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# Investigation and Research on the Big Five Personality of Employees in Agricultural Engineering Industry

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#### Abstract

There is a close relationship between personality traits and occupation. This article focuses on personnel in the agricultural engineering industry as the research object. Understanding the personality characteristics of practitioners can help enterprises to do a good matching in peopleposition and people-duty, improve work efficiency, and also promote mental health and career growth of the employees. A cluster sampling method is used to select 150 employees from enterprises for a big five personality questionnaire survey. The overall test results showed that the tested employees scored lower on neuroticism factors, indicating that their emotions were stable and they adapted well. Higher scores in factors such as extraversion, openness, agreeableness, and conscientiousness indicate that they tend to exhibit friendliness, optimism, emphasis on cooperation, and a higher sense of responsibility towards work. There is a significant difference (P=0.039<0.05) in terms of agreeableness factor between female and male participants, with female getting higher scores. In terms of conscientiousness factor, the scores of the tested employees increase with age. Employees aged 50 and above have the highest score in the conscientiousness factor, and there is a significant difference compared to the tested employees aged 20-29 (P=0.028<0.05). The gender of the tested employees is positively correlated with agreeableness (p=0.039, R=0.181). There is a positive correlation between age and conscientiousness (p=0.028, R=0.192), indicating that as age increases, an individual's sense of responsibility also gradually increases. There is a negative correlation between work experience and openness (p=0.049, R=-0.173), indicating that as work experience increases, an individual's openness gradually decreases. It is recommended that companies arrange job positions for employees based on their personality traits and take corresponding incentive measures, which is conducive to their career growth. Providing professional mental health management services for employees to enhance their psychological resilience and communication competence, is beneficial for personal and corporate development.

## For citation

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#### Keywords

Agricultural engineering industry, Big five personality, Mental health.

# Introduction

The agricultural engineering industry, as a pillar industry of China's national economy, can promote the development of the entire country's economy, social progress, and the improvement of people's living standards. Agricultural engineering projects have the characteristics of large investment capital, long construction cycle, high labor intensity, and complex implementation procedures, which put higher requirements on the personality traits of enterprise employees in terms of professional emotions, responsibility, and openness. Personality is a psychological concept. Gordon Allport believes that personality is a dynamic organization of a person's internal psychophysical system, which shapes a unique pattern of behavior, thoughts, and emotions. From the perspective of psychological phenomena, "personality includes not only needs, motivations, and trait units, but also cognitive, emotional, and behavioral systems; it includes a person's attitude and views, as well as their beliefs and values." [Chen Shaohua, 2004] It is the qualification, specification, and internal standard that makes a person, and personality determines an individual's way of life. [Peng Danling, 2004] The five-factor model (OCEAN) is a relatively consistent conclusion formed by many psychologists in the process of studying personality structure, that is, personality structure includes five factors: extraversion, agreeableness, conscientiousness, neuroticism, and openness. There is a close relationship between personality traits and occupation, and the choice of occupation is an extension and reflection of personality. This study starts from the perspective of the big five personality and explores the personality characteristics of employees in the engineering industry. It can reveal the individual differences in employee career growth at a deeper level and develop targeted strategies and basis for providing psychological health services for employees in enterprises.

## **Objects and methods**

Objects. This study used cluster sampling to select 150 employees from an agricultural engineering company in Beijing, and obtained 131 valid questionnaires, including 50 males and 81 females. The basic situation of social demography involves gender, age, registered residence registration (whether Beijing registration or not) and the number of years of entry.

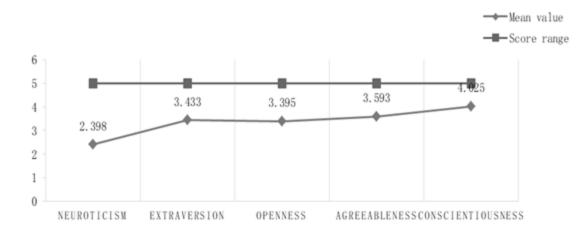
Methods. The research is conducted using the Chinese translation of NEO-FFI, revised by Professor Zhang Jianxin, a psychologist at the Chinese Academy of Sciences. The research strictly follows standardized procedures for collective testing, and each time the main examiner reads out the instructions. The data is collected using SPSS 21.0.0 and AMOS7.

#### **Results and analysis**

Overall Test Results. In this evaluation, the participants score lower on neuroticism factors, indicating that their emotions are stable and they adapt well; The highest score in the dimension of conscientiousness indicates that the evaluators have strong work motivation, are organized, planned, and persistent in their work, and have a strong sense of responsibility and career ambition; A higher score in factors such as agreeableness, extraversion, and openness indicates that they tend to exhibit friendliness, optimism, emphasis on cooperation, diligence in thinking, and rich knowledge.

Table 1 - Overall Test Results							
Factor	Mean value	Standard deviation					
Neuroticism	2.40	0.579					
Extraversion	3.43	0.614					
Openness	3.40	0.516					
Agreeableness	3.59	0.398					
Conscientiousness	4.03	0.515					

Table 1 - Overall Test Results



**Figure 1 - Overall Test Results** 

## **Specific Factor Analysis**

Analysis of Neuroticism Personality. Neuroticism personality refers to an individual's tendency to experience negative emotions, mainly manifested as emotional instability. People with high scores in the neuroticism dimension of the big five personality questionnaire are more likely to experience negative emotions such as anxiety, anger, and depression with traits such as anxiety, hostility, suppression, self-awareness, impulsiveness, and fragility. If the score of neuroticism is lower, it indicates that the emotions are more stable; The higher the score, the more unstable the mood is.

In this evaluation, 114 people had lower scores in neuroticism, accounting for 87.02%; 17 people, accounting for 12.98%, scored higher in neuroticism. From the data, it can be seen that the majority of participants are emotionally stable individuals. Among participants with different scores of neuroticism, the focus should be on those with higher neuroticism scores. Compared to others, they have greater emotional fluctuations and are easily influenced by the environment and other behaviours. So, it is necessary to focus on this group of people and provide them with targeted psychological counselling.

Analysis of Extraversion Personality. Extraversion personality refers to an individual's level of active engagement in the external world, including personality traits such as enthusiasm, sociability, decisiveness, liveliness, adventure, optimism, etc. Positive manifestations include good communication, vitality, excitement, and emotional richness. According to the big five personality data analysis, the higher the extraversion scores of the participants, the more extroverted the personality. Those with lower extraversion scores are introverted individuals. Compared to extroverted individuals, introverted individuals tend to be quieter, more restrained, and more cautious, and less interested in the external world.

In this evaluation, 34 people, accounting for 25.95%, scored lower in extraversion; 97 people, accounting for 74.05%, scored higher in extraversion. It can be seen that the majority of this group are extroverted individuals.

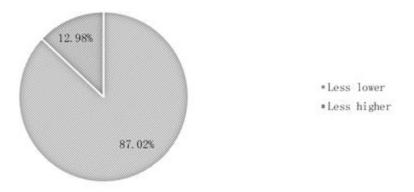


Figure 2 - Analysis of Neuroticism Personality

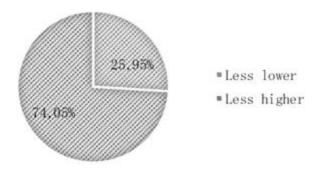


Figure 3 - Analysis of Extraversion Personality

Analysis of Openness Personality. Openness personality refers to the degree of an individual's imagination and curiosity. People with high openness scores are creative and imaginative, preferring abstract thinking, enjoying art, being sensitive to beautiful things, and having a wide range of interests. Closed individuals with lower scores in openness tend to prefer convention, practicality, and are more traditional and conservative. The higher the score for openness, the more outgoing the personality, the more open the attitude, and the easier it is to accept new things.

In this evaluation, 33 people scored lower in openness, accounting for 25.19%; 98 people scored higher in openness, accounting for 74.81%. For individuals with high scores in openness, it is more suitable to leverage their own characteristics and be willing to express their suggestions. People with lower scores of openness tend to be more closed and cannot easily change their opinions. Therefore, when carrying out work, they should not be overly demanding and need to communicate effectively with a more convincing explanation method.

Analysis of Agreeableness Personality. Agreeableness personality refers to the degree to which an individual is suitable for interacting with others in group life, characterized by trust, straightforwardness, altruism, compliance, humility, empathy, and other traits. It is positively expressed as being helpful, trusting, and empathetic, emphasizing cooperation rather than competition.

Individuals with lower scores in agreeableness value and care about their own interests, generally do not care about others, are more rational, and sometimes doubt the motives of others.

In this evaluation, 12 people scored lower in terms of agreeableness, accounting for 9.16%; 119 people, accounting for 90.84%, scored higher in terms of agreeableness. The group with higher scores in agreeableness is easy-going and plain, making them more receptive to others and adept at communicating with others.

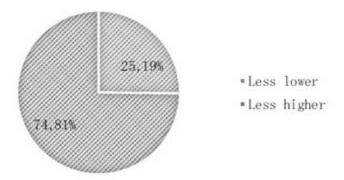


Figure 4 - Analysis of Openness Personality

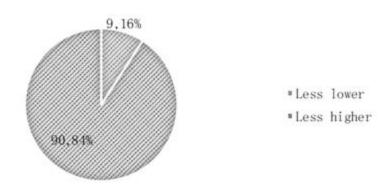


Figure 5 - Analysis of Agreeableness Personality

Analysis of Conscientiousness Personality. Conscientiousness refers to the study of an individual's organization, persistence, and motivation in goal-oriented behaviour, demonstrating qualities such as competence, fairness, organization, diligence, achievement, self-discipline, prudence, and restraint. Positive manifestations include ability, sense of responsibility, organization, and planning in actions, and the ability to persist. Individuals with high scores for conscientiousness usually exhibit reliable, standardized, capable, and responsible behavior. They are usually able to do things well and satisfy people in every aspect. Individuals with lower scores in conscientiousness exhibit irregular behavior, carelessness, low work efficiency, and unreliability.

In this evaluation, 7 people had a lower score for conscientiousness, accounting for 5.34%; 124 people, accounting for 94.66%, scored high on their conscientiousness, indicating that the majority of participants have a strong sense of responsibility. They not only take their work seriously and responsibly, but also fulfill their duties in other aspects.

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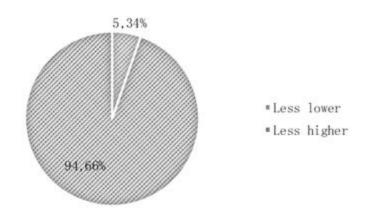


Figure 6 - Analysis of Conscientiousness Personality

#### Analysis of Test Results for Employees of Different Genders

The following "Table 2" shows the scores of participants of different genders in this evaluation. Female participants scored relatively higher than male participants in factors such as extraversion, agreeableness, and conscientiousness, and there was a significant difference in pleasant factors (P=0.039<0.05); The scores on openness and neuroticism factors were relatively lower than those of male participants, but there was no significant difference between the two. Female participants scored relatively higher than male participants in factors such as extraversion, openness, agreeableness, and conscientiousness, while their scores in neuroticism were relatively lower than male participants. Although the difference in results is not significant, previous research on personality tests has shown that in adult samples, gender factors often have a greater impact on the results than factors such as age and education level. Female employees have better emotional stability than male employees, which is reflected in the fact that female employees tend to be calmer and composed when facing pressure and emergency situations.

At the same time, the researchers speculate that male employees bear more pressure than female employees due to social roles; Female employees have a higher level of conscientiousness than men, which is consistent with previous workplace research indicating that women have a higher level of focus on their careers; Females have a higher degree of extraversion than boys, and they appear more active and outgoing than boys; Females have a higher level of agreeableness than boys, which is consistent with people's traditional belief that girls are easier to establish good relationships with people than boys.

	Male	(n=50)	Femal			
Factor	Mean value	Standard de viation	Mean value	Standard de viation	P value	
Neuroticism	2.514	0.575	2.327	0.573	0.072	
Extraversion	3.336	0.618	3.493	0.607	0.157	
Openness	3.416	0.553	3.383	0.495	0.721	
Agreeableness	3.502	0.403	3.649	0.386	0.039	
Conscientiousness	3.988	0.523	4.048	0.511	0.518	

 Table 2 - Analysis of Test Results for Employees of Different Genders

Note: P<0.05 represents a significant difference, while P>0.05 does not show a significant difference.

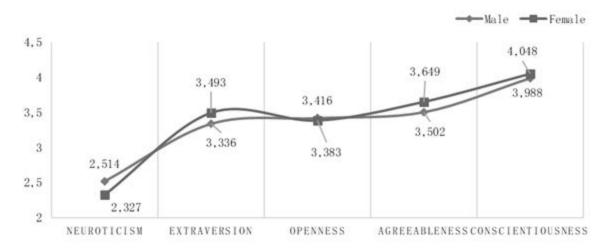


Figure 7 - Analysis of Test Results for Employees of Different Genders

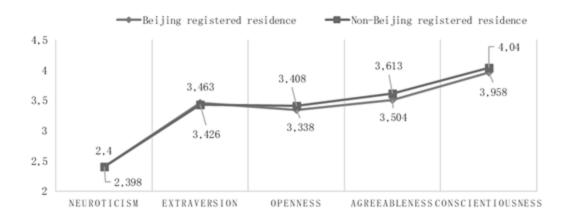
# Analysis of Test Results for Employees of Different

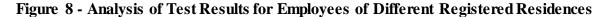
Registered Residences. The following "Table 3" shows the scores of the employees with different registered residence in this evaluation. The scores of non-Beijing registered employees are relatively higher than those of Beijing registered employees in terms of openness, agreeableness and conscientiousness, while the scores of neuroticism, extroversion and other factors are lower than those of Beijing registered employees, but the difference is not statistically significant (P>0.05).

Factor		tered residence =24)	Non-Beijin resideno	P value	
ractor	Mean value Standard deviation Mean		Mean value	Standard de viation	r value
Neuroticism	2.4	0.504	2.398	0.596	0.989
Extraversion	3.463	0.600	3.426	0.619	0.794
Openness	3.338	0.427	3.408	0.535	0.545
Agreeableness	3.504	0.329	3.613	0.410	0.226
Conscientiousness	3.958	0.580	4.04	0.501	0.484

Table 3 - Analysis of Test Results for Employees of Different Registered Residences

Note: P<0.05 represents a significant difference, while P>0.05 does not show a significant difference.





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## Analysis of Test Results for Employees of Different Ages

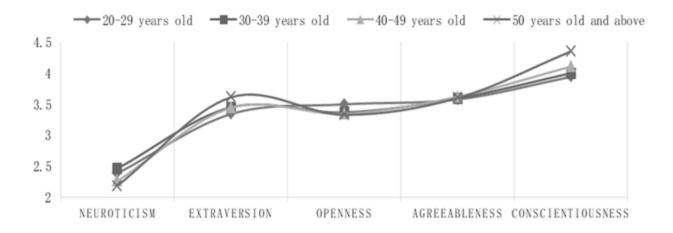
The following "Table 4" shows the scores of participants at different age groups in this evaluation. There is no significant difference in scores of participants at different age groups in factors such as neuroticism, extraversion, openness, agreeableness, and conscientiousness.

In terms of the conscientiousness factor, the scores of the tested employees increase with age. Employees aged 50 and above have the highest score in the conscientiousness factor, and there is a significant difference compared to the tested employees aged 20-29 (P=0.028<0.05). Employees in the 40-50 age group have the highest level of conscientiousness and the lowest score of neuroticism, indicating that they take their work more seriously and rigorously, while maintaining emotional stability, being more tolerant and inclusive; In the age group of 20-30, they tend to be more humane and open-minded, exhibiting more agile thinking, lively and outgoing behavior, good teamwork skills, and good teamwork spirit. However, their emotions are often not stable enough.

Та	Table 4 - Analysis of Test Results for Employees of Different Ages							
	20-29 years old	30-39 years old	40-49 years old	50 years old and				

	20-29 years old		30-39 years old		40-49 years old		50 years old and		
Trade	(n=34)		( <b>n=70</b> )		( <b>n=17</b> )		above (n=10)		Р
Factor	Mean	Standard	Mean	Standard	Mean	Standard	Mean	Standard	value
	value	deviation	value	deviation	value	deviation	value	deviation	
Neuroticism	2.388	0.580	2.466	0.594	2.265	0.550	2.19	0.495	0.37
Extraversion	3.341	0.708	3.45	0.543	3.441	0.737	3.61	0.551	0.653
Openness	3.497	0.469	3.367	0.533	3.347	0.542	3.33	0.529	0.611
Agreeableness	3.576	0.405	3.594	0.406	3.618	0.410	3.6	0.343	0.989
Conscientiousness	3.941	0.467	4	0.521	4.106	0.584	4.35	0.428	0.14

Note: P<0.05 represents a significant difference, while P>0.05 does not show a significant difference.



#### Figure 9 - Analysis of Test Results for Employees of Different Ages.

Analysis of Test Results for Employees of Different Working Years. The following "Table 5" shows the scores of participants with different years of work in this evaluation. There is no significant difference in scores of participants with different years of work in factors such as neuroticism, extraversion, openness, agreeableness, and conscientiousness.

The score of the openness factor decreases with age, and the participants with 0-2 years of work experience have the highest score of the openness factor; In terms of conscientiousness, employees

who have worked for 6-10 years scored the lowest, while those who have worked for more than 10 years scored the highest.

Factor	0-2 yea	ars (n=44)	3-5 years (n=52)		6-10 years (n=18)		More than 10 years (n=16)		Р
Factor	Mean	Standard	Mean	Standard	Mean	Standard	Mean	Standard	value
	value	deviation	value	deviation	value	deviation	value	deviation	
Neuroticism	2.436	0.499	2.365	0.687	2.567	0.463	2.194	0.495	0.279
Extraversion	3.393	0.630	3.458	0.633	3.439	0.472	3.431	0.705	0.967
Openness	3.489	0.519	3.41	0.474	3.306	0.559	3.219	0.581	0.276
Agreeableness	3.582	0.367	3.579	0.450	3.617	0.303	3.637	0.432	0.949
Conscientiousness	3.964	0.544	4.094	0.463	3.817	0.517	4.219	0.539	0.079

 Table 5 - Analysis of Test Results for Employees of Different Working Years

Note: P<0.05 represents a significant difference, while P>0.05 does not show a significant difference.

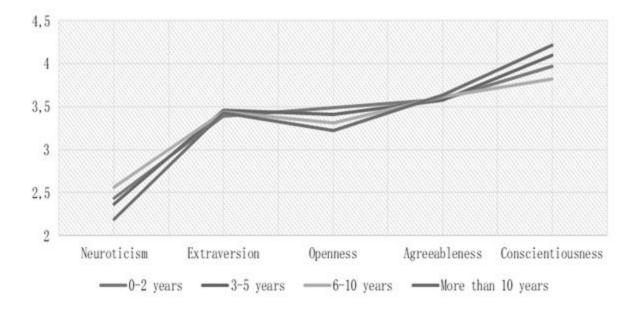


Figure 10 - Analysis of Test Results for Employees of Different Working Years

# Correlation Analysis Between Personality Characteristics and Gender, Registered Residence, Age and Working Years

Correlation analysis is a process to describe the closeness of the relationship between objective things and express it with appropriate statistical indicators. This correlation analysis mainly studies the correlation and significance between the gender, registered residence, age, years of work, neuroticism, extroversion, openness, agreeableness and conscientiousness of the staff involved.

As shown in the "Table 6" below, the gender of the tested employees is positively correlated with agreeableness (p=0.039, R=0.181); There is a positive correlation between age and sense of responsibility (p=0.028, R=0.192), indicating that as age increases, an individual's conscientious ness also gradually increases; There is a negative correlation between work experience and openness (p=0.049, R=-0.173), indicating that as work experience increases, an individual's openness gradually decreases. But the above correlation is weak, which may be related to the stability of personality.

	and Gender, Registered Residence, Age and Working Years									
F	'actor	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness				
Gender	Correlation coefficient R	-0.157	0.124	-0.031	0.181*	0.057				
	Significance	0.072	0.157	0.721	0.039	0.518				
Age	Correlation coefficient R	-0.097	0.102	-0.1	0.026	0.192*				
_	Significance	0.271	0.247	0.258	0.769	0.028				
Registered residence	Correlation coefficient R	-0.001	-0.023	0.053	0.106	0.062				
	Significance	0.989	0.794	0.545	0.226	0.484				
Working	Correlation coefficient R	-0.07	0.023	-0.173*	0.046	0.078				
years	Significance	0.428	0.793	0.049	0.602	0.377				

 Table 6 - Correlation Analysis Between Personality Characteristics and Gender, Registered Residence, Age and Working Years

Note: A significance level below 0.05 indicates statistical significance and can be used to draw conclusions; The range of the correlation coefficient R is 0-1, and the closer it is to 1, the higher the degree of correlation. R<0.4 belongs to weak correlation, 0.4 < R < 0.7 belongs to medium strength correlation, and R > 0.7 belongs to strong correlation.

# Discussions

Arranging Job Positions for Employees Based on Their Personality. Numerous studies on the big five personality and job performance have shown that successful competence in different types of work requires employees to have different personality traits. The higher the match between job types and personality traits, the more likely employees are to exhibit good job performance. [Ren Guohua, Liu Jiliang, 2005] The turnover rate of employees in the agricultural industry is relatively common, and their loyalty to the company is low, which is also detrimental to their long-term development. The human resources of enterprises can design suitable positions and work tasks based on the professional personality of employees and provide external guarantee conditions for employees to achieve their goals. The human resources of enterprises can also help them determine long-term goals, ensure the direction of personal efforts, ensure that life does not deviate, simultaneously establish phased goals to lay the foundation for achieving long-term goals, and contribute to the development of the enterprise While improving work performance and realizing personal value. Psychological research has shown that people who have a clear understanding of themselves and clear goals for the future are more likely to achieve success. Therefore, for young employees, companies need to help them accurately understand themselves and clarify their career goals, so that they can have more motivation in life and work.

Previous studies have suggested that personality traits closely related to the job performance of engineering industry talents mainly include three aspects: sense of responsibility, resilience, and willpower (conscientiousness) in work; A calm and composed temperament, strong resilience (emotional stability), respect for others, and emphasis on teamwork (agreeableness). Previous studies have also analyzed the personality traits that engineering industry talents should possess from different perspectives. Due diligence is unanimously recognized as the primary dimension, but there are different understandings of emotional stability and agreeableness. Civil engineering leaders believe that emotional stability is more important than agreeableness, while excellent civil engineers believe that agreeableness is more important than emotional stability. [Xie Hai, Ning Kai, Liu Hengrong, 2015] This is consistent with the conclusion drawn from the big five personality the researchers did earlier. It

indicates that the tested employees possess personality traits related to job performance, with the best performance in conscientiousness and positive performance in both agreeableness and emotional stability. As for which is more important, it also depends on the position and specific job requirements of the participants. However, any personality has its advantages and disadvantages. Being responsible means being diligent in handling tasks, but it can also lead to demanding perfection and being difficult to adapt, resulting in increased pressure. Increased stress can lead to a series of physical and mental reactions, including sleep disorders, anxiety, and more. It is recommended that employees learn self-regulation decompression techniques and organize a good social support system to maintain their physical and mental health.

Adopting Diversified Incentive Methods for Employees Based on Their Personality Traits. An effective incentive method is the driving force behind the work of enterprise employees, which can further unleash their work potential and improve the work performance of the enterprise. However, due to the different personality traits of each individual and their varying demands for work, a single incentive method cannot meet the needs of employees. Therefore, diversified incentive methods should be adopted according to the needs of employees. For example, for employees who are older, more responsible, and pay attention to rules and regulations, or those who are more open and good at expressing opinions and viewpoints, participatory incentives can be used to encourage them to participate in the decision-making and management of major issues in their department and unit, and to empower them with the right to supervise leadership behavior; For employees with high scores in neuroticism, sensitivity, and unstable emotions, it is important to promptly identify strengths and make progress in their work, combining material rewards with spiritual rewards; For female employees with high agreeableness, care and incentives should be taken, and organizations should be good at listening, providing more emotional support, and experiencing the warmth of the organization; For employees who are prone to a sense of achievement, honor incentives are adopted, linking work performance with promotion, promotion, and selection of top performers; For employees of post-90s and post-00s, they grew up with the attention and praise of their parents. Once they enter the workplace and lack attention and encouragement, it is easy to lack a sense of belonging and security. Organizations should encourage and reward them in a timely manner after achieving their goals to stimulate and maintain professional enthusiasm.

Conducting Training Courses Related to Psychological Resilience to Help Employees Improve Their Level of Psychological Resilience. Psychological resilience refers to an individual's ability to actively adapt and restore psychological balance after enduring pressure. It is generally believed that psychological resilience is related to personality, life experiences, and other factors. Research has shown that neuroticism, extraversion, agreeableness, and conscientiousness are all significantly correlated with psychological resilience, and are important predictive variables affecting the formation of psychological resilience. As a resource advantage, psychological resilience can endow individuals with a positive and optimistic attitude and high-level psychological resources, enabling them to calmly face the pressure brought by the workplace and maintain a positive state, which can promote individuals to actively adapt to work pressure. Therefore, organizations can carry out training courses related to psychological resilience, help employees improve their level of psychological resilience through special lectures, case studies, group counselling, workshops, and other forms, face the harm of stress and timely relieve it, providing strong support for their growth. Especially for employees from other regions who do not have a good social support system, their physical and mental health should be given more attention, and the company can provide corresponding help and support. For example, enterprises can establish employee mutual aid organizations and organize team building activities appropriately.

Improving Group Communication Methods and Enhancing Team Communication Effectiveness Based on Individual Characteristics of Employees. Human stress is largely caused by interpersonal relationships, and poor interpersonal relationships are largely due to poor interpersonal communication skills. Personality assessment can help individuals better understand their own and others' personality tendencies, recognize their strengths and weaknesses, be more accepting of themselves, and better understand and accept others. Employees in the engineering industry have a professional personality that focuses on the facts themselves, pays attention to details, and follows rules to handle things in a standardized manner. However, the engineering project itself changes greatly, and plans, drawings, designs, etc. often change. If they are too stubborn, they can easily conflict with the client, unit departments, and colleagues. Conflict itself is not a bad thing, sometimes it can improve employee motivation and enhance the performance of the enterprise. However, excessive conflicts can reduce employee work efficiency and job satisfaction. Therefore, it is necessary to improve employees' communication skills, learn how to manage conflicts, and achieve a win-win situation in conflicts. The differences in personality determine the uniqueness of individuals, and team leaders should adopt flexible communication methods based on the different personality traits of team members. For introverted and emotionally sensitive employees, leaders should listen more, encourage more, and support more to protect and not dampen their enthusiasm, and encourage them to complete tasks better; For agreeable and responsible employees, managers should adopt an open and straightforward communication approach, allowing them to do things without much intervention. Enterprises can provide support and assistance to employees in this regard.

Incorporating Mental Health Management into the Training System and Providing Professional Services. A good mental health condition helps employees release and alleviates work pressure, enhance confidence and interpersonal skills, promote individuals to play a positive role in the enterprise team, and further improve job satisfaction levels. Therefore, organizations need to incorporate mental health training into the training system to improve the mental health quality of employees. Organizations can provide mental health services to employees through external organizations, addressing issues such as emotions, stress, work relationships, marital relationships, career development, and personal growth. For those who require clinical psychological services, referral can be made for further diagnosis and treatment by clinical psychologists. Targeted group counselling can also be carried out to improve teamwork skills while addressing psychological issues.

## Conclusion

In the era of knowledge economy, individuals have undergone significant changes in their professional values, paying more attention to their career development and success in addition to meeting basic survival needs. Modern enterprise management should keep up with the pace of the times, pay attention to the psychological status of employees, promote their career development, and achieve a win-win situation for both individual employees and the enterprise.

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# Исследование и анализ пяти основных черт личностей работников сельскохозяйственного машиностроения

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#### Аннотация

Между личностными качествами и профессией существует тесная связь. В данной статье объектом исследования являются работники сельскохозяйственной машиностроительной отрасли. Благодаря знанию личных качеств специалистов руководство предприятия способно повысить эффективность работы, поддерживать психическое здоровье в коллективе и создавать условия для карьерного роста сотрудников. В исследовании использован метод кластерного анализа, выборку составили 150 сотрудников предприятий, опрошенных на предмет пяти основных качеств личности работника. Результаты исследования показали, что опрошенные сотрудники набрали меньше баллов по критерию «невротизм», что указывает на то, что их эмоции стабильны и они хорошо адаптировались. Более высокие баллы отмечались по таким критериям, как экстраверсия, открытость, доброжелательность и добросовестность, что указывает на то, что данные сотрудники склонны проявлять дружелюбие, оптимизм, готовы к сотрудничеству и ответственно относятся к работе. Наблюдается значительная разница (Р = 0,039 < 0,05) относительно критерия доброжелательности между участниками женского и мужского пола, при этом женщины набирают более высокие баллы. Что касается критерия добросовестности, баллы испытуемых сотрудников увеличиваются с возрастом. Сотрудники в возрасте 50 лет и старше имеют самый высокий балл по критерию добросовестности, и есть значительная разница по сравнению с протестированными сотрудниками в возрасте 20-29 лет (Р = 0,028 < 0,05). Пол протестированных сотрудников положительно коррелирует с доброжелательностью (р = 0,039, R = 0,181). Существует положительная корреляция между возрастом и добросовестностью (p = 0,028, R = 0,192), что указывает на то, что с возрастом чувство ответственности человека также постепенно усиливается. Отмечается отрицательная корреляция между опытом работы и открытостью (p = 0,049, R = -0,173), что указывает на то, что с увеличением опыта работы открытость человека постепенно уменьшается. Предприятиям рекомендуется учитывать личные качества сотрудников в процессе работы, а также принимать соответствующие меры поощрения, что способствует их карьерному росту. Обеспечение психологической поддержкой сотрудников с целью повышения их психологической устойчивости и коммуникативной компетентности вносит положительный вклад в личностное и корпоративное развитие.

#### Для цитирования в научных исследованиях

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#### Ключевые слова

Сельскохозяйственное машиностроение, Большая пятерка личностных качеств, психическое здоровье.

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