

RESEARCH ARTICLE

Art healing practice program for rail worker mental health

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ABSTRACT

At present, China's rail transportation industry is in a rapid development stage, and the work pressure of rail transportation workers is increasing, and mental health problems are becoming more and more prominent. This study adopts the questionnaire research method to investigate the main factors affecting the mental health of the employees of five rail transit enterprises in Guangdong Province, China and their attitudes towards art healing, and constructs a factor model to conduct a comprehensive analysis by using the SPSS software, which reveals that the work intensity, work pressure and life pressure are the main factors affecting the mental health of the rail transit employees, and that most of the rail transit employees are willing to accept the art healing and believe that art healing is a positive and effective way to solve the mental health problems. Most of the rail transit workers are willing to accept art healing and believe that art healing is a positive and effective way to solve mental health problems. When designing art healing programs, it is necessary to give full consideration to the high work intensity of rail transit workers, and in the case of fewer art healing programs in the existing rail transit industry, it is necessary to actively explore leisure and relaxing art healing programs for the workers in the rail transit industry in order to alleviate and heal the psychological problems of rail transit workers, and to assist in the healthy development of the rail transit industry. The healthy development of rail transportation industry.

Keywords: railroad workers; artistic healing; work intensity; mental health

1. Introduction

In 2022, the report of the Twentieth National Congress of the Communist Party of China proposed promoting the construction of a healthy China and prioritizing the protection of people's health in the strategic position of development. In the same year, the General Office of the State Council of China issued the "14th Five-Year Plan for National Health" and the "Outline of the Healthy China 2030" plan, proposing to improve mental health and mental health services, and improve the social mental health service system. With the emergence of various mental health problems in the society, the nation has become more and more concerned about mental health, and how to effectively alleviate psychological pressure and solve psychological problems has become the main topic in front of the public.

At present, China has become the world's largest subway construction center, the mileage of urban rail

ARTICLE INFO

Received: 11 July 2024 | Accepted: 13 August 2024 | Available online: 30 September 2024

CITATION

Wei P, Lin YY. Art healing practice program for rail worker mental health. *Environment and Social Psychology* 2024; 9(9): 2963.
doi:10.59429/esp.v9i9.2963

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transit operation has jumped to the first place in the world, and the number of cities and the length of lines of completed rail transit rank among the world's top. The rail transit industry is in the stage of rapid development, and the workload of rail transit workers is facing the state of increasing but not decreasing. With the introduction of China's "14th Five-Year" Railway Standardization Development Plan and other policies, China's rail transit workers need to take on more responsibilities. Since the rail transportation industry has been working with high intensity and in a closed and noisy environment for a long time, accompanied by the fast-paced, high-load, round-the-clock working condition, the obvious acceleration of the life and work rhythm, and the increasingly fierce competition, the life and work pressure of the rail transportation workers have been increasing, and some insecurity factors can easily appear in their thoughts and psychology^[1].

The working environment of the front-line workers of rail transit is generally very difficult, and most of them need to engage in physical labor, they are either overhauling, or maintenance of the track, or driving on the road for a long time for the driver and the station service. Their work is very heavy, and most of them not only have to face extreme weather such as hot summer and snow, but also the work content involves public safety, the requirements for the work are very strict, they need to comply with a variety of management systems, and need to accept regular high-frequency assessment. In addition, they will also be exposed to various uncertain sources of danger in their work as well as matters to be dealt with on an emergency basis. Track maintenance workers are expected to repair damaged tracks, fix signals, and carry out other technical work to ensure the functionality of the rail infrastructure, and in order to be certain that the rail network is repaired as quickly as possible, workers are under constant pressure from the business to complete their work on time, and this work is sometimes hazardous^[2].

In addition, the majority of rail transit workers are prone to psychological problems because of their irregular working hours, the inability to get a break during government-arranged holidays, and the frequent need to work night shifts. job strain and night shifts among workers were associated, both independently and in combination, with an increased risk of poor mental health. Job strain and night shifts among workers were associated, both independently and in combination, with an increased risk of poor mental health. poor mental health by means of a combined effect with shift work^[3].

The psychological health and harmony of rail transportation workers has an important impact on the development of rail transportation industry and national safe travel. Therefore, the state should pay attention to the mental health of rail transportation workers, and take effective and reasonable ways and means to promote their mental health level; seek more ways to solve or alleviate the psychological problems of rail transportation workers, and at this time, art healing as a new way of healing the soul was born, and became a possible solution to the psychological problems of rail transportation workers. As one of the countries with the best development of rail transportation industry, China is a reference for the whole world to use art healing to solve the psychological problems of rail transportation employees.

According to Korean scholar , art healing refers to the restoration of physical, psychological, social, and spiritual integrity through art, and states that the goal is to change the participants' inner selves, emphasizing restoration through self-treatment^[4]. Art therapy has been widely used in western countries since it was proposed by Nannenberg, an American psychiatrist, in the 1930s, and art healing in China has been slowly popularized and developed since the 1990s, and although some studies on art healing theories have successively appeared, there is still less research on the specific practice of how to use art healing to solve some specific people's mental health How to use art healing to solve the mental health problems of certain

specific groups of people? How to use art healing to solve the mental health problems of certain specific groups of people needs to be further developed and researched.

Based on existing research, this study analyzes the main factors affecting the mental health of rail transit workers. Moreover, it explores the attitudes of rail transit workers toward the use of art healing to solve their psychological problems when facing mental health problems. Finally, the art healing theory was used to design an art healing practice program by combining the main factors affecting the mental health of rail transit workers. This study combines art and psychology to conceptualize and practice the art healing program, which provides an effective program for the mental health problems of rail transit workers; it also adds humanistic care to the originally monotonous railroad working environment, so that the rail transit workers can feel pleasure and healing from it, and gives full play to the healing function of art, which enables the rail transit workers to fully relax their psyche, and better guards their mental health.

By combining with professional practice, this study has sorted out and explored the mechanism of the role of art healing in facing the mental health problems of rail transportation workers. On the basis of the theory of art healing, the study enriches the form of art healing and broadens the application field of art healing. Meanwhile, this study focuses on the factors affecting the mental health of rail transit workers, scientifically applies the art healing theory, and designs an art healing program. It provides rail transit workers with highly accurate art services, heals their hearts with art, strengthens their psychological defense, promotes their mental health, and provides practical reference programs for rail transit industry enterprises. In addition, this study will make the society and the industry pay more attention to the mental health of rail transportation workers, and ultimately promote the prosperity of the world rail transportation industry.

2. Theoretical background

2.1. Key concepts

In 1958, American psychologist Margaret Nannenber used psychoanalytic theory as a guide to combine art and psychotherapy, after which the Art Therapy Association (AATA) was established in the U.S. In the 1960s, art therapy became an emerging professional field, and art was recognized as having a psychotherapeutic role^[5]. In the case of human physical and psychological ailments, human beings have combined the two fields of art and medicine to form a new field, which is referred to as art therapy or art therapy in psychotherapy^[6]. artistic healing can be seen as a way for the experiential to change their psychological condition, and the art therapy can be used as a way for the experiential to change their psychological condition. Their negative emotions through a new cognitive approach^[7].

Meanwhile, Li believes that art healing has two main dimensions, one is that individuals can heal physical and mental illnesses and imbalances during the process of creating and appreciating art, and the other is that art can reveal, excavate, reflect, and repair collective issues and traumas of the group and the times^[8]. The healing nature of contemporary art stems from the fact that contemporary art changes social perceptions, and from the fact that artists are able to release their pent-up energy through art creation, and their works sensitize and heal the public^[9]. The scope of art healing includes music, painting, writing, and other forms, and the target groups are mainly divided into two categories: those who are mentally ill, mentally retarded adults and children; and those who are ordinary people but may have suffered from psychological events, have stage-specific psychological problems, or desire for self-transcendence and spiritual growth, and have a high level of interest in self-exploration^[10].

This study of art healing does not only use some kind of art to treat physical or psychological diseases, and does not emphasize the therapeutic function, but prefers the healing nature of art, which mainly refers to

the process of ordinary people creating and enjoying art content through art, through the specific guidance of some professionals, and through some kind of art form, which may be music, dance or drama and so on, so as to release their own internal backlog of energy, and more. It is more oriented to a kind of artistic growth for spiritual soothing or self-psychological transcendence. This kind of healing can relieve the stress of study, work or life, bring physical and mental pleasure, generate positive emotions and give people unlimited energy.

2.2. Literature review

Relevant literature mainly focuses on the research situation of mental health of workers in the rail transportation industry and the analysis of the current situation of the use of art healing, and found that many experts at home and abroad have positively affirmed the art healing and pointed out its great potential, and then combined with the actual direction and the specific situation of this study, we are committed to guarding the mental health of rail transportation workers with art healing.

2.2.1. Research on the mental health of workers in the rail transportation industry

Due to the rapid development of the rail transportation industry, the workload of employees is heavy. Under the influence of various aspects, the psychological problems of employees are increasingly prominent. Many scholars in China are concerned about the psychological health of workers, pointed out that the accelerated pace of work and pressure of railroad workers need to be prevented and channeled to prevent the psychological pressure of workers^[11]. The psychological health of railroad workers is less desirable compared to the national norm, in which somatization, obsessive-compulsive symptoms, depression, anxiety, hostility, fear of Terror, paranoia, psychoticism and total score are higher than the domestic adult norm^[12]. Mental health problems not only affect the physical and mental health of individual workers, but also bring safety hazards to the production of railroad transportation, and even restrict the deepening reform and development of the railroad^[13].

Many foreign scholars have also paid attention to the mental health of workers. Van Veen Malte and Oude Hengel Karen M pointed out that at least one psychosocial work factor has an association between exposure and mental health complaints, affecting the mental health of workers^[14]. The presence of psychological problems not only affects emotional but also physical health. Goetz Carlos et al in their study showed that mental health is a current concern because this affects emotional states, behavior and physical reactions that can reduce worker productivity, affect the economic status of industries and lead to serious mental, physical conditions^[15].

2.2.2. Theoretical research and practical examples of art healing

Art healing as an emerging thing in China, Meng Peixin, the first person who proposed and used integrated art therapy in China, believes that integrated art therapy, with the help of symbolic artistic expressions and cognitive space expansion, etc., transgresses the left brain's judgmental system or the obstacle of verbal discernment, helps people help themselves, helps visitors and cultural groups to gain insights into the realities of life, repairs emotional trauma, and transcends the integration of an individual's physical and mental development, so as to achieve healing^[16].

Some scholars believe that art has great healing potential. Basumatary Bhavna Khajuria argues about art as a therapeutic potential and how the visual arts can be a medium for healing emotional injuries, increasing understanding of oneself and others, developing the capacity for self-reflection, alleviating symptoms, and changing behavior and thought patterns^[17]. The philosophical background of art therapy activities is based on the idea of respect for human beings with a commitment to solving problems, trust in the possibility of

solving problems, trust in the possibility of accessing new methods, a spirit of service and sacrifice to society, the idea that moral thinking cures pathologies of the mind, the idea that a healthy body begins with a healthy mind, and the idea that the arts are useful for achieving mental and physical well-being^[18].

Meanwhile, some scholars have developed a range of practical programs for art therapy. The results of a 3-day short-term art therapy program for children whose parents had died of cancer showed that an art therapy group intervention for children aged 7-12 years who had lost a parent to cancer was feasible and acceptable to the recipients. The intervention is expected to improve postmortem adjustment and quality of life due to the death, and this improvement was maintained after 3 months^[19]. Group art therapy using art museum exhibits was found to have a significant effect on reducing children's problematic behaviors in a program using art museum exhibits^[20]. Additionally, art therapy has been shown to alleviate irritability, aggressive behavior, painful memories, and general cognitive deficits and negative emotions following disabling trauma in military personnel^[21].

Through the literature review, it is found that there are many factors affecting the mental health of rail transportation workers, but most scholars focus on factors such as work intensity, with reference to the emergence of mental health problems in other industries, but also includes factors such as job benefits and life factors that also affect the mental health of employees. Moreover, both theory and practice, art healing has appeared in a number of industries, with the economic and social progress, people are more and more recognized art healing. Therefore, the following hypothesis is proposed: work intensity, job benefits, life factors are the main factors affecting rail transit employees, and at the same time, under the positive attitude of rail transit employees towards art healing, we can try to put forward solutions to solve the psychological problems of employees in the rail transit industry, which will play a positive role in the psychological guidance of employees in the rail transit industry.

In summary, it can be seen that a large number of studies at home and abroad have confirmed the effectiveness of art healing to solve psychological problems, and art healing can not only help people eliminate negative emotions, but also effectively reduce some of the problematic behaviors. At present, many scholars have carried out research on art healing for children and other groups, but fewer of them have conducted in-depth analysis and research on art healing from the perspective of railroad transportation employees. Meanwhile, it can be seen that many scholars at home and abroad have already paid attention to the psychological problems of railroad transportation employees and tried to put forward some solutions, but the research on the solution of the psychological problems of the employees of the traffic and transportation industry from the perspective of art healing is still relatively small. However, the research on solving the psychological problems of employees in the transportation industry from the perspective of art healing is still relatively small. Therefore, on the basis of existing research, this study will analyze the factors of employees' psychological problems and explore the art healing solutions to guard the psychological health of employees, so as to provide new ideas and reference for guarding the psychological health of employees and promoting the development of the rail transportation industry.

3. Research design

3.1. Questionnaire design

In the process of questionnaire preparation, in order to ensure the reliability and validity of the questionnaire, through the comprehensive analysis of relevant literature, existing research questionnaire options, the finalized questionnaire includes three parts: the first part is the basic situation of the survey

respondents, the second part is the main factors affecting the psychology of rail transit workers, and the third part is the attitude of rail transit workers towards art healing.

3.2. Subjects of the study

Ltd. Group, Shenzhen Metro Rail Transit Co., Ltd., Foshan City Rail Transit Development Co., Ltd., Dongguan City Rail Transit Co., Ltd. and China Railway Guangzhou Bureau Group Co., Ltd. and other five Guangdong Province rail transit enterprises employees as the target of the survey, which covers different academic qualifications, marital status, gender, years of experience and positions of the employees. These rail transit enterprises are at the forefront of China's reform of the city, the company's system is perfect, the employee welfare system of China's rail enterprises in the forefront, the choice of these enterprises as the subject of the study is not only representative of these enterprises, these enterprises attach great importance to the mental health of the employees, the feasibility of the promotion of the practice of art healing program.

3.3. Modeling

This paper examines the effects of work intensity, work stress, and life stress on the mental health of rail transit workers, for which the following measurement model was constructed for the regression of this study:

$$\text{Mental health situation}_i = \alpha + \beta \text{working intensity}_i + YX_i + \varepsilon_i$$

$$\text{Mental health situation}_i = \alpha + \beta \text{work pressure}_i + YX_i + \varepsilon_i$$

$$\text{Mental health situation}_i = \alpha + \beta \text{pressure of living}_i + YX_i + \varepsilon_i$$

where mental health situation indicates the degree of mental health of railroad transit workers as the explanatory variable; working intensity, pressure of living, pressure of living indicate the intensity of work, pressure of work, and pressure of living as the core explanatory variables; Y represents the control variable; subscript i denotes the interviewed individuals respectively; ε_i is the randomized disturbance term.

3.3.1. Explained variables

The main concern of this study is the mental health of rail transit workers, which is difficult to quantify objectively, so the article chooses to divide the problem into multiple dimensions, respectively, from the "can concentrate on things, whether there is the idea of lightening the life, and feel their own mental depression" and other dimensions as an explanatory variable to assess the indicators, and five categories were designed: 1=completely agree; 2=disagree; 3=basically agree; 4=agree; 5=completely agree.

3.3.2. Explanatory variables

Combined with the previous literature analysis, this study takes work intensity, work pressure and life pressure as explanatory variables, and the specific analysis is as follows: when analyzing the questionnaire research data, the initial descriptive analysis of the questionnaire and then through the reliability analysis and validity test, it is learned that the dimensions of the whole scale in this study are reliable and can reflect the true extent of the indexes being measured. Finally, through the factor analysis of employee mental health, the scale was subjected to exploratory factor analysis, and the factors were extracted using principal component analysis, the number of factors with eigenvalues greater than 1 was extracted, and orthogonal rotation was performed using Kaiser's normalization of the maximum variance method, and finally 3 mutually independent common factors were extracted, and the results are shown in **Table 1**. The variance contribution rate of these three main factors is greater than 10%, the highest reaches 22.623%, and the cumulative variance contribution rate is 62.166%, and the results are shown in **Table 1**.

Table 1 uses principal component analysis to downscale the selected 18 original sample data, and then extracts the common factors according to the degree of contribution of the downsized factors, and the cumulative variance contribution rate of the three common factors in the table reaches 62.166%, which is greater than the minimum lower limit of 60%. It can be seen that the contribution rate of 62.166% is provided by the first three principal components with eigenvalues greater than 1. Therefore, these 18 indicators can be summarized as three principal factors.

Table 1: Interpretation of total variance of psychometric scales for railroad workers

ingr edie nt	Total Variance Explained			Extract the sum of the squares of the loads			Rotational load sum of squares		
	(grand) total	Percentage of variance	Cumulative %	(grand) total	Percentage of variance	Cumulative %	(grand) total	Percentage of variance	Cumulative %
1	8.859	49.218	49.218	8.859	49.218	49.218	4.072	22.623	22.623
2	1.259	6.994	56.212	1.259	6.994	56.212	3.87	21.5	44.123
3	1.072	5.954	62.166	1.072	5.954	62.166	3.248	18.043	62.166
4	0.7	3.889	66.056						
5	0.651	3.618	69.674						
6	0.61	3.391	73.064						
7	0.574	3.188	76.252						
8	0.551	3.062	79.315						
9	0.524	2.909	82.224						
10	0.489	2.719	84.943						
11	0.435	2.414	87.357						
12	0.412	2.289	89.646						
13	0.376	2.089	91.735						
14	0.362	2.01	93.745						
15	0.322	1.787	95.532						
16	0.306	1.698	97.23						
17	0.275	1.529	98.759						
18	0.223	1.241	100						

Extraction method: principal component analysis.

In order to ensure that the rotated factors will not change the degree of model fitting to the data, this study adopts the maximum variance orthogonal rotation method, which can make the factor interpretation have better representation. After rotation, the contribution rate of the three extracted common factors is still 62.166%, which has the same degree of explanation as that before rotation, and thus meets the experimental requirements. The data in the rotated component matrix represent the contribution rate of specific indexes in each common factor. Generally speaking, the value greater than 0.6 is the main indicator to explain the common factor.

As can be seen from **Table 1**, the first common factor is represented by the principal components of the higher degree of labor intensity of the workplace; eating on time on weekdays; regular work and rest on weekdays; having the energy and stamina to go out and have fun on Saturdays and Sundays when they are on vacation; when they are in contact with a new field to learn new knowledge; and when there are great

changes in the work environment, etc. The six indicators can directly reflect the work intensity of the impact on the workers, and so it will be named as the intensity of the work.

The second common factor is represented by the principal components of the higher degree of daily work pressure; salary dissatisfaction; poor welfare benefits; often competitive pressure in the workplace; psychological pressure and emotional problems have not been correctly channeled and catharsis and other five indicators that can directly reflect the job welfare factors on the impact on the workers, and therefore named it as the work pressure factor.

The second common factor is represented by the principal components of a higher degree of life stress; irritability because of family conflicts; distress because of children's schooling, employment or other issues related to family members; psychological burden because of being single and unmarried; stress because of problems such as job promotion or interpersonal relationships in the workplace; overwhelm and knowledge anxiety because of over-absorption of information from various sources; the existence of an information gap and the fear of keeping up with the development of the times. There are seven indicators that can directly reflect the impact of life factors on workers, and therefore they are named life stress.

3.3.3. Control variables

The control variables chosen for the study were: gender, marriage, education, job position, and years of service.

4. Research analysis and results

4.1. Descriptive statistics

According to the descriptive statistics in **Table 2**, the mean provides information about the average level of the variable, while the variance demonstrates the degree of dispersion of the data, i.e., the extent to which the values of the variable differ from its mean. The minimum and maximum values indicate the minimum and maximum values of the variable taken in the data set, respectively, while the observed values tell us how many observations there are in the data set. As can be seen from the table, the means and variances vary considerably from industry to industry, which reflects the factors.

The results of the descriptive statistical analysis of the variables from **Table 2**. It was found that the mean value of the variable work intensity is 3.537076, which is between "agree basically" and "agree", but more inclined to "agree". The mean values of the variables work pressure and life factors are 3.417455 and 3.487333 respectively, which are between "basically agree" and "agree", indicating that work intensity, work pressure and life pressure have a greater impact on the mental health of rail transit workers. This indicates that work intensity, work pressure and life pressure have a greater impact on the mental health of rail transit workers. The average value of the explanatory variables is 2.247788, which is in favor of "basically agree", and the variable "inability to concentrate" reaches 2.271386, which indicates that there may be problems with the mental health of rail transportation workers.

Table 2: Descriptive statistics

Variable	Mean	Std. dev.	Min	Max.
Mental health situation	2.247788	1.224969	1	5
Inability to concentrate	2.271386	1.227197	1	5
distinguishing between the sexes	1.436578	0.496695	1	2
matrimonial	1.59587	0.491448	1	2
education attainment	2.59882	0.915739	1	4
job title	1.702065	1.131722	1	4
years of experience	1.442478	0.906303	1	4
monthly salary	1.961652	1.096662	1	4
Working intensity	3.537076	1.137793	1.26705	6.33525
work pressure	3.417455	1.178886	1.25268	6.2634
pressure of living	3.487333	1.247955	1.29182	6.4591

4.2. Empirical analysis

4.2.1. KMO test and Bartlett's test of sphericity

Suitability test is conducted before factor analysis. Firstly, Bartlett's sphericity test and KMO test are carried out to analyze, in general, the criterion of whether it passes the Bartlett's sphericity test is to see whether the sig. value is less than 1% and whether the approximate chi-square value is relatively large. sig. value is 0.000, which is less than 0.001, which indicates that the difference is significant and meets the requirement of factor analysis. Meanwhile, Chi-square is 3356.169, which is a large value, indicating that there is a significant correlation relationship between the indicators between industries, and passed the Bartlett's test of sphericity.

KMO test is mainly used to compare the partial correlation coefficient as well as the simple correlation coefficient between the variables, and in general, the criterion of whether to pass the KMO test is to see the size of the KMO value. As long as the KMO value is greater than 0.7, it means that the data selection is appropriate, as can be seen from **Table 3**, the KMO value is 0.943, which indicates that the variable indicators selected in this paper are within the acceptable range and pass the KMO test test. In view of this, the selected data are suitable for research by factor analysis.

Table 3: KMO test and Bartlett's test of sphericity

	KMO test	0.943
	Chi-square	3356.169
Bartlett's test	df	153
	Sig.	0.000

4.2.2. Regression analysis

In this paper, a linear regression model was used to regress the explanatory variable mental health situation. The regression results are shown in the **table 4**. The table columns (1) to (3) show that from the regression of the explanatory variables, the relationship between work intensity, work stress, life stress and mental health of rail transportation workers is significant and obvious.

Table 4: Baseline regression

VARIABLES	(1) Mental health situation	(2) Mental health situation	(3) Mental health situation
Working intensity	0.4345*** (0.0592)		
work pressure		0.4339*** (0.0595)	
pressure of living			0.4231*** (0.0499)
sex	0.0557 (0.1253)	0.0001 (0.1326)	0.0463 (0.1243)
marr	-0.0068 (0.1590)	-0.0025 (0.1606)	-0.1262 (0.1481)
edu	-0.2337** (0.0956)	-0.2466** (0.0964)	-0.1956** (0.0946)
work	0.0322 (0.0845)	0.0157 (0.0821)	0.0181 (0.0801)
year	0.0983 (0.0982)	0.0943 (0.1002)	0.0062 (0.0930)
Income	-0.0058 (0.0847)	0.0189 (0.0918)	0.0549 (0.0868)
Constant	1.0640*** (0.4046)	1.2098*** (0.3805)	1.2679*** (0.3708)
Observations	339	339	339
R-squared	0.210	0.221	0.226

4.2.3. Robustness analysis

In order to test the validity of the results of the above study, the present study completed the placebo test by randomly generating an experimental group to verify the effects of work intensity, work stress, and life stress on the mental health of rail transit workers. The explanatory variables "work intensity, work stress, life stress" were first randomized, and then put into the model for regression to generate an estimated coefficient β , and then repeat this process 500 times, and finally generate 500 β . **Figures 1 to 3** show the distribution of β , which is close to the standard normal distribution, with a mean close to 0, indicating that the estimated equation passes the placebo test, which is a good indicator that the placebo test is valid, indicating that the estimated equation passes the placebo test, suggesting that the effects of work intensity, work stress, and life stress on the mental health of railroad transit workers are robust, and excluding other random factors from interfering with the results.

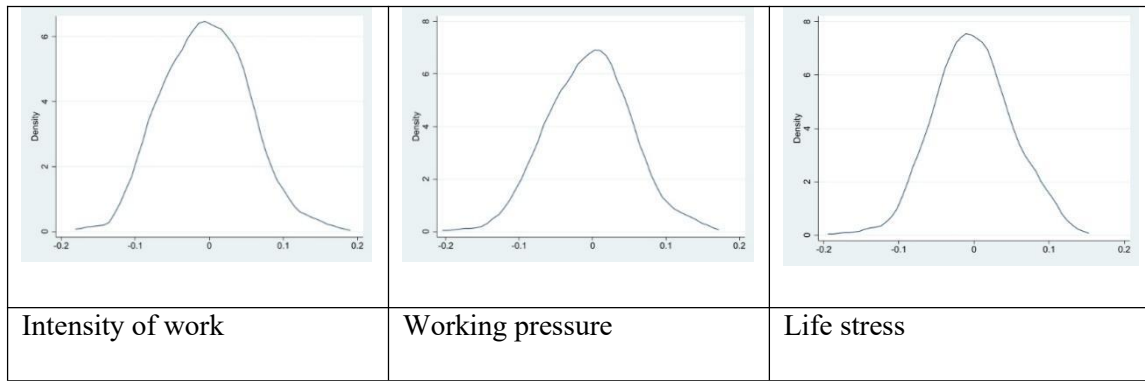


Figure 1: Robustness analysis

4.2.4. Analysis of mediating effects

In this study, the mediating variable (inability to concentrate), the dependent variable (mental health of rail transit workers), and the independent variables (work intensity, work stress, and life factors) were put into an equation to first test whether there is a significant relationship between the dependent variable on the mediating variable, so as to infer the mediating effect of inability to concentrate between work intensity, work stress life stress, and the mental health of rail transit workers.

The results are shown in **Table 5**, and the correlation analysis of the inability to concentrate with work intensity, work pressure, and life pressure shows that the inability to concentrate is significantly positively correlated with work intensity ($\beta=0.499^{***}$), work pressure ($\beta=0.412^{***}$), and life pressure (0.486^{***}), which indicates that the greater the work intensity, work pressure, and life pressure are, the more the railroad employees the less able to concentrate on things, which not only further affects the health of railroad workers, but also is a reflection of the emergence of mental health problems.

Table 5: Mediating effects

VARIABLES	(1) Inability to concentrate	(2) Inability to concentrate	(3) Inability to concentrate
Working intensity	0.499*** (0.055)		
work pressure		0.412*** (0.059)	
pressure of living			0.486*** (0.046)
sex	0.045 (0.121)	0.020 (0.131)	0.034 (0.125)
marr	-0.059 (0.153)	-0.063 (0.158)	-0.196 (0.146)
edu	-0.166* (0.095)	-0.197** (0.098)	-0.122 (0.094)
work	0.103 (0.076)	0.079 (0.077)	0.087 (0.074)
year	-0.012 (0.084)	-0.011 (0.086)	-0.118 (0.081)

VARIABLES	(1) Inability to concentrate	(2) Inability to concentrate	(3) Inability to concentrate
Income	-0.017 (0.077)	0.005 (0.087)	0.053 (0.082)
Constant	0.844** (0.408)	1.318*** (0.372)	1.076*** (0.343)
Observations	339	339	339
R-squared	0.244	0.190	0.265

Table 5. (Continued)

In addition, in order to clarify the attitude of railroad employees towards art healing also conducted an extensive survey, the study found that more than 60% of people do not know about art healing, but more than 65% of people hold the attitude of conceptual novelty towards art healing, and 76% are willing to accept art therapy. Employees have positive attitudes towards art healing, so art healing can be extremely helpful to employees.

Based on the above research, it can be seen that there may be problems with the mental health of railroad workers, in which work intensity, work pressure and life pressure are the main factors affecting the mental health of railroad workers. Additionally, most of the workers are willing to accept art healing and think that art healing is more positive and effective, and art healing can provide more effective help in curing the workers' psychological problems, which provides the possibility of conceptualizing the art healing program after this study.

5. Conclusion

Through research and analysis, this study found that the main factors affecting the mental health of rail transit industry workers are work intensity, work pressure and life pressure (including irregular work and rest, etc.), and found that most of the rail transit industry has a positive attitude towards art healing and is willing to accept art healing related content. On this basis, combined with the theory and practical experience of art healing, the concept of art healing program for rail transportation industry employees from the promotion of art healing, content construction, effect guarantee, etc., the program will help and promote the stable development of art healing in China, and further highlight the advantages of art healing, provide new ideas and research significance for the mental health of rail transportation workers, and realize the value of art healing program. The program will help to promote the stable development of art healing in China.

Based on the previous research, this study further clarifies the main factors affecting the psychology of the employees in the rail transportation industry, and also investigates the attitudes of all employees towards art healing, as well as attempts to provide art healing programs in the rail transportation industry, but the study is limited to the representative rail transportation enterprises in China, and better data from the rest of the world is needed in the future to give support to the study, and for the proposal of practical programs, the effectiveness is still being tested. Moreover, the effectiveness of the proposed practice is still being tested, and more railroad companies need to participate in it to promote the development of art healing practice in the railroad transportation industry.

At present, it is still difficult to promote the development of art healing in the rail transportation industry. Few rail transportation enterprises are willing to build an art healing system for their employees in an all-round way; the national policy support for art healing is also still insufficient; in addition, the basic cognition of employees on psychological problems is still not comprehensive enough, and a lot of employees are not

able to face up to the psychological problems. However, with the economic and social development and the further deepening of social awareness of art healing, art healing will surely become an important means and way for people to heal psychological trauma and alleviate psychological problems. Of course, we are looking forward to more art healing theory and practice workers to enrich the form and content of art healing, and to promote the comprehensive development of art healing in various fields of the society, such as rail transportation enterprises.

6. Recommendations

The mechanism of the art healing function is to integrate the separated and opposing parts of individual life through the creative process, and there are various ways of art healing, such as painting, dance, theater, music and so on^[22]. Therefore, in the process of art healing, it is recommended that rail transit enterprises and related departments adhere to the principle of focusing on rail transit workers, uphold the concept of promoting the personal development of workers in the rail transit industry, follow the laws of physical and mental development of rail transit workers, create immersive healing situations, utilize various forms of art healing, enhance the interactivity in the process of art healing, and systematically consider the object of healing, the content, the form, the environment systematically consider the object of healing, content, form, environment and its characteristics, so that the designed content forms an organic whole. Moreover, in the process of examining the effect of art healing, the accuracy of information dissemination is clarified, and the development of personal mental health of workers in the rail transportation industry is comprehensively promoted to ensure the final effect of art healing.

6.1. Empowering the development of arts healing through "business + public welfare"

Both art therapy promoters and beginners should pay attention to the theories, methods and techniques within the art therapy profession, but also to the humanistic spirit and ideological background at the time of the birth of art therapy, in order to maintain a critical and reflective professional spirit in the process of exploration and development^[23]. In the previous analysis, it is known that many rail transit workers do not know enough about art therapy. In order to further promote art therapy in the rail transit industry, in the spirit of professionalism of art therapy, and in combination with the low investment in art therapy, we can try to promote art therapy through the following ways The mode of "business + public welfare" allows more rail transit workers to understand and be familiar with art healing. On the one hand, through the creation of railroad small objects business model, the integration of railroad elements to produce peripheral products, so that the rail traffic subconsciously understand the relevant knowledge of art healing; on the other hand, through the development of exclusive offline art healing public welfare activities, with the help of the form of the activities, in a form of a pleasant form, so that the rail traffic workers in the process of participating in art activities in the process of the silent realization of the importance of paying attention to the issue of mental health. The importance of mental health.

6.2. Building art healing content with "art + sharing"

In the survey, it was found that rail transit workers have a high intensity of work, not only the work content is complicated and physical labor, but also many positions like drivers are in a relatively closed space. Therefore, in response to this result, high intensity content should be avoided and expressive art healing content should be increased when constructing an art healing program for rail transit workers. Expressive art therapy is a counseling method that uses various art vehicles such as games, music, sand trays, paintings, dances, and plays to express people's inner thoughts, feelings, and experiences (conscious or subconscious) in a supportive environment to promote spiritual growth and healing^[24]. Through casual and relaxed non-verbal communication, rail transit workers are allowed to express their inner feelings, thus

helping them to recognize themselves, achieve self-acceptance, and achieve the effect of psychological healing.

6.3. "Platform + individual" to ensure the effectiveness of artistic healing

Treatment programs are flexible and patient dependent, and two art therapists may choose different art mediums to treat the same mental health condition. However the core principle is always based on the therapeutic response to these materials, i.e. the theory that specific material mediums evoke specific types of emotional expression^[25]. The survey found that the rail transportation industry workers work and rest time is not regular and many types of work, in the face of this problem, first of all, we need to establish the art of healing work platform, from the hardware and software to ensure that the construction of the workers' art of healing, the rail transportation industry art of healing workers should be based on the specific circumstances of the workers, including types of work, work and rest time, and other factors to develop an exclusive "art of healing programs "In addition, it is also necessary to establish a comprehensive "art healing effect monitoring system" for rail transit workers, regularly detecting changes in the mental health of workers at different stages, early detection, early intervention, early adjustment, so as to achieve a cure. Early detection, early intervention, early adjustment, so as to achieve the healing effect.

Conflict of interest

The authors declare no conflict of interest.

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