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ORIGINAL

ASSESSING THE INFLUENCE OF COLLEGE CAMPUS ENVIRONMENTS ON MENTAL HEALTH INTERVENTIONS FOR ECONOMICALLY DISADVANTAGED STUDENTS

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ABSTRACT

Objective: To explore the relationship between college students with financial difficulties, campus environment and mental health, and to explore whether physical activity can be used as a mediating variable to make campus environment affect mental health through it, so as to improve the mental health of college students. **Methods:** A total of 150 college students from five universities in Shanghai were selected by stratified random sampling. The basic information of the questionnaire was surveyed, the 3D accelerometer and GPS measured the intensity, time and trajectory of physical activity, the built environment factors were extracted by GIS, and the structural equation model was tested by AMOS 22.0. **Results:** Campus environment had a significant direct effect on the mental health of college students with financial difficulties, and the path coefficient was 0., respectively43, the order of its contribution is landscape elements, spatial configuration, building density, distance from sports venues, and the obvious direct and indirect effects on the mental health of college students with financial difficulties through physical activities, and the path coefficients are 032. 0.101;Campus environment and physical activities have a positive impact on the mental health of college students with financial difficulties. **Conclusion:** Campus environment and physical activities have direct and indirect effects on the mental health of college students with financial difficulties. By revealing the impact path of college students with financial difficulties' mental health, it is of great practical significance for the construction

of urban communities, the improvement of campus environment, the promotion of physical activities, and the improvement of mental health in the new era.

KEYWORDS: college students with financial difficulties; campus environment; mental health

1. INTRODUCTION

In higher education, China has always attached great importance to the problem of poor students, and every year the Ministry of Education has taken the issue of poor college students with financial difficulties as a key task. For poor students in universities, the state has given a relatively comprehensive financial aid in the economic aspect, but this series of subsidies are all material, and the spiritual aspect of poor college students with financial difficulties also needs to be cared for by the school, the government and the society. Although college students with financial difficulties are more mature than students at other stages, they are still in adolescence and are still more likely to have negative emotions. Students at this stage not only lack good self-regulation ability, but also lack good self-control ability, and are likely to encounter a series of mental health problems in daily life. According to relevant reports, the proportion of poor college students with financial difficulties who have social problems due to psychological problems is higher. Therefore, it is very important to take the poor college students with financial difficulties as a specific object, evaluate their psychological state, and carry out a comprehensive and in-depth analysis of their psychology (van Loon, 2023).

Socio-ecological theories suggest that human health behaviors are influenced by factors such as individuals (psychological, biological, and emotional), interpersonal relationships (social support and culture), physical environment (physical exercise facilities, spatial landscapes), and policies, and that interventions are most effective when these factors interact simultaneously (Oyeyemi et al., 2016). The construction of green campuses plays an active role in promoting physical and leisure activities (Oswalt et al., 2020). Diverse green spaces such as trees and shrubs enrich and enhance children's activities, promote the expression of imagination, and make children's performance more active and active (Soria & Horgos, 2021). Picking up with green space can help children effectively improve their physical health, while reducing the incidence of obesity and other chronic diseases, so that the body can achieve a good state of balance. Increasing the amount of vegetation in secondary school campus landscape renovation reduces stress for secondary school students and is beneficial to mental health (Salimi, Gere, Talley, & Irioogbe, 2023). A sample of students from six campuses, including elementary school students playing in the woods during recess, science and writing classes in their natural habitat, and high school students engaging in gardening, all showed that green spaces helped restore attention and stress, and promote positive emotional

responses (Kalkbrenner, Flinn, Sullivan, & Esquivel Arteaga, 2021). Enjoying the green landscape of the campus through the windows helps high school students effectively improve their concentration levels while relieving fatigue and stress (Song, Zhou, & Liu, 2018). In window experiments, researchers found that students who could see natural landscapes through school windows performed better on the orientation attention recovery test machine than those who could not see the landscape view (Rockwell & Kimel, 2023).

In some studies, outdoor green spaces have also been found to promote self-discipline in children and adolescents, including improvements in social cognition such as inhibition of impulses (Bailey, 2023). A study that investigated the campus environment of 101 middle schools, including the amount of vegetation visible from the windows of classrooms and cafeterias, the density of vegetation in the campus, and the meters predicted students' academic performance (i.e., standardized test scores, graduation rates, etc.), showed that there was a positive correlation between the campus environment and academic performance (Wang & Fu, 2023). School-based interventions have resulted in improved learning scores in curriculum assessments (Kustimah, Kumalasari, & Meindy, 2023) and improved math and verbal skills (Cerin et al., 2013). There is a positive correlation between the rate of greening in schools and students' math and reading scores (Oyeyemi et al., 2017). There was also a significant positive relationship between tree cover rate and reading performance in schools (Oyeyemi, Adegoke, Oyeyemi, & Fatudimu, 2008). A good campus environment factor can effectively promote the amount of sports activities, and those who are active have mild functional impairment and depressive symptoms (Evans & Sims, 2022). Studies have shown that lawns are more likely to promote positive mood than trees and no vegetation, and open green spaces are more conducive to physical and mental health. However, there are still many open public environments that are overlooked, such as large squares, gymnasiums, playgrounds, etc. Among them, the playground is an important activity place on the campus of College Students with Financial Difficulties, which plays the role of carrying out various sports and entertainment activities, and is a part of the daily life of College Students with Financial Difficulties. Numerous studies have also shown that physical activity has a positive impact on a person's physical and mental health. Therefore, this paper chooses to explore the factors affecting poverty and mental health of college students with financial difficulties from the perspective of people's environmental preferences and behavioral characteristics.

Environmental preference refers to the tendency of users to choose a certain environment, which is of great significance for the improvement of mental health of college students with financial difficulties as a cognitive evaluation of the environment. Therefore, it is also necessary to understand the impact of human behavior on Mental health of college students with financial difficulties. In summary, both sports activities and the campus environment may

affect the mental health of college students with financial difficulties. Studying the relationship between Campus environment, sports activities and Mental health of college students with financial difficulties can effectively reveal the influencing factors of Mental health of college students with financial difficulties. Influencing the path is of great significance.

2. Research Methods

2.1 Research Subjects

In this study, five universities in Shanghai, Fudan University, Tongji University, University of Shanghai for Science and Technology, Shanghai Electric Power University, Shanghai Ocean University, are selected. From October 2022 to November 2023, 30 poor students were recruited from each school as the test subjects, with a total of 150 students. Intensive presentations and surveys were conducted in the form of "thematic talks", which included basic population information, sports activities logs, and sports activity volumes. The unqualified samples were excluded (exclusion criteria: incomplete questionnaire filling; accelerometer worn for less than 4 days; wearing time less than 8 hours per day), and 145 valid samples were used.

2.2 Variable selection

The explanatory variable in this paper is Mental health of college students with financial difficulties, which is represented by self-reporting inventory (SCL-90). In 1975, Derogatis developed this scale. The scale includes 90 items, each of which is scored on a five-point scale, never, very mild, average, relatively severe, severe, and the symptoms gradually worsen. There were 9 symptom factors covered by the symptom self-rating scale, which were somatization, interpersonal relationship, anxiety, phobia, psychosis, obsessive-compulsive symptoms, depression, hostility, and paranoia, and the obviousness of the symptoms would increase with the increase of scores.

The explanatory variables were college students with financial difficulties, Campus environment and sports activities. Sports activities were measured using Actigraph GT3+ 3D accelerometer, collecting college students with financial difficulties sports activities data and GPS electronic logs for 4 consecutive days, including 2 working days and 2 rest days, requiring Students of environmental design Carry a GPS device every day when you wake up, and wear a GT3+ 3D accelerometer on your right hip and remove it when you go to bed at night. Three indicators were extracted: the amount of outdoor activities, activity time, and the time of moderate to high-intensity sports activities (MVPA) of college students with financial difficulties. GIS methods were used to collect relevant campus environment indicators. The all-element digital map of Shanghai, which contains spatial information such as parks, mountains, rivers and lakes, and street networks, was imported into ArcGIS 10.2 as the basis for

extracting objective campus environment data. The distance data from the dormitory to the sports activities were calculated according to the group spacing of 100 m, and the frequency percentage of 500 m reached 60.13%, indicating that most of the sports activities including college students with financial difficulties in urban communities within 500 m distance from home were included. Combined with the service radius of public facilities in Shanghai (such as bus stops, fitness paths, vegetable markets, etc.), the buffer zone radius was set at 500 m. According to the most superficial theory of Kaplan et al. and the classification basis of Qiu et al., the keywords in the open-ended question "whether you like the environment" in the questionnaire were identified, and they were divided into landscape elements, spatial configuration, human feelings, weather, management, events, human feelings and other types for semantic analysis. The campus environment variables were selected to include 15 indicators in five aspects: building density, landscape elements, spatial configuration, climate, and management.

2.3 Research Methodology

As shown in Figure 1, Mental health of college students with financial difficulties, Campus environment, individual attributes, and sports activities are obtained through measurement variables, forming four measurement models. The structural relationships of the four latent variables established by these four measurement models form a structural model, and the structural relationship of latent variables is explored with the strategy of path analysis.

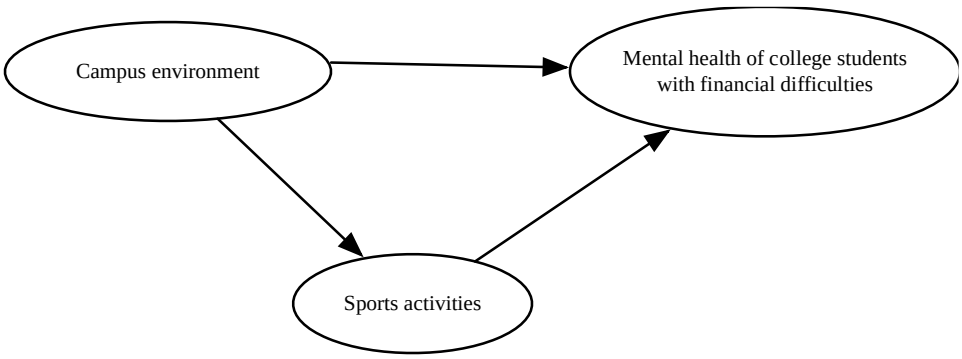

Figure 1: Theoretical framework of influencing factors of mental health of college students with financial difficulties

Figure 1 shows three separate measurement models. Each model represents a combination of a particular latent variable and its observed variables, while endogenous variables are affected by latent variables and measurement errors. In this study, SPSS 22.0 was used to analyze the confirmatory factors, and then the relationship between the latent variables was calculated by AMOS 22.0 software, and the proposed theoretical model was validated. The exogenous latent variables include campus environment

variables, including building density, landscape elements, spatial configuration, climate, and management; The observed variables of sports activities were the amount of sports activities, outdoor MVPA and activity time. The structural model verified the relationship between four latent variables: campus environment, individual attributes, sports activities and Mental health of college students with financial difficulties.

3. Results and Analysis

3.1 Variable description statistics

The dependent variables Mental health of college students with financial difficulties were self-rated health, MI index and number of chronic diseases, respectively. The three indicators of sports activities were the number of sports activities (total Count value), activity time and mean MVPA. The independent variables include the campus environment variable, and the 9 indicators are density (population density, building density), diversity design (street connectivity, per capita road length, land mixed use rate), accessibility (number of traffic stations, distance to transportation stations, distance to fitness places, distance to commercial places), and four indicators of individual attributes (age, economic level, education level, and living style, Table 1).

Table 1: Descriptive statistics of variables

	TOTAL	MALE	FEMALE
SAMPLE CAPACITY	150	78	72
DEPENDENT VARIABLE			
DEPRESSION	4.29±0.94	3.76±0.32	3.96±0.24
INTERPERSONAL SENSITIVITY	24.52±3.09	24.52±3.11	24.2±3.23
ANXIETY	0.87±0.76	0.84±0.88	0.89±0.97
MEDIATOR VARIABLE			
MVPA/(MIN/DAY)	27.4±24.07	27.7±25.37	27.1±24.65
TOTAL COUNT VALUE	240954.6±146678	242781.8±142866	247641.4±147732
SPORT TIME/MIN	273±15.74	263.8±15.65	257.3±16.28
INDEPENDENT VARIABLE			
BUILDING DENSITY(/%)	0.3±0.1	0.3±0.06	0.3±0.09
LANDSCAPE ELEMENTS	207.1±0.23	173.5±0.17	201.4±0.23
SPATIAL CONFIGURATION	37.1±0.16	37.3±0.35	37.2±0.32
CLIMATE	29.6±0.17	35.7±0.3	36±0.34
MANAGEMENT	7.2±0.28	7.4±0.27	7.3±0.26
DISTANCE TO FITNESS FACILITIES/M	274.1±230.3	263.2±138.1	263.9±185

3.2 Factors influencing Mental health of college students with financial difficulties

As can be seen from Figure 2, the measurement model characterizes the contribution of each observed variable to the latent variables Campus environment, individual attributes, sports activities, and Mental health of college students with financial difficulties. Among them, MD1 and MD2 are the potential variables in the campus environment, which represent population density and building density, respectively. KDX1~KDX4 is the number of traffic stations, distance to traffic stations, distance to fitness places and distance to commercial places in the Campus environment variables, and SJDYX1~SJDYX3 is the diversity design indicators in the Campus environment variables, which are street connectivity, total road length per capita and mixed land use. TLHDI~TLHD3 represents the amount of outdoor activities, activity time, and outdoor MVPA, respectively. JK1~JK3 represent health self-rating, number of chronic diseases and BMI, respectively. c is the residuals corresponding to the observed variables. The Mean Square and Square Root of Progressive Residuals (RMSEA) takes into account the degrees of freedom, and the closer its value is to 0, the higher the fitness of the model.

The closer the co-value of the Good Fit Index (GFI) and the Adjusted Good Fit Index (AGFD) is closer to 1, the better the fit of the model, generally greater than 0.9 means that the loose path diagram has a good fit with the actual data, and the co-value of the Extended Fit Index (CFI) is recommended to be greater than 0, and the model has an excellent degree of adaptation. After elimination, it was found that x/df=2.866, RMSEA was 0.06, GFI was 0.938, AGFI was 0.916, and CFI was 0.962, all of which showed that the model had a good fit and accepted the hypothetical model. The various relationships reflected by the measurement model can be summarized as follows: 1) The contribution of 9 observable variables to the campus environment in 3 dimensions reflects the campus environment in residential areas: accessibility dimension (0.96), diversity design dimension (0.90) and density dimension (0.47), and the results show that college students with financial

The perceived importance of difficulties to the campus environment is reflected in the improvement of accessibility, the improvement of diversity design and the improvement of density, among which the level of destination accessibility and diversity design can better reflect the level of Mental health of college students with financial difficulties than density. 2) the contribution of the three observable variables reflecting sports activities was as follows; The results of outdoor activity time (0.87), MVPA (0.85) and sports activities (0.77) indicate that the improvement of college students with financial difficulties sports activities is mainly due to the improvement of outdoor activity time and MVPA. 3) The contribution of the two observable variables reflecting individual attributes was low: age (0.64) and economic income (0.52).

Table 2: Path parameters of exogenous variables for Mental health of college students with financial difficulties

Exogenous Variable	OVERALL EFFECT	DIRECT EFFECT	INDIRECT EFFECT
CAMPUS ENVIRONMENT	0.337	0.31	0.027
SPORTS ACTIVITIES	0.433	0.329	0.104

Note: ** indicates significance at the 0.05 level, ** indicates significance at the 0.01 level, the same below.*

The structural model reflects the relationship between the latent variables, and it can be seen from the path coefficients of the influence of exogenous variables on Mental health of college students with financial difficulties in Table 2 that Campus environment and individual attributes have an impact on Mental health of college students with financial The impact of difficulties is significant at the statistical levels of 0.01 and 0.05, and it is a positive effect, and the path coefficients of the impact are 0.296 and 0.421, respectively. It can be seen that the better the environment of CCB in the residential area, the more favorable the degree of mental health of college students with financial difficulties, and the higher the economic level of college students with financial difficulties, the stronger the willingness to be healthy, indicating that college students with financial Accessibility, diversity and economic income in the vicinity of the dwelling are conducive to improving the level of co-health. In addition, it was found that there was a mutual relationship between campus environment and individual attributes.

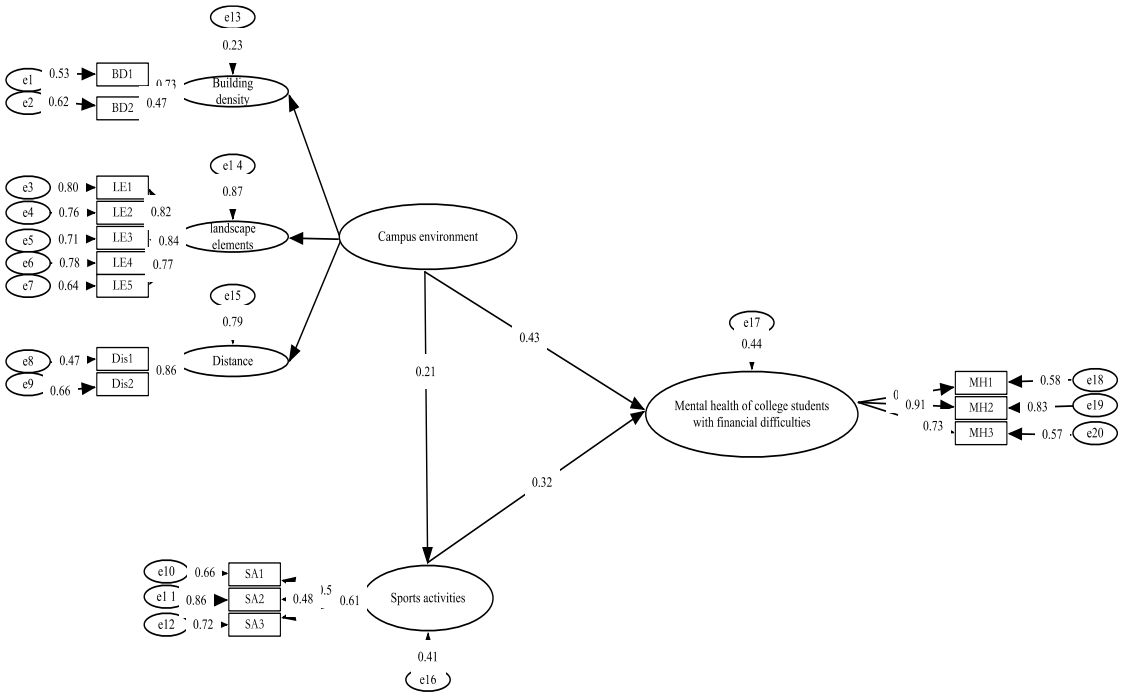

Figure 2: Roadmap of the influencing mechanism of Mental health of college students with financial difficulties

From Figure 2, it can be seen that the impact of Campus environment on Mental health of college students with financial difficulties can be divided into two paths: direct impact (Campus environment health) is 0.26, and indirect impact effect (Campus environment is sports activities 1 health) was 0.2X0.18=0.036, and the total effect was 0.296. There were also two ways for individual attributes to affect Mental health of college students with financial difficulties, the direct effect (individual attribute 1 health) was 0.32, the indirect effect (individual attribute 1 sports activities and 1 health) was 0.56X0.18=0.101, and the overall impact effect was 0.421.

The results showed that campus environment and individual attributes could indirectly affect health status through sports activities. The influence of individual attributes on Mental health of college students with financial difficulties is greater than that of Campus environment, and Mental health of college students with financial difficulties is more likely to be affected by age, Therefore, improving Mental health of college students with financial difficulties should start more from the direct path of improving family income. At the same time, it also reflects the need to pay attention to the improvement of the living environment when improving the mental health of college students with financial difficulties.

3.3 Differences in psychological healing in different types of campus environments

The results of one-way analysis of variance showed that there were significant differences in the overall resilience of the four types of campus environment ($F=15.18$, $P<0.01$). Blue space was considered to be the most psychologically restorative environment, followed by playground and green space, with gray space being the smallest.

3.4 The influence of environmental preference on the psychological healing of the campus environment

The results of independent samples T-test showed that respondents' preferences had a significant effect on the psychological recovery of the campus environment ($F=1.72$, $P=0$). The results of semantic analysis showed that the perceived preferences of the respondents with positive emotions towards the environment were mainly concentrated in events (e.g., exercise, walking), landscape elements (e.g., trees, water, small animals), spatial configuration (e.g., emptiness, privacy) and human sensations (e.g., quietness and coolness).

On the other hand, respondents with negative emotions mainly focused on people's feelings, weather, spatial configuration, landscape elements, management and events, and different from positive emotions, respondents also paid more attention to management and weather deficiencies.

3.5 The influence of behavior type on the psychological healing of the campus environment

The cross-tab test was used to analyze the behavior type and psychological recovery score, and the results showed that the blue space and playground were dominated by dynamic behavior, and the green space and gray space were dominated by passing behavior. One-way ANOVA showed that there were significant differences in the psychological healing of different behavior types ($F=30.80$, $P<0.05$), and the recovery effect of mixed behaviors was the best, followed by dynamic behaviors and static behaviors, and the lowest through behaviors.

3.6 Effect of Residence Time on Psychological Healing of Campus Environment

3.6.1 Effect of Residence Time on Overall Healing of Campus Environment

The results of one-way analysis of variance showed that there were significant differences in the overall healing of respondents among the five groups of subjects ($F=4.00$, $P<0.05$). Respondents in the T4 group felt that the psychological healing effect caused by the environment was the best, while the respondents in the T2 and T3 groups felt that the healing effect was weak. In the selected campus settings, respondents' recovery decreased with length of stay, with a significant increase in the T4 group.

3.6.2 Effect of residence time on the characteristics of four dimensions of the restorative environment

The results of one-way ANOVA for feature scores and residence time in the four dimensions showed that residence time significantly affected other dimensions except for the compatibility dimension. Correlation analysis showed that the enrichment and attraction dimensions were significantly negatively correlated with residence time. This suggests that the longer respondents spend in the same environment, the less they perceive the richness and attractiveness of the environment.

4. Discussion

4.1 Campus environment has a direct impact on health

The results show that the campus environment has an important role in mental health of college students with financial difficulties, showing a significant positive impact, with a direct impact of 0.26, in which destination accessibility and design diversity have an impact on Campus The contribution of environment is large, indicating that facility accessibility and design diversity are the main influencing factors of Mental health of college students with

financial difficulties. Good accessibility of facilities has a promoting effect on health, and communities with high accessibility to facilities have relatively complete public transportation facilities, and all kinds of public facilities are evenly distributed and have a high degree of mixing, which is conducive to the nearby activities of the elderly, and their travel modes are mainly walking and public transportation, which promotes their sports activities and thus affects their health status. Older adults who are chronically in low-density or commercially declining settings are at higher risk of poor health compared to those in normal settings. That is, long-term living in communities that lack health support services (such as pharmacies, grocery stores, senior centers, and recreational facilities) and have declining mixed-use rates increases health risks compared to living in better neighborhoods (good accessibility and high mixing rates). Older people with limited access to health services are at greater risk of health decline.

Objective measurements of street characteristics, including street connectivity, street trees, and accessibility to public transport, were inversely associated with physical disability. Previous studies have shown that humans are naturally responsive to water, and that designs with water can effectively improve the enjoyment of the environment. Playgrounds also have a positive impact on students' mental health, suggesting that improvements in cognitive function are not necessarily limited to nature, and that sports activities may also improve mood and mental health. In recent years, the potential synergies between different health benefits have attracted many scholars, such as the more positive link between physical activity and emotional health in the natural environment. Historically, campus environment construction has focused on increasing green space, but this is not the only way to increase the potential for environmental healing.

Therefore, future landscape design should abandon the idea of simply increasing green space, and consider providing a variety of exercise places or promoting the use of green space to encourage people's activities, so as to effectively improve the Mental health of college students with financial difficulties. In terms of the impact of environmental preference on mental health, this paper found that environmental mental health and environmental preference are directly proportional. The higher the preference of college students with financial difficulties, the stronger their willingness to stay and carry out activities, and the better the relief effect of their physical and mental stress. This paper found that college students with financial difficulties prefer landscape elements such as trees, water, birds, fish, and seats, and prefer a spacious and quiet space environment, and pay more attention to whether the environment is suitable for exercise.

Unlike those with positive emotions, those with negative emotions were concerned about deficiencies in environmental management and weather.

Therefore, in the design of green space environment, full attention should be paid to the characteristics and content of respondents' environmental preferences, and the factors that make college students with financial difficulties produce negative preferences should be avoided.

4.2 The mediating role of sports activities in campus environment and mental health

The results showed that sports activities played a mediating role in the relationship between campus environment and health, and its mediating coefficient was 0.2X0.18=0.036, accounting for 12.16% of the total impact coefficient. This shows that the Campus environment plays a positive guiding role in the level of Mental health of college students with financial difficulties, while on the other hand, the Campus environment promotes the investment in sports activities to a certain extent, which translates into healthy returns. The results show that the accessibility of facilities, landscape elements and spatial configuration in the 500m buffer zone can effectively promote the amount of sports activities. This is because the greater the accessibility of facilities, means that there are more facilities and services that can be reached on foot or by bicycle over a shorter distance, thus boosting their sports activities and indirectly affecting mental health. In particular, the spatial accessibility of recreational facilities can not only increase pedestrian sports activities, but also increase the frequency of use of public spaces. Therefore, good accessibility to facilities is conducive to promoting sports activities for college students with financial difficulties (Ketchen Lipson, Gaddis, Heinze, Beck, & Eisenberg, 2015).

Campus spaces are designed to support or limit sports activities for College Students with financial difficulties, which in turn promotes or restricts behaviors, such as jogging on relatively flat, open ground, and lawns that reduce the occurrence of such behaviors. The same campus environment allows for the possibility or impossibility of psychological healing through potential interaction with students, so the space should accommodate a wide range of human behaviors and allow for the coexistence of various behaviors. The health benefits of various public open spaces on campus require people to have active contact with the environment, and people's willingness to enter the environment for activities is the premise of healthy psychology. This also proves that designers should consider improving the attractiveness of the environment, guiding people to interact with the environment, and reducing the occurrence of behavior, so as to enhance the Mental health of college students with financial difficulties (Seehuus, Moeller, & Peisch, 2021).

With the change of seasons, the change of ecological characteristics such as appearance, color, and shape of plant communities will affect visual perception and psychological response", and the changes in plant appearance provide students with different visual experiences to a certain extent. On the

other hand, college students with financial difficulties' adaptation to the campus environment produces place attachment, that is, a special dependency relationship between place and people, people usually see the living environment as their greatest attachment, and when a person is in an environment similar to the environment in which they live, it will inspire a positive emotional experience.

As college students with financial difficulties spend more time in school, college students with financial difficulties become more dependent on the campus environment, and the experience changes accordingly. It can be seen that appropriately extending the stay time in the outdoor environment is beneficial to people's mental health. Compatibility refers to the setting in the environment that supports the individual's preferences and purposes. The link between the environment and good mood is achieved through aspects such as social cohesion and physical activity. The playground performs well in terms of compatibility, which indicates that the playground can meet the needs of the students. It can be seen that mental health may be due to environmental factors or dependent on people's spontaneous activities.

5. Conclusion

In summary, this paper puts forward several suggestions for the construction of campus recovery environment. For landscape architects, blindly increasing green space does not necessarily increase Mental health of college students with financial difficulties, but focusing on the design of sports venues or the synergy between green space and sports is an effective way to improve Mental health of college students with financial difficulties. Improving the characteristics of environmental preferences is conducive to creating a good psychological environment, and integrating landscape elements such as water, birds, trees, and fish into the design and optimizing environmental management is also beneficial to improving the Mental health of college students with financial difficulties.

University campuses should be designed to meet the needs of students for as many activities as possible. The longer the time spent in the outdoor environment, the better the psychological experience. Be aware, however, that occasional distancing from your familiar natural surroundings may promote perceived relaxation. In addition, adding the compatibility features of the environment in the campus landscape design can effectively enhance the positive impact of the environment on the psychology of college students with financial difficulties. Since the respondents in this paper may underestimate or overestimate their own psychological responses, the objectivity of the indicators is susceptible, and the measurement of physiological indicators should be added to future studies.

In addition, the research on campus environment is the interaction of problems in different professional fields, and a wider range of experimental objects and influencing factors can be included in the experimental scope to further objectively and scientifically evaluate the impact of human settlements on the physical and mental health of different populations, and provide a scientific basis for the construction of a mental health-friendly campus environment.

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