares of ZTO Express, Yunda Express, YTO Express, YTO Express, BEST Express, STO Express, SF Express were 17%, 14%, 13%, 10%, 9% and 8%, respectively.

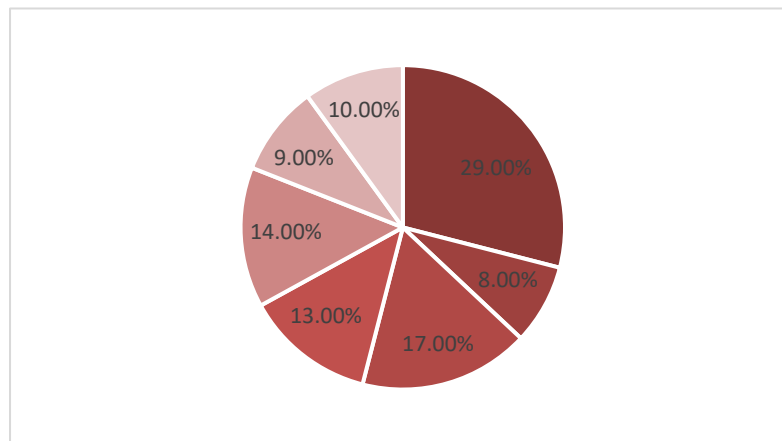


Fig. 1: Market share of courier companies in 2018, China
Source: Qianzhan Industrial Research Institute

As SF Express, STO Express, ZTO Express, BEST Express, YTO Express and Yunda Express rise, China's express industry becomes more concentrated. The CR8 [CR8: industrial concentration rate, referring to the total market share of 8 largest players in the industry.] of China's express market was 77.4% in 2016, 81.1% in late 2017 and 81.5% in late June, 2018.

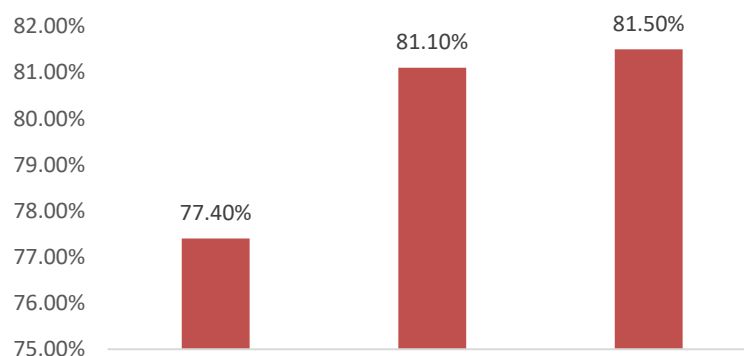


Fig. 2: CR8 data of China's express industry 2016-2018
Source: Qianzhan Industrial Research Institute

2.3. Structure Analysis of Couriers

In the courier companies, there are management roles, customer service roles and business operation roles. Most of the employees play the business operation roles, suggesting that the express industry is labor intensive. The operations of most courier companies are less automatic and require manual work

Also, the well-educated employees account for a small portion of the total. The education backgrounds and proportion of senior technicians in China's express industry are inferior to the average level of other industries nationwide. The courier companies expand fast and are in urgent need of front-line employees. The job requirements are therefore loose. The roles such as couriers and sorters only hold the senior high school degree, some of whom are merely junior high school or primary school graduates.

Before 2016, only 28% of the employees in the express industry held the senior vocational degrees or above, which hinders the long-term growth of the companies. Recently, the courier companies attach importance to employee training and talent attraction. The candidates for all positions are required to hold the college degree or above.

3. Investigation Design and Methods

3.1. Investigation Objects

The study sample covers the new-generation couriers from the state-owned, private and foreign courier companies, ensuring the objectivity and universality of the findings. To make the results representative, the couriers who have worked in the express industry for less a year, one year, three years and five years were sampled.

3.2. Investigation Design

Stage I: Data collection. Learned about the career conditions of the couriers from news articles, online materials and market survey reports and obtained the factors that affect the career attainment of the couriers. Interviewed the couriers and designed questionnaires based on the interviewing results and related literature.

Stage II: Field investigations and data processing. Learned about the working conditions of the couriers. Took the regions and the company natures into consideration when designing and distributing questionnaires, making sure that the samples were representative

Stage III: Report drafting, revision, proof-reading and finalization. There were 26 versions between the first draft and the final report. Software such as SPSS was employed to make descriptive statistical, regression, exploratory factor, correlation and cross-frequency analyses. A structurally coherent and logically rigorous investigation report supported by reliable and faithful data was presented.

4. Data Analysis and Verification

4.1. Descriptive Statistical Analysis of the Couriers

Table 1: Demographic statistical frequency analysis

Variables	Items	Fre.	Percentage	Effective	Cumulative
Gender	M	832	94. 1	94. 1	94. 1
	F	52	5. 9	5. 9	100
Age	18~25	221	25	25	25
	26~30	338	38. 2	38. 2	63. 2
	31~35	195	22. 1	22. 1	85. 3
	36~40	91	10. 3	10. 3	95. 6
	above40	39	4. 4	4. 4	100
	J high school	234	26. 5	26. 5	26. 5
Education	high school	546	61. 8	61. 8	88. 2
	undergraduate	104	11. 8	11. 8	100
	under3000	104	11. 8	11. 8	11. 8
Salary	3000~4000	143	16. 2	16. 2	27. 9
	4001~5000	195	22. 1	22. 1	50
	5001~6000	195	22. 1	22. 1	72. 1
	above 6000	247	27. 9	27. 9	100
Place	country	429	48. 5	48. 5	48. 5
	city	455	51. 5	51. 5	100
	first-tier	160	18. 1	18. 1	18. 1
	new first-tier	160	18. 1	18. 1	36. 2
City	second-tier	255	28. 9	28. 9	62. 1
	third-tier	188	21. 2	21. 2	86. 3
	fourth tier	121	13. 7	13. 7	100
summation		884	100	100	0

Source: Investigations

Most couriers are male (94%) aged between 26 and 30 (a small number of them age above 40). Most couriers hold the senior high school degree or junior vocational degree and above. The income of most couriers ranges between RMB 4,000 and 6,000; and some couriers earn over RMB 6,000. Half of the couriers come from the rural areas and the rest from the urban areas. Nearly 30% of the couriers live in the Tier-2 cities.

4.2. Significance Test of the Career Attainment of the Couriers

The quantitative analysis was made to discuss the factors that sway the career attainment of the couriers based on 884 valid samples. The significance test was carried out to measure the impact of different demographic statistical variables on the career attainment of the couriers. It was hoped that the test results were consistent with those of the case analysis above, thus getting complete and objective conclusions.

(1) T-test of gender

With gender as the independent variable and career attainment as the dependent variable, this paper conducted the independent T-test of the samples. According to the table below, there was significant gender difference in career attainment.

Table 2: Abstract of independent T-test results among the couriers of different genders

Variables	Gender	Sample	Mean	SD	t
Career attainment	Male	832	3.234	0.821	-7.911***
	Female	52	3.850	0.522	

Note: ***P<0.001; **P<0.01; *P<0.05. Source: Investigations

(2) ANOVO test of age

With age as the independent variable and career attainment as the dependent variable, this paper conducted the ANOVA analysis. According to the table below, there was significant age difference in career attainment. According to the Scheffe comparison results, the difference in career attainment was most prominent in the age group from 31 to 35.

Table 3: Abstract of the comparison among the couriers in different age groups

Variables	source of variation	sum of squares	DOF	Mean	F	Post hoc
Career attainment	inter-group	38.335	4	9.584	15.200***	3>1 3>2
	intra-class	554.22	879	0.631		3>4 3>5
	summary	592.555	883			

Note: ***P<0.001; **P<0.01; *P<0.05. 1 for age 18-25, 2 for age 26-30, 3 for age 31-35, 4 for age 36-40, and 5 for age 41 and above. Source: Investigations

(3) ANOVO test of educational background

With educational background as the independent variable and career attainment as the dependent variable, this paper conducted the ANOVA analysis. According to the table below, there was significant educational background difference in career attainment. According to the Scheffe comparison results, the difference in career attainment was most prominent among the couriers who hold the college or bachelor degree.

Table 4: Abstract of the comparison among the couriers with different educational backgrounds

Variables	source of variation	sum of squares	DOF	Mean	F	Post hoc
Career attainment	inter-group	5.933	4	2.967	4.455*	3>1
	intra-class	586.622	881	0.555		3>2
	summary	592.555	883			

Note: ***P<0.001; **P<0.01; *P<0.05. 1 for junior high school degree, 2 for senior high school or junior vocational degree, 3 for college or bachelor degree. Source: Investigations

(4) ANOVO test of monthly income

With monthly income as the independent variable and career attainment as the dependent variable, this paper conducted the ANOVA analysis. According to the table below, there was no significant monthly income difference in career attainment.

Table 5: Abstract of the comparison among the couriers with different monthly incomes

Variables	source of variation	sum of squares	DOF	Mean	F	Sig.
Career attainment	inter-group	3.058	4	0.765	1.140	0.336
	intra-class	589.497	879	0.671		
	summary	592.555	883			

Source: Investigations

(5) T-test of the living area

With living area as the independent variable and career attainment as the dependent variable, this paper conducted the T-test. According to the table below, there was significant area difference in career attainment.

Table 6: Abstract of the T-test results among the couriers from different areas

Variables	living area	Sample	Mean	SD	t
Career attainment	country	429	3.182	0.892	-3.127**
	city	455	3.354	0.735	

Note: ***P<0.001; **P<0.01; *P<0.05. Source: Investigations

(6) ANOVA test of living city

With living city as the independent variable and career attainment as the dependent variable, this paper conducted the ANOVA analysis. According to the table below, there was significant city difference in career attainment. According to the Scheffe comparison results, the difference in career attainment was most prominent among the couriers who hold the college or bachelor degree.

Table 7: Abstract of the comparison among the couriers from different cities

Variables	source of variation	sum of squares	DOF	Mean	F	Post hoc
Career attainment	inter-group	6.881	4	1.720	2.582*	5>1 5>2
	intra-class	586.674	879	0.666		5>3 5>4
	summary	592.555	883			

Note: ***P<0.001; **P<0.01; *P<0.05. 1 for Tier-1 cities, 2 for new Tier-1 cities, 3 for Tier-2 cities, 4 for Tier-3 cities, and 5 for Tier-4 and lower tier cities. Source: Investigations.

4.3. Correlation Analysis

Table 8: Correlation analysis

NO.	Variables	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Gender	1.059	0.235	1												
2	Age	2.309	1.089	-0.186*	1											
3	Education	2.853	0.601	0.269*	-0.291*	1										
4	Income	3.382	1.351	-0.210*	0.140*	0.106**	1									
5	living area	1.515	0.500	-0.007	-0.157*	0.105**	0.013	1								
6	City	2.941	0.662	0.117*	-0.097*	0.163*	-0.304*	-0.042	1							
7	Job stress	3.240	0.653	0.016	0.090*	-0.034	0.070	-0.001	-0.106*	1						
8	Compromise	2.755	0.725	0.171*	-0.152*	-0.030	-0.154*	0.004	0.168*	0.467*	1					
9	Job burnout	3.195	0.865	0.070	0.030	-0.023	-0.130*	0.100*	-0.141*	0.485*	0.104*	1				
10	Identity	3.358	0.835	0.117*	-0.057	-0.022	-0.013	0.099*	0.260*	0.293*	0.671*	-0.088**	1			
11	Social S	3.256	0.769	0.144*	0.078	0.056	-0.023	-0.075	0.151*	0.353*	0.472*	0.272*	0.429*	1		
12	Identity S	11.208	4.579	0.155*	-0.015	0.026	-0.068	0.003	0.262*	0.358*	0.687*	0.051	0.856*	0.790*	1	
13	attainment	3.271	0.819	0.177*	-0.081	0.099*										1

Source: Investigations

According to the table above, the mean value and SD of all variables are within the proper range. There is no abnormality in the correlation coefficient among variables. The correlation coefficient matrix suggests strong correlation and remarkable significance between the career attainment and the couriers' identity and job burnout.

4.4. Study on the Empirical Model of the Couriers' Career Attainment based on the Career Compromise Theory

To test whether identity and career compromise are the mediating variables between the career pressure and the job burnout and career attainment, this study came up with a career attainment theory model and made hypotheses test analyses on 10 models. The results confirmed the mediating role of identity and career compromise in the relationship between the career pressure and the job burnout and career attainment.

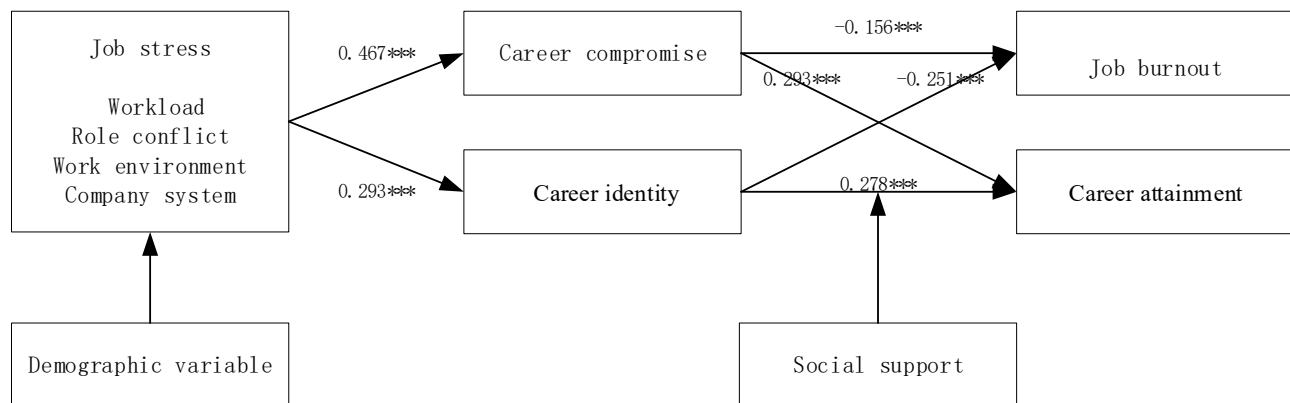


Fig. 3: Career attainment model

Note: Significance: ***<0.001; **P<0.01; *P<0.05. Source: Investigations

4.5. Moderating Role of Social Support

To test whether social support is the moderating variable between identity and career attainment, this study came up with a career attainment theory model and made hypotheses test analyses on 2 models. The results confirmed the positive impact of identity on career attainment.

Table 9: Test of regulating effect of social support (C for career attainment)

Variables	Model1	Model2	Model3
Career identity	0.415***	0.419***	0.089
Social support		0.619***	0.570***
CI*SS			0.095
R ²	0.172***	0.485***	0.485***
ADJ-R ²	0.171***	0.483***	0.483***
F	183.317***	534.055***	267.306***
D-W		1.845	1.844

Note: Significance: ***<0.001; **P<0.01; *P<0.05. SI, Career identity; SS, Social support

Source: Investigations

As shown in Table 9, the moderating variable social support was introduced to Model 3, generating Model 2. Model 2 verified the regulating effect of social support on the relationship between identity and career attainment. The interpreting power of Model 2 is significantly greater than that of Model 1 ($\Delta R^2=0.485$, $p<0.001$). In Model 3, the interaction item between the independent variables and the dependent variables was included in the regression model to test the regulating role of social support in the relationship between identity and career attainment.

According to the regression analysis results, the interaction between identity and social support was not significant, indicating that social support did not play the regulating role in the relationship between identity and career attainment. In other words, when the social support is strong, identity plays a significant role in the prediction of the career attainment ($\beta=0.525$, $t=6.058$, $p<0.01$); and when the social support is weak, identity also plays a significant role in the prediction of the career attainment ($\beta=0.176$, $t=3.083$, $p<0.01$), but the regression coefficient is smaller. To conclude, social support enhances the career attainment of the couriers with strong identity.

5. Conclusions and Suggestions

(I) Industry: scientific and humanized management

1. Give play to the role of industrial associations and better manage the industry and employees
China Express Association drafts the industrial standards, strengthens the industrial discipline, and provides the right protection channels for the couriers. The industrial association should regularly organize the training sessions on business, safety and legal awareness, enabling the couriers to provide better services and enhance the legal awareness.

2. Put in place reasonable performance evaluation system and show more care for the couriers
The companies should put in place the reasonable evaluation system and show more care for the couriers; label the clients who complain a lot and alleviate the punishment resulted from the complaints filed by the labeled clients; and ease the punishment during the extreme weather conditions to enhance career identity and confidence.

3. Organize traffic safety training sessions and urge the couriers to ensure their safety
Speed and efficiency are crucial in the express industry. The couriers often neglect safety risks. The companies should organize traffic safety training sessions and ensure the safety of the couriers.

(II) Government: ensure policy implementation and protect the rights and interests of the couriers

1. Facilitate policy implementation and safeguard the rights and interests of the couriers

China Express Association should supervise the implementation and decomposition of the policies, improving the “top design” of the express industry. The government should establish the labor guarantee grade evaluation system and strengthen industrial supervision and law enforcement.

2. Invest in the industrial infrastructures (such as the drop-in boxes) and improve the working conditions of the couriers.

The government should invest in the infrastructures of the express industry and put in place the intelligent drop-in boxes in all communities, thus alleviating the labor intensity of the couriers. Subsidies should be granted to the express companies to encourage technology and equipment innovation. The express service facilities should be included in the public service facility plan of the government.

(III) Society: call for respect for the couriers and standardize the express market

1. Elevate the social status of the express industry and call for respect for the couriers

Release laws and regulations to elevate the social status of the couriers, remove the stereotype against them, and call for respect for them.

2. Raise the market threshold of the express industry

Give play to the screening and regulating role of the market based on customer satisfaction, standardize the express industry, ensure the healthy development of the market, ban the

unlicensed entities from providing the express services, and create the legal and orderly market environment.

(IV) Couriers: acquire knowledge and skills to safeguard the legitimate rights and interests

The couriers are encouraged to acquire knowledge, work on the communication skills, and make proper career plan. They should learn to maximize the benefits with the least energy investment. The couriers can establish the partnership with the regional stores and companies so as to boost the incomes.

In addition, they should raise the legal awareness and learn how to protect their legitimate rights and interest.

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