

**Methods:** According to the survey data obtained by MMSE scale, MATLAB software and SPSS26.0 software for statistical sorting, calculation and analysis.

**Results:** Table 1 shows the comparison results of MMSE scores of two groups of college students with cognitive impairment before and after the intervention of different education modes. It can be seen from Table 1 that before the educational intervention, the MMSE scores of the two groups of college students were at a low level, indicating that they were accompanied by severe cognitive impairment. With the continuous educational intervention, the MMSE score of college students in the control group increased slightly, but the increase was small. After 3 months of educational intervention, college students in this group were still accompanied by moderate cognitive impairment. The MMSE score of college students in the experimental group increased significantly. Finally, it was no longer accompanied by cognitive impairment and was at the normal level of mental health.

**Table 1.** Comparison results of MMSE scores of two groups of college students before and after educational intervention

Time	Control group	Experience group
Before intervention	4.55±0.76	5.12±0.89
1 month after intervention	11.54±0.84*	12.36±0.92*
2 months after intervention	13.27±1.05*	19.75±0.83*
3 months after intervention	18.42±1.03*	28.91±0.89*

Note: Compared with before intervention, \* $P < 0.05$ .

**Conclusions:** As a common mental disease, cognitive impairment is difficult to treat. The mental health level of college students with cognitive impairment is usually low. All kinds of negative effects brought by cognitive impairment will greatly hinder the healthy growth and all-round development of college students. The reformed education model can effectively improve the MMSE score of college students with cognitive impairment, significantly alleviate their symptoms of cognitive impairment and ensure their mental health.

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## ANALYSIS ON THE POSITIVE IMPACT OF INTERIOR DESIGN ON RESIDENTS BASED ON DESIGN PSYCHOLOGY

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**Background:** Design is a creative activity, which includes four main steps: imagination, operation research, planning and budget. According to the differences of design purposes, design is usually divided into three types, namely visual communication design, product design and environmental design. The corresponding purposes of the three are to convey, use and live the design works respectively. In the process of design, we need to explore people's demand consciousness from the perspective of psychology, and then integrate it into the design works. This knowledge is design psychology. Design psychology is mainly based on the relevant theories of psychology, which concretely deals with people's psychological state and psychological needs, so that they can be presented in the form of design works. At the same time, design works can also react on people's psychological reactions and related needs. There is a complementary and interdependent relationship between the two. Environmental design mainly includes two space design forms inside and outside the building. From the perspective of design psychology, designers can make reasonable planning and design of the indoor and outdoor space environment of the building, so that the final design works can meet people's living needs and preference demands at the same time. Design psychology is a new branch of art design established in the field of psychology. Based on the psychological acceptance of the general public, it studies people's aesthetic laws and consumer psychology related to vision, touch and mentality. According to people's different needs, create design results based on design methods, and fully consider the psychological impact of design results on social groups or individuals. For residents, interior design needs to meet the pursuit of material and spiritual aspects. The former refers to comfortable living conditions and functional living space. Residents' daily life, study and work have different levels of needs. Therefore, interior design should fully consider the demand elements of different

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.

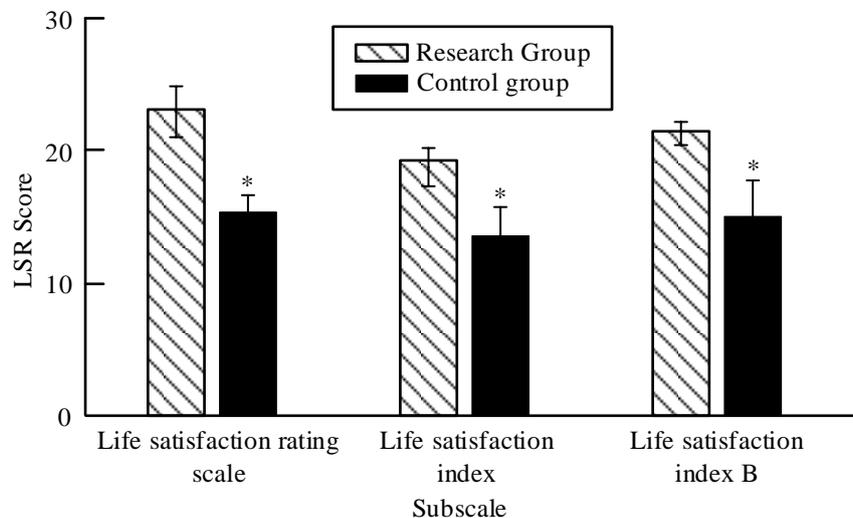
**Objective:** To explore the positive impact of interior design on residents from the perspective of design psychology, in order to provide residents with interior design works that can meet their physiological and psychological needs, have a significant positive impact on their psychology, and improve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