

The Relationship between Transformational Leadership and Job Satisfaction of Universities in Yunnan China[†]

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Abstract

Transformational leadership is essential for the success of any organization, while job satisfaction relates to how content an individual is with his or her job. This study aimed to explore the relationship between transformational leadership style and job satisfaction among university staff in universities in Yunnan China. Specifically, the systematic framework of job satisfaction in this research is constructed by dimensions of interpersonal relationship, financial compensation, and work conditions. The study was based on a questionnaire survey with 157 effective responses collected from organizations in Chinese education sector. The data were analyzed using SPSS for Descriptive Statistics, Pearson Correlation Analysis. The empirical estimation results show the following. There was a significant correlation between job satisfaction and transformational leadership style. This research enriches the existing theory by constructing a comprehensive framework of the influencing factors of job satisfaction, which provides useful implications of human resource management optimization for organizations.

Keywords: Job satisfaction, Leadership style, Transformational leadership, Higher education sector

Introduction

Employee turnover can increase management costs and lower productivity. It is important to maintain an appropriate employee retention rate as well as understand the reasons why employees disengage and leave.

According to Mufti et al. (2019), job satisfaction has a significant relationship to organizational employee turnover. Better leadership is essential to retaining employees by improving employee job satisfaction. Keith et al. (2020) cite job satisfaction as a key factor that may affect the performance of individuals. As a result of job experience or appraisal of one's work, job satisfaction is described as a positive emotion or pleasurable state (Zhuang, 2015).

Employee job satisfaction has always been closely related to leadership. The quality of leadership determines the success of any organization, while job satisfaction measures how satisfied an individual is with his or her job (Iyeke, 2020).

The success of an organization depends on both employee satisfaction and effective leadership. Leadership can provide direction for the organization and lead employees to achieve their goals (Zhuang & Pan, 2022).

The demographic dividend of China has been gradually eroding over the past decade due to the declining birthrate and population aging. There is a shortage of labour supply for many companies across various industries as a result of the downward trend of the global economy.

Education has been particularly affected. In addition to being pulled away by better offers, employee turnover can also be caused by a lack of satisfaction due to poor leadership. Human resource managers are

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therefore faced with the challenge of attracting adequate and capable employees and preventing employee turnover.

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Research questions

According to Williams (2013), employees who are more satisfied with their jobs are generally more productive. Employees who are more satisfied with their jobs will generally perform better. In addition, job satisfaction impacts performance over time. It is crucial to have a deeper understanding of the influencing factors of employees' job satisfaction, in order to foster a better partnership between employees and employers by improving their happiness and performing as well as possible. What is the impact of transformational leadership on job satisfaction among staff of higher education sector in Yunnan China?

Objectives of the study

Studying the impact of transformational leadership on job satisfaction among staff of higher education sector in Yunnan China is the primary goal of this study. The specific objectives of this research are listed below:

- 1) To discover the perception of respondents toward job satisfaction.
- 2) To analyze the perceptions of respondents toward transformational leadership in terms of idealized influence, intellectual stimulation, inspirational motivation, and individualized consideration.
- 3) To study the relationship between transformational leadership in terms of idealized influence, intellectual stimulation, inspirational motivation, and individualized consideration and job satisfaction.

Literature review

Job satisfaction

According to the literature, there has been a great deal of research conducted on the subject of job satisfaction from various perspectives.

Many studies have been published pertaining to employees' satisfaction, including but not limited to personal characteristics, professional accomplishments, income, or relationships with other employees (Oven & Domajnko, 2021).

Herzberg et al. (1959) identified hygiene factors and the preview 9 motivating factors as determining factors of job satisfaction. The motivation hygiene theory calls hygiene factors dissatisfiers (Iyeke, 2020). According to Herzberg et al. (1959), the absence of dissatisfiers contributes to job dissatisfaction. There are a number of factors that contribute to hygiene, including company policy, supervision, working conditions, interpersonal relations, salary, status, and job security. According to Herzberg's motivation hygiene theory (Choi & Wan, 2016), a dissatisfier of supervision has a negative effect on job satisfaction, and this was demonstrated by transactional and laissez-faire leadership styles.

In particular, four factors can influence job satisfaction: Demographic characteristics, individual endowments, contextual circumstances, and psychological conditions (Zhuang & Pan, 2022). Aside from the above classification of factors affecting job satisfaction, there are other classification methods or evaluation methods.

Smith et al., propose a five-facet Job Descriptive Index (JDI) to measure job satisfaction: Pay, promotions, opportunities for promotion, coworkers, and supervision (Choi & Wan, 2016). In addition to recognition, Locke includes working conditions as well as the company and its management in the index. JDI is a particular type of questionnaire used to measure job satisfaction (Choi & Wan, 2016). The

Minnesota Satisfaction Questionnaire (MSQ), the Job Satisfaction Survey (JSS), and the Faces Scale (Choi & Wan, 2016) are other types of job satisfaction questionnaires.

Based on Yavirach (2015), the determinants of job satisfaction can be categorized into three groups: Personal characteristics, job characteristics, and organizational characteristics, while others suggest two groups: endogenous intrinsic factors and exogenous extrinsic factors. The combination of endogenous psychological factors such as psychological contract, sense of support, trust, emotional intelligence, and mental health is considered a closed system on the one hand. A deeper internal perspective emphasizes the role of psychological determinants, integrating individual characteristics (Zhuang & Pan, 2022).

Combined with the perspective of the work conditions and the social environment, the exogenous factors are viewed as an open system. These studies mainly demonstrate the effect of work atmosphere, leadership style, professional positions, and working hours on job satisfaction. Common environmental stressors in the work environment, for instance, can impact employee satisfaction (Shurbagi & Alferjani, 2015).

Main dimensions of job satisfaction

On the basis of employee perceptions, some scholars (Qu et al., 2015; Sharma & Sharma, 2019; Mufti, Xiaobao et al., 2019) focused primarily on these dimensions: Interpersonal relationships, financial compensation, and work conditions as the determinants of job satisfaction.

Interpersonal relationship

According to Shurbagi and Alferjani (2015), interpersonal relationships in the workplace can be divided into 2 categories: Relationships with management and relationships with colleagues. In this context, managers refer mainly to supervisors, team leaders, and superiors who hold a higher position in the organization, whereas colleagues relate to those co-workers in a similar position.

In one sense, perceived relationship with managers can be viewed as the employees' perception of their interactions with supervisors and leaders (Zhuang & Pan, 2022). Employee satisfaction is a key factor influenced by supervision (Herzberg et al., 1959). Informal systems often play a large role in China's relation-oriented society. The job satisfaction of employees may consequently be affected more by specific leadership behaviors including coordinating, structuring, and communicating (Jie, 2020). As long as employees have better relationships with managers with dominant power and resources, they may be better able to acquire resources and reap benefits, providing a conducive environment for career advancement. When employees get along well with managers, they may feel more confident and have a sense of superiority, so their job satisfaction is likely to be higher (Keith et al., 2020).

The perceived relationship with colleagues, on the other hand, refers to the peer relationship among coworkers who are at the same level or similar level within the organization, which is characterized by friendliness and kindness of colleagues (Zhuang & Pan, 2022). In studies, co-worker support was found to predict employee behavior (Jaskyte, 2019). In an environment where colleagues work cooperatively and collaboratively, relationships with colleagues are mutually supportive. The degree of co-worker support correlated significantly with personal accomplishments (Kalva & Shiryayev, 2016).

Those who have good interpersonal relationships with co-workers have an easier time overcoming work-related challenges due to knowledge sharing. Employees experienced strong working relationships within the occupational team as a source of strength that helped them overcome challenges. When faced with difficulty, those who have co-worker support are more likely to obtain important information and timely support, which means they are more likely to find a solution to the problem in a shorter period of time, causing more positive emotions and promoting job satisfaction. In contrast, when relationships with colleagues were strained, employees' ideas and creativity would be hindered, which could negatively impact their job satisfaction (Zhuang & Pan, 2022).

Teamwork has also been shown to improve job satisfaction by creating positive interactions. Interpersonal relationships can lead to a closer emotional connection between colleagues (Oven & Domajnko, 2021). Whenever employees are in a bad mood and in need of care, they are more likely to be comforted by colleagues if they have good interpersonal relationships, which reduces depression and

conflict at work. An effective state of interpersonal relationship can influence the effectiveness and efficiency of communication, social exchanges, and emotional venting among employees, and can help to promote harmonious cooperation and a good working environment. Creating a good atmosphere can help create a supportive environment and an overall sense of safety, which can relieve some of the pressures of life and work. A person's job satisfaction may be well improved when they feel supported and backed by their colleagues (Zhuang & Pan, 2022).

Recognition

Recognition generally refers to compensation and the perceived fairness behind it. As compensation, financial rewards refer to wages, income, bonuses, insurance, and any monetary payment or financial benefit employees received from their jobs.

It has been argued that the level of compensation is positively related to job satisfaction, since an increase in compensation represents an increase in material resources occupied by employees. Employees would feel more motivated, thus accumulating higher job satisfaction. It is important for a job to have a stable income (Oven & Domajnko, 2021).

Compensation and job satisfaction may be linked by some complicated mechanism. The relationship between compensation and job satisfaction is complex (Zhang & Pan, 2022). More research is needed to consider this relationship.

A multicultural workforce's job satisfaction is positively influenced by the perception of equity of distribution, and it is reported that a fair compensation system can lead to a more satisfied workforce. Job satisfaction has always been determined by the fairness of salaries (McLoughlin & Carr, 1997).

On the one hand, perceived rationality of compensation can be defined as how employees perceive and judge compensation based on their abilities and expectations. The perception of fairness plays an important role in service encounters, according to numerous studies. Studies have shown that compensation affects job satisfaction (Shurbagi & Alferjani, 2015). In terms of compensation, most existing studies are value-oriented and just consider the amount of compensation rather than the perception of employees. Assessments that are based on an employee's contribution and compensation may influence their job satisfaction (Zhuang, 2015).

Accordingly, an employee's subjective assessment of his or her input-related reward can influence his or her job satisfaction. The less cost-effectiveness of compensation is perceived by people with average incomes, and their job satisfaction may be low as a result. Contrary to this, for people whose income level is not very high, if they believe their income is in line with their own contribution and that it meets their expectations, then their sense of reasonableness of their income may be strong, which may result in a stronger feeling of job satisfaction (Lok & Crawford, 2004).

Work conditions

A worker's work conditions are largely composed of objective and subjective factors such as workload, working period, workplace environment, promotion opportunity, and work stress (Williams, 2013). According to the study, work conditions are composed of two important components: perceived match between ability and job and perceived autonomy.

Researchers found that employees' attitude towards their work is affected by their perception of person-organization fit. An employee's fit with his or her job is usually assigned as the compatibility between the employee and the tasks expected of them in exchange for employment (Williams, 2013).

If a job requires highly related knowledge and skills, those provided by their education, experience, and abilities are highly related. Having job-related knowledge may affect job satisfaction in such situations because it is strongly related to potential job performance.

When employees perceive an overqualification in their jobs, they may feel frustrated because they cannot apply their own skills to their work, which makes them more likely to lose interest in their job (Erdogan et al., 2011). When an employee's previous knowledge or skills cannot be fully utilized in the current work or feeling that they are having difficulties adapting to the current job or using their original skills and talents on the job task, a sense of mismatch is created, resulting in lower job satisfaction. Even if

employees possess good qualifications, mismatching their occupation with their abilities may still negatively impact their performance to some extent, resulting in low self-confidence and job satisfaction (Iyeke, 2020).

Studies have confirmed that autonomy in the work process, flexible working hours, and autonomy in workload have positive effects on satisfaction. There is evidence that flexible work plans can reduce employees' work-family conflict, reduce turnover, and improve perceptions of job autonomy, job satisfaction, organizational commitment, and job performance (Oven & Domajnko, 2021).

Thus, enhancing the autonomy and freedom of employees and supporting them in arranging their time and working tasks reasonably can reduce time conflicts at work, improving work flexibility and adaptability, and thus improving employees' job satisfaction.

Transformational leadership

A leader's role is to change followers' thinking and behavior, as well as how their groups perform their tasks. A leader and a follower are in a relationship. Business success in an organization depends on effective leadership (Branham, 2012).

James MacGregor Burns first wrote about the leadership style back in 1978, and Barnard Bass then added a psychological element to the approach in the 1980s. The major types of leadership styles are transactional, laissez faire, and transformational (Burns, 1978; Bass & Riggio, 2006).

Zhang (2005) argues that transformational leadership involves inspiring followers so that they can achieve extraordinary results while developing themselves as leaders.

It's all about the people's needs. Motivating and inspiring employees rather than rewarding and punishing them builds their commitment (Qu et al., 2015).

In order to achieve the collective objective, transformational leaders are motivated, involving, encouraging, and helpful to employees. They encourage and inspire employees with individual recognition, appreciation, and team coordination.

In transformational leadership, employees' mindset and beliefs are changed, which benefits the organization (Qu et al., 2015) and they never show discrimination based on their ethnicity, social class, gender identity, age, or religion (Emu & Umeh, 2014). Organizational advancement and strategic thinking are encouraged by transformational leadership.

A supportive and optimistic leader is likely to increase subordinates' confidence in their abilities (Qu et al., 2015). The transformational leader understands how to handle workload in a friendly and comfortable way, so that their subordinates are also content and satisfied with their work. This comfortable and friendly work environment stimulates employees' intellectual curiosity, encourages them to achieve organizational goals, and motivates them to succeed. When employees are given appropriate training in a receptive environment they are more likely to be motivated to achieve the goals of the organization (Mufti et al., 2019).

The transformational style consists of 4 major components, including inspirational motivation, idealized influence, individualized motivation, and intellectual stimulation (Qu et al., 2015).

Idealized influence

Followers view leaders' influence in terms of power, charisma, self-confidence, trust, consistency, and ideals to influence his followers, which they attempt to emulate and respect. Bass and Avolio (2002), such leaders are a source of admiration, respect, pride, confidence, growing optimism, and the talk of their followers. Idealized influence may be attributed to leaders' conduct, values, beliefs, and standards of high moral character (Bass et al., 2003).

Modeling is the key to this. Are the leaders setting examples and walking the talk? Are they representing the vision that they have outlined? Do their actions match their words?

To engage their followers in the vision and come along with them on the journey, leaders need to act as role models for the desired high performance behaviors.

Inspirational motivation

An inspirational leader emphasizes to his followers that they must perform well and help the organization to achieve its mission and goals. The leaders who adopt this kind of behavior can help their followers respond more positively to them (Bass & Avolio, 2002). Additionally, they have a knack for communicating important ideas and visions in a way that is easy for their followers to understand and implement.

The goal is to bring people together. Motivation is about winning people's hearts and minds. Leaders need to develop a vision that is bigger than themselves (Burns, 2005).

By developing each person, setting challenging goals and encouraging them in all they do, it's about getting the best from them.

Intellectual stimulation

Leadership that keeps his followers thinking, asking questions, and solving problems is intellectual stimulation. By introducing ideas and preliminary solutions to problems on the basis of their own understandings, beliefs and standards, transformational leadership stimulates followers to think creatively about problem solving (Bass & Avolio, 2002).

The goal is to challenge the status quo. To propel a business forward, it takes innovative products, processes, and services. The key to this is creativity, by which, they can see the opportunities before them and create them if none exist.

Individualized consideration

Everyone should be treated differently according to their needs, ambitions, and fears in life. It's about connecting with people so leaders can learn what they need and tailor their approach to meet the individual needs (Bass & Avolio, 2002).

Conceptual framework and hypothesis

Based on the research findings from previous studies, job satisfaction has been identified as dependent variables (DV), and transformational leadership style is selected as a independent variable (IV) with 4 dimensions: idealised influence, intellectual stimulation, inspirational motivation, individualised consideration.

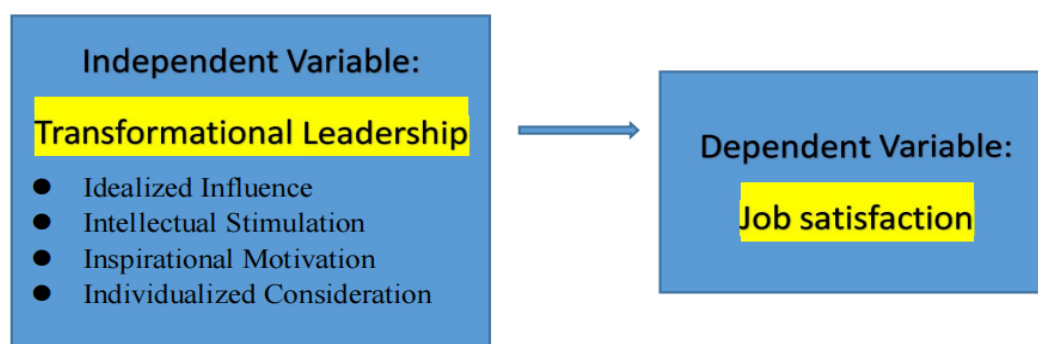


Figure 1 Conceptual framework of the research.

Consistent with the objective of the study, the proposed hypotheses for testing are:

H1: Idealized Influence is positively related to job satisfaction.

H2: Intellectual stimulation is positively related to job satisfaction.

H3: Inspirational motivation is positively related to job satisfaction.

H4: Individualized consideration is positively related to job satisfaction.

H5: Transformational leadership style has positive effect to the job satisfaction.

Methodology

Populations and sampling procedure

The Ministry of Education released the “National List of Higher Educational Institutions”, and as of September 30, 2021, there were 2756 colleges and universities in China. To determine the population size, there were about 10,000 leaders at different administrative levels in those schools.

Krejcie and Morgan (1970) provided a table that determined sample size for this study. China had 3,005 institutions of higher learning as of June 2020, including over 82 in Yunnan (<http://www.gov.cn/2021>). The number of employees in these organizations is estimated at 10,000 to 15,000 people. Thus, the sample size for this study will be around 380.

Research instruments

Quantitative research designs tend to be more suitable for current study because variables and hypotheses are clearly defined in advance of data collection. As the study setting will not be influenced by environmental factors or manipulated, it is non-contrived.

It is expected that respondents will answer the questionnaire voluntarily, without being manipulated. The researcher should not interfere with the respondents.

In the Yunnan higher education sector, the questionnaire will be used to study the impact of transformational leadership on job satisfaction. A 1-5 Likert scale will be used as the questionnaire design to determine the significance of different indicators in this study.

Data collection

Using questionnaires, data is collected from 380 staff in Yunnan higher education sector during this study. In surveys, researchers collect data on responses directly from respondents. Questionnaires will be distributed to staff of randomly selected universities in Yunnan China, either online or in-person.

Data analysis

In this study, data was captured on the IBM Statistical Package for the Social Sciences (SPSS) version 26 to conduct the analysis.

In order to examine the relationship between the dependent variable (DV) and the independent variables (IV), correlation analysis will be conducted. Descriptive statistics including the mean values and standard deviation will also be employed to determine the general idea towards a certain question.

Results and discussion

There were 384 questionnaires distributed to the students in several universities in Yunnan, China. A total of 157 effective responses were collected.

Findings on job satisfaction

Table 1 Descriptive statistics on job satisfaction.

Q	N	Minimum	Maximum	Mean	Std. Deviation
Q4 I like the people I work with.	157	2	5	3.50	0.814
Q5 The people I work with cooperate as a team.	157	2	5	3.35	0.999
Q6 I frequently find my work easier because of the competence of people I work with.	157	1	5	2.45	1.232
Q7 I feel that the work I do is appreciated.	157	2	5	3.62	0.788
Q8 I see employee recognition and appreciation by management and my fellow employees	157	1	5	3.38	0.997

Q	N	Minimum	Maximum	Mean	Std. Deviation
Q9 I have the opportunity to give input on decisions affecting my work.	157	1	4	2.78	0.837
Q10 I am happy with the work condition here.	157	1	5	3.48	0.945
Q11 I receive the information, tools and resources I need to do my job effectively.	157	2	4	2.77	0.783
Q12 I am satisfied with the benefits I receive.	157	1	4	2.65	1.031
Valid N (listwise)	157				

The above table shows the results related to Job Satisfaction, which comprises nine questions relating to 3 aspects: Interpersonal relationship (Q4 - Q6), recognition (Q7 - Q9), work condition (Q10 - Q12). It is clear that all mean values are between 2 to 4, which means staff are generally between the idea of neutral and slightly positive or negative towards job satisfaction. No responses are too overall strong. Q7 (I feel that the work I do is appreciated.) had the highest mean value 3.62 with standard deviation of 0.788. Q6 (I frequently find my work easier because of the competence of people I work with.) had the lowest mean value 2.45 with standard deviation of 1.232. Therefore, among all 3 aspects of job satisfaction, recognition achieved the highest overall mean values, while work condition received the overall lowest mean values, with interpersonal relationship stayed in between.

Findings on transformational leadership

The following tables show the results related to transformational leadership, which comprises nine questions relating to 3 aspects: Idealized influence (Q13 - Q15), intellectual stimulation (Q16 - Q18), inspirational motivation (Q19 - Q21), and individualized consideration (Q22 - Q24).

Table 2 Descriptive statistics on idealized influence.

Q	N	Minimum	Maximum	Mean	Std. Deviation
Q13 My leaders make others feel good to be around them.	157	2	5	3.57	1.021
Q14 People have complete faith in leaders.	157	1	5	3.11	0.993
Q15 People are proud to be associated with the leaders.	157	2	5	3.30	0.772
Valid N (listwise)	157				

According to above table, it is clear that all mean values are above 3, which means respondents are generally between the idea of neutral and slightly positive towards leaders' idealized influence. No responses are too overall strong. Q13 (My leaders make others feel good to be around them.) had the highest mean value 3.57 with standard deviation of 1.021. Q14 (People have complete faith in leaders.) had the lowest mean value 3.11 with standard deviation of 0.772. While leaders are making people feel good to be around them, they should work hard to win people's trust as well as their faith in them.

Table 3 Descriptive statistics on Intellectual stimulation.

Q	N	Minimum	Maximum	Mean	Std. Deviation
Q16 My leaders can explain and express properly with a few simple words.	157	1	5	3.14	1.028
Q17 My leaders can appeal images about what we can do.	157	1	5	3.15	0.921
Q18 My leaders can help us find meaning in our work.	157	1	5	3.27	0.936
Valid N (listwise)	157				

According to above table, it is clear that all mean values are above 3, which means respondents are generally between the idea of neutral and slightly positive towards leaders' Intellectual stimulation. Responses are overall moderate. Q18 (My leaders can help us find meaning in our work.) had the highest mean value 3.27 with standard deviation of 0.936. Q16 (My leaders can explain and express properly with a few simple words.) had the lowest mean value 3.14 with standard deviation of 1.028. Some leaders are lack of the simplicity and efficiency on their expression. They are generally believed to be able to help subordinates to find the meaning of work.

Table 4 Descriptive statistics on inspirational motivation.

Q	N	Minimum	Maximum	Mean	Std. Deviation
Q19 My leaders enable us to think about old problems in new ways.	157	1	5	2.99	0.961
Q20 My leaders encourage people to engage in critical thinking.	157	2	5	3.31	0.791
Q21 My leaders rethink ideas that we had never questioned before.	157	1	4	2.58	0.914
Valid N (listwise)	157				

According to above table, it is clear that all mean values are above 3, which means respondents are generally between the idea of neutral and slightly negative towards leaders' Inspirational motivation. Responses are overall moderate. Q20 (My leaders encourage people to engage in critical thinking) had the highest mean value 3.31 with standard deviation of 0.791. Q21 (My leaders rethink ideas that we had never questioned before) had the lowest mean value 2.58 with standard deviation of 0.914.

Table 5 Descriptive statistics on individualized consideration.

Q	N	Minimum	Maximum	Mean	Std. Deviation
Q22 My leaders can help us develop ourselves.	157	1	5	3.14	0.828
Q23 My leaders let us know how they think we are doing.	157	1	5	3.26	0.988
Q24 My leaders give personal attention to those who seem rejected.	157	1	5	3.17	1.057
Valid N (listwise)	157				

According to above table, it is clear that all mean values are above 3, which means respondents are generally between the idea of neutral and slightly positive towards leaders' Individualized consideration. Responses are overall moderate. Q23 (My leaders let us know how they think we are doing) had the highest mean value 3.26 with standard deviation of 0.988. Q22 (My leaders can help us develop ourselves.) had the lowest mean value 3.14 with standard deviation of 0.828.

Findings on hypothesis

Findings on H1: Idealized Influence is positively related to job satisfaction

Table 6 The Correlation between Idealized Influence and job satisfaction.

		Q4 people	Q5 team	Q6 competence	Q7 work	Q8 appreciate	Q9 input	Q10 condition	Q11 resource	Q12 Benefit
Q13 My leaders make others feel good to be around them.	Pearson Correlation	0.461**	-0.045	0.598**	0.346**	0.529**	0.509**	0.604**	0.404**	0.421**
	Sig. (2-tailed)	0.000	0.575	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	157	157	157	157	157	157	157	157	157
Q14 People have complete faith in leaders.	Pearson Correlation	0.468**	0.134	0.440**	0.399**	0.616**	0.440**	0.596**	0.207**	0.334**
	Sig. (2-tailed)	0.000	0.095	0.000	0.000	0.000	0.000	0.000	0.009	0.000
	N	157	157	157	157	157	157	157	157	157
Q15 People are proud to be associated with the leaders.	Pearson Correlation	0.507**	0.379**	0.546**	0.439**	0.542**	0.630**	0.495**	0.316**	0.358**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	157	157	157	157	157	157	157	157	157

According to Above table, the relationship between idealized influence as a dimension of transformational leadership and job satisfaction are measured by analyzing the correlation between Q13~Q15 and Q4~Q12. It is noticed that the idealized influence as a dimension of transformational leadership has significant positive correlation with job satisfaction. The overall correlations among these are significantly strong. Q13 - Q10, Q14 - Q8, and Q15 - Q9 have the highest Pearson Correlation values, which are all above 0.6. To interpret the message, people are more likely to enjoy being around their leaders if they are more chance to input their ideas in making decision, and people have more faith to their leaders if they are being appreciated. In addition, if people will improve their perception towards working condition if they feel good about being around their leaders. According to above findings, it is concluded that the idealized influence as a dimension of transformational leadership has significant correlation with job satisfaction. Therefore, H1 is accepted.

Findings on H2: Intellectual stimulation is positively related to job satisfaction**Table 7** The Correlation between Intellectual stimulation and job satisfaction.

		Q4 people	Q5 team	Q6 competence	Q7 work	Q8 appreciate	Q9 input	Q10 condition	Q11 resource	Q12 Benefit
Q16 My leaders can explain and express properly with a few simple words.	Pearson Correlation	0.284**	-0.117	0.345**	0.556**	0.660**	0.417**	0.464**	0.128	0.319**
	Sig. (2-tailed)	0.000	0.145	0.000	0.000	0.000	0.000	0.000	0.111	0.000
	N	157	157	157	157	157	157	157	157	157
Q17 My leaders can appeal images about what we can do.	Pearson Correlation	0.548**	0.081	0.555**	0.574**	0.697**	0.585**	0.563**	0.298**	0.259**
	Sig. (2-tailed)	0.000	0.315	0.000	0.000	0.000	0.000	0.000	0.000	0.001
	N	157	157	157	157	157	157	157	157	157
Q18 My leaders can help us find meaning in our work.	Pearson Correlation	0.481**	0.214**	0.424**	0.398**	0.391**	0.715**	0.222**	0.067	0.217**
	Sig. (2-tailed)	0.000	0.007	0.000	0.000	0.000	0.000	0.005	0.407	0.006
	N	157	157	157	157	157	157	157	157	157

According to Above table, the relationship between Intellectual stimulation as a dimension of transformational leadership and job satisfaction are measured by analyzing the correlation between Q16~18 and Q4~12. It is noticed that the Intellectual stimulation as a dimension of transformational leadership has significant positive correlation with job satisfaction. The overall correlations among these are significantly strong. Q16 - Q8, Q17 - Q8, and Q18 - Q9 have the highest Pearson Correlation values, which are all above 0.66. To interpret the message, people are more likely to feel appreciated if leaders are able to express themselves more simply and efficiently. And the more leaders appeal images about what people can do, the more people feel to be appreciated. In addition, if leaders help people to find the meaning of their work, they will be more willing to make input in their work and decision making.

According to above findings, it is concluded that the intellectual stimulation as a dimension of transformational leadership has significant correlation with job satisfaction. Therefore, H2 is accepted.

Findings on H3: Inspirational motivation is positively related to job satisfaction**Table 8** The correlation between inspirational motivation and job satisfaction.

		Q4 people	Q5 team	Q6 competence	Q7 work	Q8 appreciate	Q9 input	Q10 condition	Q11 resource	Q12 Benefit
Q19 My leaders enable us to think about old problems in new ways.	Pearson Correlation	0.295**	0.205**	0.211**	0.426**	0.266**	0.379**	0.254**	0.235**	-0.017
	Sig. (2-tailed)	0.000	0.010	0.008	0.000	0.001	0.000	0.001	0.003	0.828
	N	157	157	157	157	157	157	157	157	157
Q20 My leaders encourage people to engage in critical thinking.	Pearson Correlation	0.076	-0.107	0.284**	0.292**	0.473**	0.483**	0.448**	0.209**	0.284**
	Sig. (2-tailed)	0.343	0.183	0.000	0.000	0.000	0.000	0.000	0.009	0.000
	N	157	157	157	157	157	157	157	157	157
Q21 My leaders rethink ideas that we had never questioned before.	Pearson Correlation	0.188*	0.233**	-0.220**	-0.007	-0.160*	-0.140	0.059	0.053	-0.389**
	Sig. (2-tailed)	0.018	0.003	0.006	0.929	0.045	0.080	0.463	0.514	0.000
	N	157	157	157	157	157	157	157	157	157

According to Above table, the relationship between Inspirational motivation as a dimension of transformational leadership and job satisfaction are measured by analyzing the correlation between Q19~21 and Q4~12. It is noticed that the Inspirational motivation as a dimension of transformational leadership has significant positive correlation with job satisfaction with some exception. The overall correlations among these are significantly strong. Q19 - Q7 and Q20 - Q9 have the highest Pearson Correlation values, which are all above 0.4. To interpret the message, people are more likely to feel good about their work condition if leaders encourage creativity like new ideas. The more leaders encourage critical thinking, the more people are willing to make input in their work and decision making. In addition, Q21 - Q12 showed a strong negative correlation, which means that as leaders rethink more about old problems, people will feel less happy with their work benefit. To explain this, as leaders rethink and bring our more issues, it may also increases the work load of the subordinates.

According to above findings, it is concluded that the Inspirational motivation as a dimension of transformational leadership has significant correlation with job satisfaction. Therefore, H3 is accepted.

Findings on H4: Individualized consideration is positively related to job satisfaction**Table 9** The correlation between individualized consideration and job satisfaction.

		Q4 people	Q5 team	Q6 competence	Q7 work	Q8 appreciate	Q9 input	Q10 condition	Q11 resource	Q12 Benefit
Q22 My leaders can help us develop ourselves.	Pearson Correlation	0.305**	0.188*	0.246**	0.219**	0.276**	0.499**	0.454**	0.060	0.283**
	Sig. (2-tailed)	0.000	0.018	0.002	0.006	0.000	0.000	0.000	0.457	0.000
	N	157	157	157	157	157	157	157	157	157
Q23 My leaders let us know how they think we are doing .	Pearson Correlation	0.436**	0.160*	0.499**	0.654**	0.731**	0.614**	0.544**	0.161*	0.235**
	Sig. (2-tailed)	0.000	0.045	0.000	0.000	0.000	0.000	0.000	0.044	0.003
	N	157	157	157	157	157	157	157	157	157
Q24 My leaders give personal attention to those who seem rejected.	Pearson Correlation	0.317**	-0.057	0.423**	0.232**	0.399**	0.631**	0.256**	0.179*	0.462**
	Sig. (2-tailed)	0.000	0.475	0.000	0.003	0.000	0.000	0.001	0.024	0.000
	N	157	157	157	157	157	157	157	157	157

According to Above table, the relationship between Individualized consideration as a dimension of transformational leadership and job satisfaction are measured by analyzing the correlation between Q22~24 and Q4~12. It is noticed that the Individualized consideration as a dimension of transformational leadership has significant positive correlation with job satisfaction. The overall correlations among these are significantly strong. Q23 - Q7, Q24 - Q9, and Q23 - Q9 have the highest Pearson Correlation values, which are all above 0.6. To interpret the message, people are more likely to feel good about their work condition if leaders provide timely feedback about their work. And the more leaders communicate people with their job performance and give people personal intention, the more people are willing to make input in their work and decision making. According to above findings, it is concluded that the Individualized consideration as a dimension of transformational leadership has significant correlation with job satisfaction. Therefore, H4 is accepted.

Findings on H5: Transformational leadership style has positive effect to the job satisfaction.

As H1~H4 are all about four dimensions of transformational leadership, which are all accepted. It can be concluded that transformational leadership has significant correlation with job satisfaction. Therefore, H5 is accepted.

Conclusion**Summary of the findings**

In general, the responses were rather moderate towards questions related to variables. Among all 3 aspects of job satisfaction, recognition achieved the highest overall mean values, while work condition received the overall lowest mean values, with interpersonal relationship stayed in between. Leaders are making people feel good to be around them, they should work hard to win people's trust as well as their faith in them. Some leaders are lack of the simplicity and efficiency on their expression. They are generally believed to be able to help subordinates to find the meaning of work.

Limitations of the study

Although the research process has tried to consider all aspects, there are still subjective factors due to time, budget, other inferential variable, research methodology, sample and etc.

Recommendation

Based on above findings recommendations are provided for leaders in higher education sector in China. It is very important for leaders to communicate with their subordinate regarding how they think about their work, which give the timely feedback show the appreciation and respect. It is also necessary for leaders to improve the expression ability so that they are able to talk efficiently and properly. Simple words are much preferred by people. Besides, leaders should encourage more creativity, but the same time try to keep their own thoughts simple and focused. The more ideas they bring out, the less likely people will happy with their work, since these constantly appearing problems may increase people's work load.

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