The Female Leadership in Universities in Tianjin of China

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Abstracts

The objectives of this research were: 1) To explore the components of female leadership in University of Tianjin. 2) To Provide the guideline for the development of female leadership at University of Tianjin.

The research was a mixed methodology research. Population was total700. This study adopted a combination of quantitative and qualitative research methods. The designated population is 700 faculty members from 5 universities in Tianjin. The researcher determined sample size with Krejcie and Morgan's table, and obtained by the stratified random sampling technique, 253 participants were selected through simple random sampling. The instrument used for data collection was, a focus group discussion of 10 management personnel was formed. The data collection includes in-depth interviews form, five-point rating scale, and Focus Group Discussion form. The statistics used for data analysis were frequency, percentages, means Standard Deviations and Exploratory Factor Analysis(EFA), and content analysis was employed.

The research findings were:1)There were 5 components of female leadership in universities of Tianjin city: Step and method for female leadership development, management mode, the influencing finding were characteristic for leadership, Female leadership.Critical finding and best practice, Key growth success and best implementation methods. 2)There were 18 guidelines for the components was: Start with self-awareness, Cultivate emotional intelligence, Lead with authenticity and integrity to gain trust and respect. Foster a growth mindset to embrace change and adapt to new challenges, Align your leadership style with organizational goals and culture, foster mentorship programs for skill enhancement.

Introduction

The rise of female leadership holds several critical implications: Gender Equality: Female leadership is a pivotal driver of gender equality. It challenges stereotypes and underscores the importance of dismantling gender biases and discriminatory practices in the workplace and beyond. As women ascend to leadership roles, it sends a powerful message that gender should not be a barrier to achieving one's potential. The study of female leadership has gained prominence in academic research. Scholars and researchers explore various aspects of female leadership, from leadership styles to the impact of gender diversity on organizational culture. This research contributes to our understanding of leadership dynamics. The rise of female leadership is not only a trend of globalization, but also indicates that female leadership

has characteristics that are in line with social development trends. By examining the growth patterns and development characteristics of female leadership from a multidimensional perspective, it can be found that outstanding female leaders have to some extent demonstrated their uniqueness in key leadership dimensions such as psychoanalysis, personality psychology, leadership style, and ethical orientation, which are no different from male leadership and even beyond. This proves the important value of female leadership and its irreplaceable role in the development of human society. Exploring this helps us understand, accept, and draw on female leadership, fully tapping into the contribution of female human resources, which account for half of the population, to the field of leadership. (Jiang Lai,2010).

The research area of female leadership holds immense practical significance in today's evolving socio-economic landscape. As the world progresses towards greater gender equality and diversity in leadership roles, understanding and promoting female leadership have become paramount. This section elucidates the practical significance of studying female leadership in contemporary society. Fostering Inclusive Work Environments: In a world striving for inclusivity, organizations that prioritize female leadership not only promote diversity but also foster inclusive work environments. The practical implications of this are numerous: increased employee engagement, improved team dynamics, and the ability to attract and retain top talent from diverse backgrounds. Enhanced Decision-Making: Research has shown that diverse leadership teams, including women in leadership positions, tend to make better decisions. Recognizing the practical significance of this, businesses and institutions that prioritize female leadership can expect to benefit from improved decision-making processes and outcomes. Improved Organizational Performance: Female leaders often bring a unique set of skills, perspectives, and approaches to leadership. These qualities can contribute to enhanced organizational performance, innovation, and adaptability – factors that are crucial in today's competitive landscape. Role Modeling and Inspiration: The presence of successful female leaders serves as a source of inspiration and motivation for future generations of women. Understanding the practical significance of female leadership means paving the way for more women to aspire to leadership roles, thereby contributing to a more balanced and equitable society. Addressing Gender Disparities: Practical significance lies in addressing and rectifying gender disparities in leadership roles. By conducting research in this area, we can identify the barriers and challenges that hinder female leadership progression, leading to actionable strategies for change. Legal and Policy Implications: Many countries and regions have introduced legal frameworks and policies aimed at promoting gender equality in leadership positions. Understanding the practical significance of these initiatives is crucial for policymakers, as it can inform the development and refinement of policies to support female leadership. Economic Impact: Beyond social and organizational benefits, the practical significance of female leadership extends to economic impact. Encouraging women to take on leadership roles can result in increased economic growth, as a diverse and empowered workforce is often more productive and innovative. Nowadays, female leaders are playing an increasingly important role in the world political and economic stage, and their proportion is also increasing. Their success is the result of leveraging women's professional advantages and continuously improving leadership. Therefore, in order for women to achieve career success, enhance their social status and value, they should clearly and fully utilize their professional advantages, continuously learn, enhance confidence, and enhance leadership in practice. Nie Zhiyi (2010)

The study of female leadership has garnered significant attention in recent years as organizations and societies recognize the importance of gender diversity in leadership roles. However, despite progress in gender equality efforts, women remain underrepresented in top leadership positions across various sectors. This underrepresentation highlights a persistent issue that necessitates further exploration and understanding. One of the central problems in the research area of female leadership is the "glass ceiling" phenomenon. The glass ceiling represents the invisible yet formidable barriers that hinder women's advancement into senior leadership roles. These barriers often manifest as subtle biases, stereotypes, and structural impediments that limit women's career progression. Furthermore, the underrepresentation of women in leadership roles raises questions about the impact of this gender disparity on organizational performance and effectiveness. Research suggests that diverse leadership teams bring a broader range of perspectives, which can lead to more innovative and effective decision-making. Thus, the lack of gender diversity in leadership may have implications not only for individual career opportunities but also for the overall success and competitiveness of organizations. Another critical aspect of the problem in the research area of female leadership is the examination of leadership styles and characteristics exhibited by women leaders. Understanding how female leaders lead, the challenges they face, and the unique strengths they bring to leadership roles is crucial for fostering a more inclusive and equitable leadership landscape. Additionally, the intersectionality of gender with other factors, such as race, ethnicity, age, and socioeconomic background, adds complexity to the study of female leadership. It is essential to recognize that women's experiences and opportunities in leadership are shaped by a combination of these intersecting identities, making it imperative to consider a holistic approach in research. Lastly, while much research has focused on identifying the challenges and barriers faced by women in leadership, there is a growing need for actionable solutions and best practices that can facilitate the advancement of female leaders. This involves not only addressing systemic issues but also promoting mentorship, sponsorship, and leadership development programs tailored to the specific needs and aspirations of women leaders. The "Outline for the Development of Chinese Women" (here in after referred to as the "Outline") released in 2007 emphasized the need to improve women's participation in the management and decision-making level of national and social affairs, and gradually increase the proportion of female cadres in the total number of cadres. To this end, the country needs to strengthen the cultivation and priority selection of outstanding young female cadres, and there should be a certain number of female cadres in the reserve cadre team of leadership teams at all levels. Since the promulgation of the outline, more and more outstanding women have entered leadership teams at all levels. According to statistics, in recent years, the number of female cadres in the country has steadily increased. The proportion of female cadres at all levels of state organs has remained stable at around 23%, while the proportion of female cadres at or above the county level has remained basically at around 16.5%. But it is obvious that female cadres are "fewer and fewer" as they go up. Chen Xuya and Zhang Lihua (2010: 44-46)

Research objectives

1) To explore the components of female leadership in University of Tianjin.
2) To Provide the guideline for the development of female leadership at University of Tianjin.

Research Methodology

Population sample and key informants

Step (1) To explore the components of female leadership in University of Tianjin.

First of all, the researcher review literature of documents and related research, synthesized 20 relevant researches and summarized some components of the the components of female leadership in University of Tianjin Province.

Key Informants

In-depth interviews with 15 experts involved in the research were experienced professionals from colleges and university in Tianjin's Province, with a minimum of 5 years of leadership experience in their respective institutions. These experts are widely recognized for their extensive expertise and achievements in university education and administration. The main information providers consisted of presidents, professors, and teachers from public colleges in Tianjin's. Specifically, interviews were conducted with presidents and professors from five public university: University of Tianjin Nankai University, Hebei University of Technology, Tianjin University of Science and Technology, Tianjin University of Technology, These individuals were selected based on their expertise and leadership roles within their institutions.

Step (2) To explore the components of female leadership in University of Tianjin. Population sample

The population is 700, from 5 Universities of Tianjin. The sample size was determined by Krejcie and Morgan's table (1970). This university was selected based on their similar categories and characteristics.

Sample, a simple random sampling method was used to select 253 teachers from 5 universities in Tianjin, including randomly selected female and male teachers, as well as educational management personnel. Among the 253 participants, data analysis would be considered effective. This study used statistical methods such as multi-stage random sampling to ensure the rigor and accuracy of the research process.

Step3: To Provide the guideline for the development of female leadership at University of Tianjin.

Focus group discussion 10 key information include of deans, experts, professors and teachers of 5 from 5 Universities of Tianjin. Due to the different professions and levels of experts and teachers, the researchers classified after criteria for selected by purposive sampling, Establish selection criteria qualification.

2. Research instruments

Three research instruments were used to three research tools to examine the objectives of this research

2.1 Semi-structured interview form

Through the semi-structured interview table, mainly by discovering the main factors, the semi-structured interview is preliminarily completed. The interview was mainly conducted in a non-face-to-face way. A total of 15 respondents were sent by mail and online.

2.2 Five-point rating scale questionnaire. The researchers used a three-part questionnaire; Part I: Demographic variables (Checklist), General information of the respondents, totaling 6 items, Part II: Variables on the effectiveness of management mechanism of Art Design Education in Universities under Liaoning Province (Five-point rating scale), totaling 36 items, and Part III: Suggestions and additional comments (Open Ended). Each factor is measured on a 5-point Likert's scale.

2.3 Focus Group discussion form 10 key informants to develop the guideline to improve To Provide the guideline for the development of female leadership at University of Tianjin.

Data Collection

The data collection process involved distributing the questionnaire through various channels, including online platforms, email, and direct contact with researchers. The following steps were followed to ensure effective data collection:

(1) Contacting relevant university: The researchers established contact with the university to introduce themselves and explain the purpose of the research. This step helped establish a connection and gain permission to conduct the study within the university settings.

(2) Identifying specific contact persons: within each university, specific contact persons were identified to facilitate the distribution and collection of questionnaires. These individuals, such as department heads or research coordinators, play a crucial role in coordinating the research activities and ensuring the participation of the target respondents.

(3) Sending questionnaires: The questionnaires sent to the identified respondents using various means, including email and other internet-based platforms. This allowed for convenient and efficient distribution, ensuring that the respondents accessed and completed the questionnaire easily.

(4) Collecting completed questionnaires: Once the respondents completed the questionnaires, the researchers collected them through the established channels. Depending on the chosen method, completed questionnaires collected electronically or in person. To collect relevant data on female leadership in colleges and university in Tianjin's, the following data collection methods will be adopted. Expert Focus Group Discussion: The researchers will act as facilitators during focus group discussions with key informants who have expertise in the field of education leadership.

(5) Establishing contact and building rapport with the identified key informants, ensuring their willingness to participate in the discussions.

(6) Clearly identifying the identity and purpose of the researchers to establish transparency and trust.

(7) Conducting the discussions either in person or remotely through channels such as email or other means of communication, based on the preferences and availability of the participants.

(8) The propose will be structured to address specific research questions and topics related to female leadership in colleges and university in Tianjin's.

(9) The researchers will document and summarize the results of the discussions to obtain specific data and insights regarding the management direction and mode of female leadership.

Data analysis

The data collected from the questionnaires were subjected to comprehensive data analysis to draw meaningful insights and address the research objectives. The following analytical methods will employed:

Descriptive statistics: Descriptive statistics, such as frequency and percentage, were utilized to analyze the demographic variables of the respondents. This provided an overview of the characteristics of the sample population. Additionally, descriptive statistical analysis will conducted on the variables of female leadership in university. Measures such as mean values and standard deviations were calculated to understand the central tendencies and variations in the data.

The components of female leadership at University of Tianjin. will analyze by EFA. This analytical technique helped identify underlying factors and reduce irrelevant variables. By examining the variables, EFA facilitated the identification of female leadership in colleges and university in Tianjin.

Results

Table 1 Variables from semi-structured of Key Informants

Dimensions	Variables	Sources
Female leadership talents development	1. Tianjin's universities lack clear goals for cultivating female leadership talents	Wei, Chen, Zhang
	2. Insufficient understanding of female leadership status	Qi, Jiang, Song
	3.The imperfect education system in China hinders the cultivation and development of female leaders	Zhou，He, Zhuang
	4.The training model of Female in China's female	Tan，

Dimensions	Variables	sources
	leaders is not clear enough	Zhang
	5.The concept of female leadership based dominance has not yet formed	Wen，Mai
	6.Female in China's female leadership view lags behind the general trend of social development	Bao，Chen
	7.Female leaders do not adapt to the educational background of the current educational management model	Zhou，He, Zhuang
	8.Teaching management operation mechanism is lack of innovation	Wei, Chen, Zhang
	9.There is not much difference between female leaders and male leaders in Tianjin universities, but the female leaders in Tianjin universities do not reflect their own characteristics and values, and there is no obvious advantage in cultivating related abilities	Tan，Zhang
Dimensions	Variables	sources
The Challenges of Female Leaders in the Field of Education	10.Poor compatibility with information electronic equipment	Qi Mai, Bao
	11.The contradiction between the expansion of female leadership and educational resources	Chen，Wei, Wang
	12. Female leaders' understanding of teaching concepts is too outdated and conservative	Wang, Song,
	13. It is difficult for female leaders to integrate new things into teaching practice	Qi, Mai, Bao
	14. Female leaders are temporarily unable to flexibly apply in the teaching environment.	Wei，Jiao, zhang
	15. The teaching evaluation method is unreasonable for female leaders, which hinders the personalized development of female teachers	Jiang，Ma, zhou
Evaluation and supervision of female leaders	16. The current evaluation system places too much emphasis on results and lacks attention to evaluation in the process of cultivating female leaders	Chen ,Wei Wang
	17. Overemphasizing the evaluation of exam results and neglecting the evaluation of female teachers' creative thinking and abilities	Wang, Song Bao
	18. Some schools adopt a teaching evaluation system, but the supporting system is not perfect	Song, Bao,
	19. The evaluation system lacks fairness in supervising female teachers	Wei，Bao, Jiao

	20. The teacher evaluation system lacks supervision over employment and internships	Gao, Wang
	21. Lack of rigor in evaluating female leaders	Jiao ,Wang

Table 2 Literature review and summary of variables of related research

Literature review and summary of variables of related research																	
Variables		Scholars															Sum
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Communication Style	√	√	√	√	√	√	√	√	√	√						10
2	Empathy and Emotional Intelligence	√	√	√	√	√	√	√	√	√	√	√					11
3	Decision-Making Approach				√	√	√	√	√	√	√	√	√				9
4	Risk Tolerance:	√	√	√		√	√		√		√	√	√				9
5	Conflict Resolution:	√	√	√	√		√	√	√		√	√	√	√	√	√	12
6	Leadership Style:	√	√	√	√	√	√	√	√	√	√	√	√				12
7	Negotiation Tactics:	√		√	√	√		√	√	√		√	√	√	√		11
8	Work-Life Balance:	√	√	√	√	√	√	√	√	√	√	√	√	√			13
9	Leadership Barriers		√	√	√	√	√	√	√	√	√	√	√	√	√		13
10	Diversity and Inclusion:				√	√	√	√	√	√							6
11	Social expectations				√	√	√		√	√	√	√		√			8
12	Affinity	√	√	√	√	√	√	√									7
13	Confidence				√	√	√	√	√	√	√	√					8
14	Decision style	√	√	√	√	√	√	√	√	√							9
15	Conflict resolution		√	√	√	√	√	√	√	√	√	√					10
16	Communication methods		√	√	√	√	√	√	√	√	√	√	√				11
17	Diversification			√	√	√	√	√	√	√	√	√	√	√			11
18	Social Wisdom			√	√	√	√	√	√	√	√	√	√	√	√		12
19	Teamwork		√	√	√	√											4
20	Self reflection				√	√	√	√	√								5

No	Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
21	Encourage employee development				√	√	√	√	√	√	√						7
22	Gender bias		√	√	√	√	√	√	√	√	√	√	√	√		√	13
23	Glass ceiling	√	√	√									√	√			5
24	Work Family Balance	√	√	√	√	√	√	√	√								8
25	Leadership Standards			√	√	√	√	√	√								6
26	Self doubt							√	√	√	√	√	√	√	√	√	9
27	Convergence	√	√	√	√	√	√	√	√	√	√	√					11
28	Education and Training		√	√	√	√	√	√	√	√	√						9
29	Organizational Culture			√	√	√	√	√	√	√	√	√	√				10
30	Leadership Development			√	√	√	√	√	√	√	√	√	√	√	√		12
31	Communication methods	√	√	√	√	√	√	√	√	√	√	√	√	√			13
32	Decision style		√	√	√					√			√				5
33	Leadership style	√	√	√			√	√	√		√		√				8
34	Handling conflicts		√	√	√			√	√	√		√	√				8
35	Leadership Style	√	√	√	√	√	√	√	√								8
36	Reaction pressure		√	√	√	√	√	√	√	√	√						10
37	Affinity	√		√	√	√		√	√	√		√	√	√		√	11
38	Diversity and inclusivity	√	√	√	√	√	√	√	√	√	√	√	√	√			13
39	Leadership level	√	√		√	√	√	√		√	√		√	√	√	√	13
40	Communication channels	√	√	√	√	√	√	√	√	√	√						10
41	Handling Risks					√	√	√	√	√	√	√	√	√			9
42	Social Intelligence	√	√	√	√	√	√	√	√	√	√	√					11
43	Decision Risk				√	√	√	√	√	√	√	√					8
44	4Conflict Resolution					√	√	√	√	√	√	√	√				8
45	Embrace Confidence			√	√	√		√	√	√		√					7
46	Effective Communication			√				√	√	√				√			5

No	Item																Total
47	Mentorship Matters			√	√	√		√	√	√		√					7
48	Continuous Learning	√	√	√	√			√	√	√	√						8
49	Networking	√	√	√	√	√				√	√	√	√	√			10
50	Emotional Intelligence				√	√	√			√		√					5
51	Resilience	√		√	√	√		√	√	√		√	√	√		√	11
52	Strategic Thinking	√	√	√	√	√	√	√	√	√	√	√	√	√			13
53	Team Building	√	√	√	√	√	√	√	√	√	√	√	√				12
54	Adaptability	√	√	√	√	√	√	√	√	√	√	√					11
55	Conflict Resolution	√	√	√	√	√	√	√	√	√	√						10
56	Lead by Example	√	√	√	√	√	√	√	√	√							9
57	Work-Life Balance		√	√	√	√	√	√	√	√	√						9
58	Advocacy			√	√	√	√	√	√	√	√	√	√				10
59	Feedback Loop			√	√	√			√	√							5
60	Decision-Making			√	√	√			√	√	√		√				7
61	Risk-Taking	√	√	√	√	√	√	√	√	√	√	√					11
62	Time Management	√	√	√	√	√	√	√	√	√	√	√					11
63	Conflict of Interest	√	√	√	√	√	√	√	√	√							9
64	Celebrate Successes		√	√	√			√	√	√					√		7
65	Self-awareness			√	√	√	√		√	√	√		√				8
66	Resilience		√	√	√	√	√	√	√	√	√						9
67	Work-Life Integration					√	√	√	√	√	√	√	√	√	√	√	11
68	Inclusivity		√	√	√		√	√	√	√	√		√	√	√	√	13
69	Legacy Building	√	√	√	√		√	√	√	√		√	√	√	√	√	13
70	Community Engagement	√	√	√	√		√	√	√	√	√	√		√		√	12
71	Tech Savviness			√	√	√	√	√	√	√	√	√	√				10
72	Cultural Competence		√	√	√	√	√	√	√	√	√	√					10
73	Time Management				√	√	√	√	√	√							6
74	Work-Life Balance					√	√	√	√	√	√	√					7
75	Advocacy	√	√	√	√	√	√	√	√	√	√						10
76	Strategic Thinking		√	√	√	√	√	√	√	√	√						9
77	Conflict Resolution					√	√	√	√	√	√	√	√	√			9

78	Risk-Taking						√	√					√		3
79	Team Building		√							√					2
80	Negotiation Skills					√		√			√				3
81	Authenticity		√	√	√					√	√				5
82	Emotional Intelligence				√	√	√			√	√				5
83	Resilience		√	√	√		√	√	√			√			7
84	Continuous Learning			√	√	√		√	√	√	√		√		8
85	Networking			√	√	√	√	√	√	√	√	√	√		10
86	Communication Skills	√	√	√	√	√	√	√	√	√	√	√			11
87	Confidence		√	√	√	√	√	√	√	√	√	√	√	√	√	13
88	Mentorship				√	√	√	√	√	√	√	√	√	√		10
89	Collaboration				√	√	√	√	√	√	√				8
90	Advocacy		√	√	√			√	√	√		√	√	√	√	10
91	Emotional intelligence			√	√	√			√	√	√		√			7
92	Visionary			√	√	√		√			√					5
93	Inspiring			√	√	√	√	√	√				√			7
94	Innovativeness				√	√	√			√	√					5
95	Problem-solving		√	√	√			√								4
96	Empowerment				√	√	√	√	√							5
97	Authenticity				√			√	√	√		√	√	√		7
98	Leadership style	√	√	√		√	√	√		√	√	√	√			10
99	Cultural intelligence	√	√	√	√	√	√	√	√	√	√	√				11
100	Inclusion	√	√	√	√	√	√	√	√	√	√	√				11

Component dimension analysis

Table 4.7 Results of components of female leadership at University of Tianjin

Components of female leadership at University of Tianjin						
Factor loading						
Variable	Component					
	1	2	3	4	5	6
VAR0007	0.985					
VAR0079	0.886					
VAR0058	0.762					

VAR0061	0.759				
VAR0013	0.748				
VAR0034	0.737				
VAR0060	0.726				
VAR0028	0.715				
VAR0049	0.711				
VAR0039	0.707				
VAR0087	0.698				
VAR0005	0.675				
VAR0027	0.665				
VAR0043	0.653				
VAR0010	0.643				
VAR0096	0.631				
VAR0085	0.575				
VAR0040	0.546				
VAR008	0.518				
VAR0048		0.886			
VAR0057		0.857			
VAR0021		0.771			
VAR0068		0.752			
VAR0035		0.741			
VAR0078		0.733			
VAR0011		0.721			
VAR0075		0.711			
VAR0069		0.699			
VAR0050		0.687			
VAR0094		0.669			
VAR0012		0.632			
VAR0015		0.622			
VAR0099		0.619			
VAR0001		0.602			
VAR0033		0.588			
VAR0032		0.567			
VAR0097		0.534			
VAR0055		0.521			
VAR0100		0.503			
VAR0071			0.789		
VAR0067			0.698		

VAR0089		0.658			
VAR0080		0.653			
VAR0022		0.651			
VAR0023		0.649			
VAR0003		0.645			
VAR0051		0.632			
VAR0066		0.622			
VAR0024		0.614			
VAR0019		0.597			
VAR0052		0.584			
VAR0084		0.541			
VAR0044		0.537			
VAR0038		0.496			
VAR0036		0.476			
VAR0004			0.780		
VAR0077			0.775		
VAR0088			0.659		
VAR0053			0.635		
VAR0020			0.629		
VAR0054			0.615		
VAR0014			0.586		
VAR0063			0.573		
VAR0090			0.563		
VAR0082				0.765	
VAR0086				0.659	
VAR0092				0.544	
VAR0045				0.532	
VAR0017				0.521	
VAR0076				0.511	
VAR0065				0.427	
VAR0046				0.319	
VAR0062					0.763

Based on the numerical magnitude of the factor load, we can divide the variable into different principal components. Usually, a load value greater than 0.5 is considered significant, indicating a strong correlation between the variable and the principal component. Component 1: In this principal component, variables VAR0007, VAR0079, VAR0058, VAR0061, VAR0013, VAR0034, etc. have high load values exceeding 0.7, indicating that they play a crucial role in the first principal component. These variables may have correlation or common properties in some way. Component 2: In the second principal component, variables VAR0048,

VAR0057, VAR0021, VAR0068, VAR0035, etc. have high load values, exceeding 0.7, indicating that they occupy a dominant position in the second principal component. These variables may have correlation or similar properties in a specific aspect. Component 3: The third principal component covers a series of variables, among which VAR0071, and VAR0067 have higher load values. These variables may have correlation or common properties on the other hand. Fourth, fifth, and sixth principal components (Components 4, 5, and 6): These principal components contain multiple variables, but their load values are relatively low, not exceeding 0.7. This may indicate that these variables have a relatively small impact in principal component analysis, or that they have a certain degree of dispersion among different principal components.

According to research standards, if the number of variables is included and the size is less than 3, that size will not be used. Also, delete items with a factor load score below 0.5 and retain items with a score above 0.5. Elements and Related Factors of Effective Policy and Innovation Team Management The selection criteria component for art teachers in universities in Liaoning Province. There are a total of 4 components; Part 1: 19 variables; Part 2: 20 variables; Part 3: 16 variables; Part 4: 9 variables; Part 5: 8 variables. It shows the effectiveness of female leadership training management in Tianjin universities.

Table 4.8 Data analysis results of the third part of the questionnaire

Order	Assembly	Number of variables	Factor load
1	Component 1	19	0.518-0.985
2	Component 2	20	0.503-0.886
3	Component 3	16	0.476-0.789
4	Component 4	9	0.563-0.780
5	Component 5	8	0.563-0.780
	All	72	0.319-0.765

1. Number of components five different components (Component 1), with each component's variable count gradually decreasing. This may indicate that certain variables are gradually excluded or reduced during the assembly process, which may be related to different stages of assembly.

2. Components that Affect Women's Leadership

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┌────────────────────┐   ┌────────────────────┐   ┌────────────────────┐
│ Components 6:       │   │ Components 1: Steps │   │ Components 2:      │
│ Key growth factors  │   │ and methods for     │   │ Management mode   │
│ and best            │   │ Female's            │   │ for Female        │
│ implementation      │   │ leadership          │   │ leadership        │
│ methods             │   │ development         │   │ development       │
└────────────────────┘   └────────────────────┘   └────────────────────┘
                          ┌──────────────────┐
                          │ female leadership │
                          └──────────────────┘
┌────────────────────┐   ┌────────────────────┐   ┌────────────────────┐
│ Components 5:       │   │ Components 4:  The  │   │ Components 3:      │
│ Female's leadership │   │ female leadership   │   │ The influencing   │
│ Critical success    │   │ qualities and traits│   │ factors under     │
│ factor and best     │   │ model               │   │ characteristic of │
│ practices           │   │                     │   │ leadership styles │
└────────────────────┘   └────────────────────┘   └────────────────────┘
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Conclusion

The research findings were:1) There were 5 components of female leadership in universities of Tianjin city: Step and method for female leadership development, management mode, the influencing finding were characteristic for leadership, Female leadership. Critical finding and best practice, Key growth success and best implementation methods. 2) There were 18 guidelines for the components was: Start with self-awareness, Cultivate emotional intelligence, Lead with authenticity and integrity to gain trust and respect. Foster a growth mindset to embrace change and adapt to new challenges, Align your leadership style with organizational goals and culture, foster mentorship programs for skill enhancement.

Discussion

1) There were 5 components of female leadership in universities of Tianjin city: Step and method for female leadership development, management mode, the influencing finding were characteristic for leadership, Female leadership. Critical finding and best practice, Key growth success and best implementation methods. The result show that becauseThe analysis report highlights 6 components for optimizing female's leadership development, consist of 1) Steps and methods for Female's leadership development 2) Administration mode for woman leadership development   3) Female's leadership Critical success factor and best practices 4) The effecting factors under characteristic of leadership styles 5) Key growth factors and best implementation methods 6) The female leadership development model. Along with the corresponding sources: Promote and support the development of other female leaders, establish alliances and support systems: encompass a comprehensive analysis that combines both quantitative and qualitative approaches, ensuring robust and reliable data feedback. Quantitative analysis revealed statistical insights into the representation of female leaders within the university's leadership roles, shedding light on the current status of gender diversity.

Qualitative analysis delved deeper into the factors impacting the development of female leaders, identifying barriers and facilitators such as mentorship programs, educational opportunities, and workplace culture. The convergence of these analytical methods offers a comprehensive understanding of the challenges and opportunities for female leadership within Tianjin University, providing a solid foundation for further research and actionable strategies to promote gender equity and leadership development. Through semi-structured interviews with 15 key information providers, their views and issues on the goals, school facilities, evaluation systems, and other aspects of cultivating female leadership were organized. These results provide important references for further research and improvement of female leadership development. Explore and utilize new technologies and tools to improve work efficiency and innovation capabilities: Based on the provided demographic information, the following is a summary of key findings: these data provide insights into the population distribution of respondents. These demographic findings can help inform future initiatives and strategies for female's leadership development, taking into account the specific characteristics and needs of different demographic groups. Steps and Methods for Female's Leadership Development consist of 5 variables; 1.Gender bias 2. Lack of mentors and support systems 3. Work Family Balance 4. Confidence and Self promotion and 5. Learning opportunities and training. In the context of gender equality and career advancement, key challenges include overcoming gender bias, establishing effective mentorship and support systems, achieving work-family balance, boosting confidence and self-promotion, and ensuring equitable access to learning opportunities and training. Female's Leadership Critical Success Factors and Best Practices Component consist of 2 variables ; Diversity and inclusivity，Equal.Opportunitie. Key Success Factors and Best Practice consist of Talent and Ability: Some people believe that the effectiveness of female leadership lies in focusing on individual talent and abilities, not just gender. By providing equal opportunities for training, development, and promotion, the potential of female leaders can be better explored and utilized, thereby promoting organizational success and innovation. The Female Leadership Development Model. consist of 4 variables ;1.Institutional and Cultural Reform 2.Empirical research and data support 3.These views and discussions can promote in-depth thinking and evaluation of the 4 effectiveness and necessity of female leadership in Tianjin University. 4.Engaging in discussions and research on institutional and cultural reform supported by empirical data can stimulate critical evaluation of the importance and efficacy of female leadership within Tianjin University. Influencing Factors Under Characteristic of Leadership Styles consist of 7 variables 1.Develop gender equality policies 2.Provide training and development opportunities 3.Establishing a Support System 4.Introducing female mentors 5.Improving Promotion Opportunities 6.Advocate for diversity and inclusivity 7.Provide Resource Support. To advance gender equality and foster female leadership, institutions can implement policies, training, support systems, mentorship programs, promotion opportunities, diversity advocacy, and resource support.

Major finding of objective 2: To Provide the guideline for the development of female leadership at University of Tianjin

Through a questionnaire survey of 253 leaders and teachers from different universities, demographic information about the survey subjects was obtained, such as identity, gender, age, job level, and work experience. The analysis results show that different groups pay attention to and demand for female's Leadership development.

1) Practice reflection and self-growth, constantly reflecting and improving one's leadership style: This guideline emphasizes the value of self-reflection and continuous personal growth in refining leadership styles. The source for this guideline is Zhou, Che, and Jin. 2)Find opportunities to showcase your leadership skills in cross-departmental and cross-disciplinary projects: This guideline highlights the importance of seeking diverse projects to demonstrate leadership abilities. The source for this guideline is Cai, He, and Tan. 3)Developing decision-making and problem-solving skills, facing challenges and making wise choices: This guideline emphasizes the significance of honing decision-making and problem-solving skills to overcome challenges effectively. The source for this guideline is Jiang, Tian, and Le. 1. Start with self-awareness. Understand your strengths and areas for improvement." 2. Seek out mentorship and coaching to gain valuable guidance and support." 3. Embrace continuous learning and skills development to stay relevant in your leadership journey." 4.Cultivate emotional intelligence, as it's a critical factor in leadership success. 5. Build a diverse and inclusive team to harness different perspectives. 6. Lead with authenticity and integrity to gain trust and respect. 7. Foster a growth mindset to embrace change and adapt to new challenges. 8. Build a strong support network, including mentors, sponsors, and peers. 9. Take risks and be unafraid of failure; it's a stepping stone to success. 10. Identify role models and study their leadership journeys for inspiration. 11. Map out a personalized leadership development plan with clear milestones. 12. Align your leadership style with organizational goals and culture. 13. Understand the cultural context and adapt your leadership style accordingly. 14. Consider your team's composition and dynamics when choosing a leadership approach. 15. Be agile and flexible in your leadership style to respond to different situations. 16. Foster mentorship programs for skill enhancement. 17. Promote leadership workshops and continuous learning. 18. Encourage inclusive leadership practices and diversity awareness. These guidelines, sourced from Zhang, Wen, Wang, Ge, Cheng, Song, Zhou, Che, Jin, Cai, He, Tan, Jiang, Tian, and Le, 4) provide female leaders with actionable strategies for optimizing their leadership development. By following these guidelines, female can promote the growth of other female leaders, leverage technology, engage in self-reflection, seek diverse projects, and enhance decision-making skills to excel in their leadership roles. Overall, these data analysis results provide valuable information for studying the development of female leadership and can provide guidance for formulating relevant training plans and policies. At the same time, it also reflects some major issues and challenges about female's leadership in Tianjin University, providing a reference for further research and improvement.

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Recommendation
Recommendation for female leadership
Recommendations for female leadership may included the following aspects:

1. Establish gender equality policies: Develop and implement clear gender equality policies to ensure that female have fair opportunities and treatment in leadership positions.

2. Provide gender sensitive training and development opportunities: Provide customized training and development opportunities for female leaders to help them improve their leadership skills and abilities.

3. Establish a mentor program: Establish a mentor program to enable experienced and successful female leaders to serve as mentors, providing guidance and support for new female leaders.

4. Provide flexible work arrangements: Develop flexible work arrangement policies to enable female leaders to better balance work and family responsibilities.

5. Eliminate gender bias and discrimination: Develop and implement zero tolerance policies for gender discrimination, encouraging inclusivity and diversity in the workplace. Organizations should provide training to help employees identify and eliminate potential gender biases.

Recommendation for practical application
The following are practical application suggestions for female leadership:

1. Cultivate self-confidence: Encourage female leaders to build self-confidence and believe in their abilities and values. Provide support and encouragement to help them overcome self doubt and self limitation.

2. Establish a strong network: Encourage female leaders to actively seek opportunities to establish and expand their social and professional networks. Participate in industry events, join professional organizations, and actively participate in social media platforms to establish connections with other industry professionals.

3. Develop leadership skills: Provide specialized leadership training and development opportunities to help female leaders develop necessary skills, including communication, decision-making, teamwork, conflict resolution, etc.

4. Finding mentors and role models: Encourage female leaders to find mentors and role models, and gain guidance and inspiration from their experience and wisdom. Mentors can provide valuable feedback and support to help them achieve success in their career development.

Recommendation for Further Research
Recommendations for further research on female's leadership could include:

1. Longitudinal Studies: Conduct longitudinal studies to examine the long-term impact of female's leadership development programs and initiatives.

2. Intersectionality in Leadership: Explore the intersectionality of gender with other identities such as race, ethnicity, and socioeconomic background in relation to female's leadership. Investigate how multiple identities intersect and influence female's experiences, opportunities, and barriers in leadership roles.

3. Organizational Culture and Policies: Investigate the role of organizational culture and policies in promoting or hindering female's leadership development. Examine the impact

of inclusive policies, flexible work arrangements, mentorship programs, and diversity initiatives on female's career progression and leadership opportunities.

4. Leadership Styles and Effectiveness: Analyze the different leadership styles employed by female leaders and their effectiveness in diverse contexts. Explore how female's leadership styles may differ from traditional models and how these styles contribute to organizational success and innovation.

5. Male Allies and Support: Examine the role of male allies in supporting female's leadership development. Investigate the strategies and interventions that can engage male colleagues and leaders in promoting gender equality and creating inclusive environments for female leaders.

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