

levels. The latter refers to that under the influence of the continuous improvement of people's economic level, people put forward more and higher psychological needs for interior design, and different psychological tendencies may show certain differences in interior design needs.

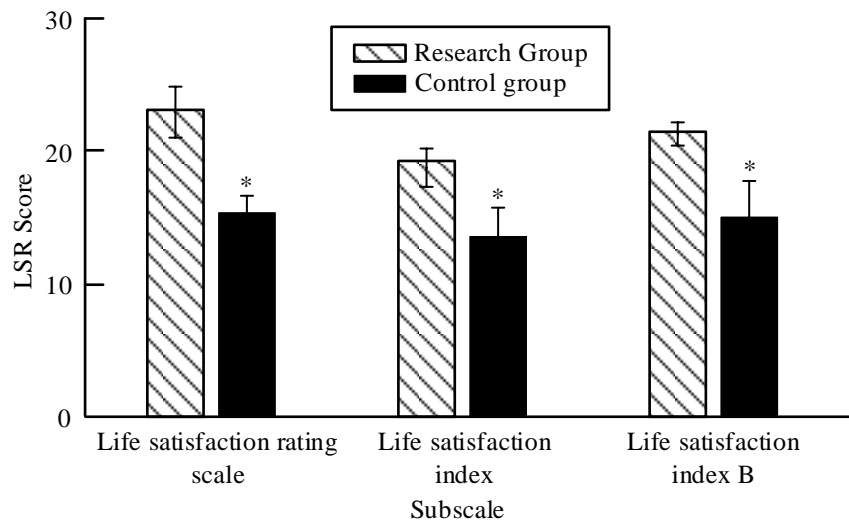
**Objective:** To explore the positive impact of interior design on residents from the perspective of design psychology, in order to provide residents with interior design works that can meet their physiological and psychological needs, have a significant positive impact on their psychology, and improve their living satisfaction, comfort and mental health.

**Subjects and methods:** 134 residents with interior design needs were randomly selected as the research objects and divided into control group and research group. The residents in the control group were given traditional interior design works. For the residents in the research group, the design psychology is integrated into the interior design works and provided to the residents in the group for living. The Life Satisfaction Rating scale (LSR) was used to evaluate the positive impact on different interior design works.

**Research design:** In LSR, it mainly includes three sub scales: life satisfaction rating scale, life satisfaction index and life satisfaction index B. the full scores of the three sub scales are 25, 20 and 22 respectively, and the total score of LSR is 67. The LSR score is positively correlated with the residents' life satisfaction, that is, the higher the score, the higher the residents' satisfaction, quality of life and happiness with the interior design works.

**Methods:** The relevant data obtained from LSR survey were statistically analyzed by tableau software and Smart Bi software.

**Results:** Figure 1 shows the comparison results of LSR scores of residents in two groups on interior design works under different design ideas. According to Figure 1, in the three sub scales, the LSR scores of residents in the study group tend to be full, and are significantly higher than those of residents in the control group. This shows that interior design based on design psychology has a significant positive impact on residents and can ensure that their LSR score is at a high level.



**Figure 1.** Comparison results of LSR scores of residents under the influence of different indoor works  
Note: Compared with the study group, \* $P < 0.05$ .

**Conclusions:** From the perspective of design psychology, interior designers can accurately grasp the physiological and psychological demands of residents, enhance and optimize the functionality of interior design works while considering meeting their living comfort, and make reasonable planning and design for the indoor and outdoor space environment of the building on the basis of design psychology. So that the final design works can meet the residents' needs for the function and aesthetics of interior design works at the same time, and make them have high satisfaction, quality of life and happiness, which reflects the significant positive impact of interior design based on design psychology on residents.

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## RESEARCH ON THE IMPACT OF BIM CIVIL HOUSING INTEGRATED DESIGN ON RESIDENTS' PSYCHOLOGY

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**Background:** Mental health refers to that all aspects of the psychological and activity process are in a good or normal state. The ideal state of mental health is to maintain good personality, normal intelligence, correct cognition, appropriate emotion, reasonable will, positive attitude, appropriate behavior and good adaptability. Influenced by heredity and environment, especially the rearing style of primitive family in childhood, has a great impact on the development of mental health. Mental health problems are very prominent. It can maintain good communication or cooperation with others in society, production and life, and deal with all kinds of situations in life. Individuals can adapt to the development environment and have perfect personality characteristics. Its cognition, emotional response, will and behavior are in a positive state, and can maintain normal regulation ability. In life practice, if we can correctly understand ourselves, consciously control ourselves, correctly deal with external influences, and maintain psychological balance and coordination, we will have the basic characteristics of mental health. The basic meaning of mental health is that all aspects of psychology and activity process are in a good or normal state. The ideal state of mental health is to maintain a sound personality, normal intelligence, correct cognition, appropriate emotion, reasonable will, positive attitude, appropriate behavior and good adaptability. Corresponding to mental health are mental sub-health and mental illness. Mental health has different meanings and measurement standards from different angles. Mental health is an important aspect of modern people's health, so what is people's mental health? There are standards for people's physical and mental health. However, people's mental health standards are not as specific and objective as people's physical health standards. Understanding and mastering the definition of mental health is of great significance to improve and maintain people's health. When people master the standard of measuring people's mental health, they can self-diagnose their mental health according to their own situation. If you find that one or several aspects of your mental state are at a certain distance from the mental health standard, you can strengthen mental exercise and reach the level of mental health. If you find that your mental state seriously deviates from the standard of mental health, you should seek medical treatment in time for early diagnosis and treatment. Mental health refers to the psychological state of continuous and positive development. In this state, the subjects can adapt well and give full play to their physical and mental potential.

At present, large-scale residential construction still adopts the traditional extensive development mode of separating design and construction, which is characterized by low information support rate. Based on the engineering characteristics of "micro design", "multi decision-making" and "transformation" of this type of housing construction. Based on the existing BIM theory and technology, taking data linkage and design and construction integration as the core, further expand and form BIM carrier technology, and combine this method with BIM technology to help solve the problem of design and construction integration decision-making of large-scale residential construction types. Driven by this demand, designers began to think about how to provide more pleasant spiritual experience for owners. From the internal house type structure to the external public space, it is a design breakthrough to stimulate the purchase desire of home buyers. After more than ten years of development in the real estate industry, the design of building house type is becoming more and more mature. Therefore, based on BIM carrier technology, creating a public space and facility environment for formal life has become the top priority of design. The essence of BIM civil residential integrated design is to create a safe, comfortable, pleasant and beautiful indoor environment for people. With the continuous improvement of the discipline of comprehensive design of civil housing, the important role of environmental psychology in design is becoming more and more obvious, and has become the guiding theory of comprehensive design of civil housing. It is of great significance for modern people's living environment to understand people's psychology and behavior under different civil houses, scientifically and artistically grasp the relationship between various elements in the comprehensive design of civil houses, and create civil houses that meet the needs.

**Objective:** In order to effectively improve residents' mental health problems, this paper studies the impact of BIM civil housing integration design on Residents' psychology, aiming to give residents good psychological construction and psychological experience through BIM civil housing integration design, so as to ensure residents' mental health in an all-round way.

**Subjects and methods:** 500 residents in two areas of our city are selected as the research object. Area A is the residents under the conventional civil housing design (250), and area B is the residents under the BIM civil housing integrated design (250). Combined with the Symptom Checklist 90 (SCL-90), the mental health status of residents in the two regions was measured. The higher the score of the scale, the more serious the psychological problems of residents.

**Methods:** Use Excel software and SPSS22.0 software for data statistics and analysis.

**Results:** Table 1 shows the mental health status of residents in the two regions. As shown in Table 1, compared with the residents in area a under the conventional civil housing design, the residents in area B

under the integrated design of BIM civil housing have a lower SCL-90 score, and there is a statistical difference in the mental health status of the residents in the two areas ( $P < 0.05$ ).

**Table 1.** Mental health status of residents in the two regions

Project	Area A (n=250)	Area B (n=250)	P
Somatization	3.15	1.28	<0.05
Obsession	2.17	1.05	<0.05
Sensitive	3.44	1.10	<0.05
Depressed	2.26	1.01	<0.05
Anxious	2.18	1.10	<0.05
Hostile	3.63	1.15	<0.05
Fear	2.59	1.12	<0.05
Paranoid	3.39	1.03	<0.05
Psychotic	2.15	1.04	<0.05
Ad-items	3.17	1.07	<0.05

**Conclusions:** In order to effectively improve residents' mental health problems, this paper studies the impact of BIM civil housing integrated design on residents' psychology. The results show that compared with the residents in area a under the conventional civil housing design, the residents in area B under the integrated design of BIM civil housing have a lower SCL-90 score, and there is a statistical difference in the mental health status of the residents in the two areas ( $P < 0.05$ ). This shows that the integrated design of BIM civil housing can give residents good psychological construction and psychological experience, so as to comprehensively ensure residents' mental health.

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## ANALYSIS ON RISK FACTORS OF SPORTS TOURISM SAFETY ACCIDENTS IN PATIENTS WITH COGNITIVE IMPAIRMENT

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**Background:** As a psychological disease, cognitive impairment develops from the perspective of psychological disease. In essence, cognitive impairment can be attributed to a kind of neurocognitive impairment, which is mainly manifested in many levels of psychological disorders, such as thinking, perception, memory, learning and so on. Cognitive impairment is a disease with cognitive function problems. To clarify its definition, we need to understand and grasp what cognitive function is. Cognitive functions include memory, calculation, space-time location, structural ability, executive ability, language understanding, expression and application. Its behavioral characteristics are concentrated in four aspects: executive ability, attention, language ability and social cognition. For cognitive impairment, for social cognitive ability, it is mainly manifested in anxiety in social communication, weakening of emotional control ability, decline of resonance ability and reduction of recognition of social clues. For attention, it is mainly manifested in the reduction of information processing speed, selectivity and other types of attention changes. For the executive ability, it is mainly manifested in the decline of organization and decision-making ability and the inability to complete complex tasks. For language ability, it is mainly manifested in grammatical errors, disregard of social etiquette, lack of expression in communication with people, and problems in abstract language expression and understanding. Combined with clinical symptoms, cognitive impairment can be divided into three levels: mild, moderate and severe. Mild cognitive impairment is characterized by wandering, anxiety, depression, forgetfulness, memory and attention loss. Moderate cognitive impairment is characterized by further deterioration of cognitive ability. Patients are characterized by large emotional fluctuations, paranoia, anxiety, reduced ability of understanding and language expression, and reduced resolution of objective things such as time. Severe cognitive impairment develops further from moderate cognition. Patients show a decline in overall function and develop dementia, which will lead to delusion, indifference, lack of self-care ability and so on. However, as a mental disease, cognitive impairment does not have more significant external manifestations than the traditional