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The Methods of Function and Space Design in Young People's Mental Health Center under the Concept of "Autonomy"

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Abstract: Based on developmental psychology, young patients (12-25 years old) should be encouraged to exercise self-determination and self-exploration through spatial design for the enhancement of intrinsic motivation, to realize self-awareness, and rebuild social relationships during long-term self-regulation, and to increase participation and effectiveness in psychotherapy. Considering the unique developmental stages of young people, the feasibility of person-centered care and peer support services in the therapeutic model is analyzed, proposing that spontaneous partnerships and respect for patients' unconscious behaviors are essential for achieving autonomy. Emphasizing that patients should be guided naturally rather than coercively through spatial design; the ambiguity of the space requires reasonable control; the functional area should have differential settings by the type of place that requires different sensory stimulation levels; the transition from private space to semi-private space to public space should also be well-organized through visual connection, waiting areas, and the chance to withdraw from the therapies.

Keywords: mental health center, young people, autonomy, self-determination, space design

1. Introduction

Mental health problems have become increasingly severe and account for one of the main contributors to the burden of disease in young people. World Health Organization (WHO) has reported that half of the mental health disorders in adulthood are started by the age of 14, which leads to grave repercussions throughout life [1]. However, according to the Australian Institute of Health and Welfare (AIHW), approximately 66% of young patients have never received treatment in Australia, and the majority have no intention of help-seeking [2]. This paper will start with the young people's barriers to engaging in mental health treatment, discussing enhancing patients' autonomy as an opportunity for optimized treatment outcomes based on developmental psychology. To facilitate this concept to be well-constructed into a new therapeutic model, and well-presented in real architectural space, the explorations on choices, environmental control, and passive guidance are presented in this study, and a prototype of private consulting space is demonstrated.

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2. Theoretical Foundation and Research Method

2.1. Interpretation of Treatment Barriers

The three main factors that lead young people to avoid and discontinue psychotherapy are social and self-stigma, preference for self-reliance, and distrust of treatment. Concerning social and self-stigma, young people's sensitivity and vulnerability to social and environmental influences are augmented due to immature values and self-management skills, consequently, judgment and misunderstanding will lead to rejection and unwillingness to receive therapy [3]. Secondly, a preference for self-reliance is considered a natural phenomenon in the human developmental stage, and there is a belief that it is better to handle difficulties independently as an alternative to relying on others, which is especially noticeable among the group aged 18 to 25, as suggested by Coralie J Wilson [4]. Moreover, the distrust of treatment is the third significant issue during young patients' treatment, mainly due to the stereotypes of the hospitals and mental health centers. The level of trust in treatment is determined mainly by transparency and authenticity. The former refers to the right to be informed, allowing patients to understand the reason and method the treatment will be delivered rather than being left with no information [5]. While the level of authenticity is more abstract than transparency and closer to the sense of certain relationships. For instance, some patients always perceive the therapist as a "therapist" other than an actual human, and such a formal relationship causes most patients to assume that the therapist is not interested in their stories and is just finishing the job.

From the architectural and spatial perspective, such a doctor-patient relationship combined with the plan configuration and functional distribution of traditional hospitals or psychiatric clinics further deepens young people's sensitivity and mistrust towards psychotherapy. As shown in the left diagram in Figure 1, the space of traditional psychiatric hospitals is highly hierarchized, with the doctor in control of the patient, the central monitoring station with a clear vision of the patient area, which is often distributed on both sides of the long and narrow corridors, without spatial initiative; the traditional therapeutic circulation is highly coercive, following the single spatial orientation from the waiting area to the consulting area to the therapeutic area, with a lack of choices, which aggravates the patient's sense of oppression while ignoring the patient's willingness to self-solve the problem; in addition, due to the formality required by the traditional treatment model, the location of the treatment is limited, often being a standardized small room, and the doctor-driven conversation amplifies the patient's emotional pressure. As barriers to treatment are the entry point in this study, young people's needs are considered as the aim of combining autonomy theory in treatment, as well as the criteria for defining the guidelines of the new therapeutic space.

2.2. Introduction of Autonomy Theory

The term autonomy reciprocally influences the barriers for young people to engage in mental health treatment. According to research, self-stigma is associated with a range of autonomy-relevant outcomes such as self-esteem and impaired social relationships; in other words, the lack of autonomy would further exacerbate stigma and thus reduce young people's participation in psychotherapy [6]. In addition, the preference for self-reliance is associated with young people's emerging individuation and the development of adult autonomy [4]. Besides, concerning trust establishment, the concept of self-determination as part of autonomy is the key to allowing patients to choose "when, where, who" is needed in the therapy process [7]. Therefore, therapy has to accommodate young people's developmental tasks and respect their needs while providing the proper guidance for autonomy.

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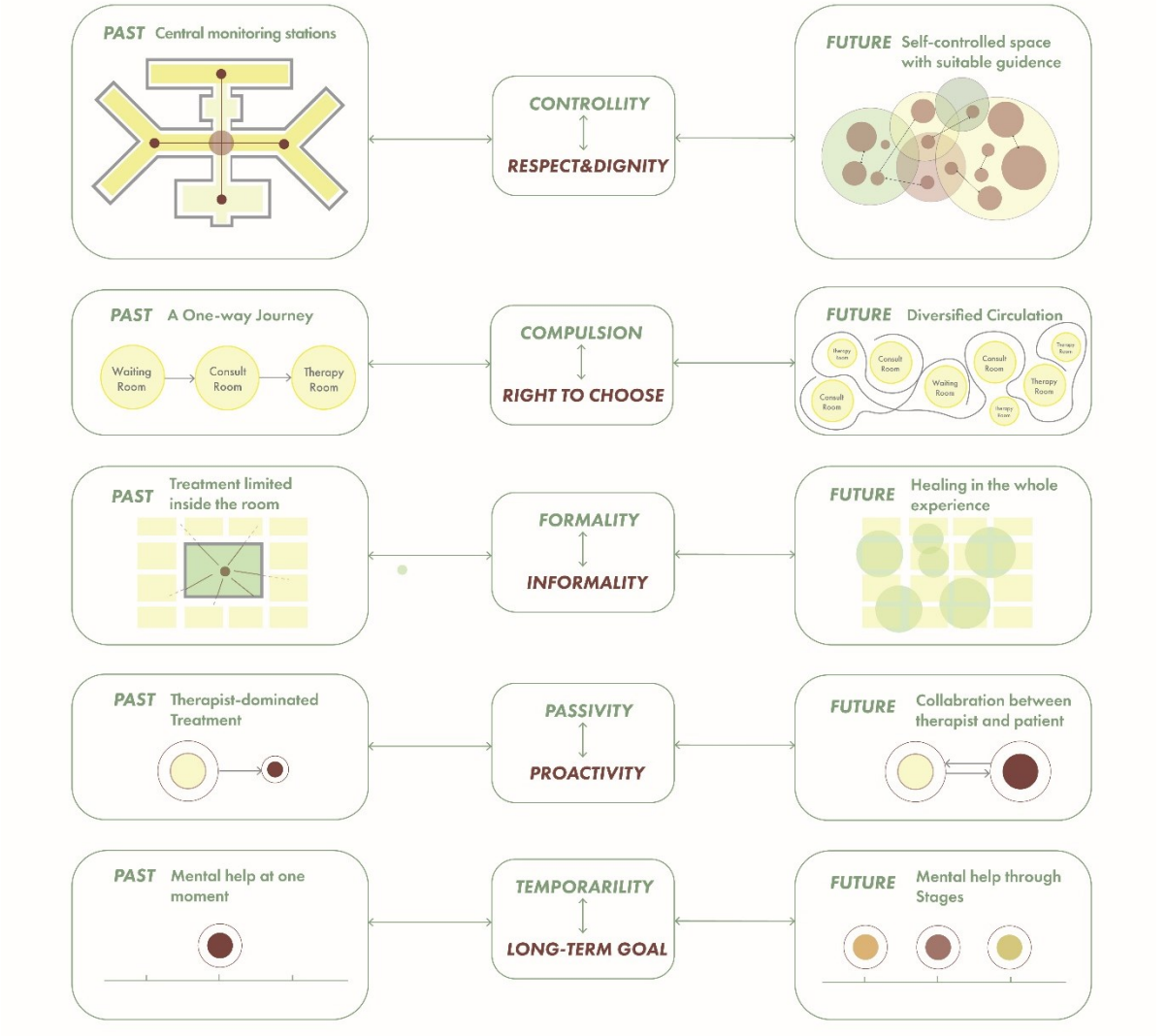

Figure 1: Comparison of the past and future treatment.

2.3. Evidence of Autonomy Theory

In further research by Jessy Bergamin and other researchers, the internal relationship between autonomy and mental health presents an opportunity for psychological rehabilitation for young people [8]. In the field of developmental psychology, mental illness can impair a patient's autonomy, when a person experiences a mental disorder, there is uncontrolled distress leading to inner conflicts, for example, depression can result in a lack of energy and a reduction in concentration, in this case, the individual's ability to act according to their intentions might be deprived at the stage of forming "intention, preference, goal" in mind, such prolonged unpaired action is a sign of reduced autonomy, which can lead to more negative emotions that worsen conditions.

Through reverse reflection, it provides a potential way of treating mental illness by restoring autonomy and enhancing self-regeneration. Bergamin indicates that autonomy is an acquired set of capacities that can be cultivated by environment and practices [8]. Real interest is critically important to patients in the cultivation of this intrinsic motivation [9]. It is the value of becoming easily engaged in activities and learning new skills [10]. The satisfaction of recurrently reaching a goal rebuilds the interrelationship between intention and action, and it facilitates the patient's self-awareness in a long-

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term self-regulated process, enabling the patients to reflect on their inner life and enhance core values such as self-esteem, self-efficacy, and a sense of identity [8].

2.4. Integration of Person-centered Care & Peer Support Service

Person-centered Care might incorporate more practical considerations into this new therapeutic model. It transformed the distant hierarchical relationship between therapist and patient in treatment, to an expert in the theory and technique of treatment, and an expert in the patient's experience (the patient himself) [11]. This partnership is the basis for respecting the patient's autonomy and responding to how to build trust with young patients in therapy. Based on this, as indicated by Antony and Roemer, the patient is expected to influence the process and direction of treatment recurrently [12]. More specifically, patients can participate in planning treatment strategies and goals according to their preferences and possess the right to make their own choices on an ongoing basis. For instance, in the case study of dementia in a hospital in the UK, there is a personalized bedroom that allows patients to customize to suit their habits [13].

In addition to adhering to person-centered care, Peer Support Services can help to form a more organic collaboration in mental health treatment. Based on research, Peer support is a recovery-oriented approach where patients (PSS Recipient) are introduced to recovered people with lived experience of mental disorder (PSS Provider) [14]. It is worth noting that this mode is closer to mutual support between PSS Recipients and PSS providers, there is non-judgmental support for the recipient, which might reduce stigma and facilitate emotional growth; the providers can progress the personal recovery further during the service, as the mentor role provides empowerment, therefore, the PSS providers can become more confident with the reframing of identity. Moreover, this approach is more flexible, enabling the two sides to make decisions together, such as when, where, and how to begin the peer support, thus stimulating intrinsic motivation.

2.5. Design Guidelines for New Therapeutic Space

Combined with the young people's needs in therapy and the theory of autonomy, the new therapeutic space should have the following attributes. Flexibility in spatial layout, functional diversity, and differentiated settings, provide patients with a variety of choice routes, and a variety of therapeutic approaches; passive spatial guidance is very important, and the control of ambiguity and legibility of the space is a prerequisite for the safe conduct of therapy, and the division of intimate gradients and different levels of sensory stimulation provide patients with gentle spatial transitions, enabling implicit guidance at the subconscious level, weakening the coercive and oppressive nature of the traditional therapeutic space, and thus achieving a new type of human-centered therapeutic space.

3. Different Settings in Similar Choices

It is essential to provide a variety of options and to offer alternative settings within the same direction of choice. Respecting patients' preferences and offering choices is one of the core aspects of achieving person-centered care, nevertheless, according to Mayer Spivack, an environmental analyst and designer, the behavior of people with mood disorders is opaque, which is a subconscious avoidance of others and prevents others from fully understanding them [15]. Therefore, it is impracticable to assume the preferences of all patients successfully and to provide each patient with a highly targeted treatment type. Since it is impossible to create a place that is always therapeutic for all people, it is necessary to provide a range of place types to enable patients to freely choose a place to accommodate their needs while learning to use their environment constructively.

The basic functional spaces in mental health centers include waiting space, consulting space, and therapy space, the intention to provide a range of options within each of these functions is needed.

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Firstly, in the waiting area, an outdoor playground and reading room can be provided for the 12 -17-year-old group, while an art gallery and informal chatting area can be designed for the 18-25-year-old group. The Gallery is considered a beneficial place because art is an inclusive element that can bridge people from different backgrounds, effectively mitigating the identity issues that people from multi-culture are vulnerable to [16]. In addition, according to research, most university students prefer to get informal help from friends, as the pressure of school and work prevents them from spending enough time on psychotherapy [17]. Therefore, incorporating the informal chatting area in the waiting area, located in an accessible place, might help the older group overcome stereotypes of hospitals while providing a flexible option for communication. In addition to these relatively functional waiting areas, there are options for more general and autonomous public and temporary events. Furthermore, the consulting space and therapy space are undergoing new transformations. The consulting area can remain predominantly a one-to-one consultation room, with the addition of a digital consulting room, as texting is considered in many reports by young patients to be an effective way of communicating with the therapist, informal and formal peer support room can be included as part of the consulting process. Besides, the therapy zone is suggested to include more collaborative activities such as art class, planting area, drama room, and yoga space.

Based on the group-specific different settings in similar basic functions described above, multiple therapeutic pathways can be formed with flexibility and spontaneity. While retaining the traditional therapeutic process, it improves the single-oriented, single-functional therapeutic model of the traditional treatment space. Fully mobilizing the enthusiasm and autonomy of patients, improving the participation in treatment, and the diversity of activities enables the treatment period to be effectively extended and tends to be normalized and routinized, thus reducing the social stigma, reducing the psychological burden of patients.

4. Environmental Control

4.1. Control of Ambiguity

Kenneth Bayes has indicated that there is a universal agreement on the necessity to avoid ambiguity and complexity in buildings for emotionally disturbed and mentally subnormal children [18]. When spatial ambiguity produces the experience of a conflict between perception and presence, normal people can manage to orient themselves in the physical world; however, people with mental illness may have lost the ability to adjust, which thus causes pain and distress. However, Bayes implies that excessive avoidance of ambiguity might create impoverished places of limited sensual attraction, causing the group of anxious individuals to lose interest. Therefore, a balance is needed to be achieved between the richness and ambiguity of the environment based on different situations. For example, ambiguity should be minimized in the private consulting zone and gradually liberated in some public activity areas. As the private consulting zone is the most professional and energy-intensive part of the treatment, preventing the disruption of the rest of the environment can be more effective in calming the patient down and avoiding unnecessary hassles. To achieve this, it is significant to avoid inconsistencies of perception and cognition in aspects such as size, shape, and color in the design; In addition to materials, highly reflective surfaces, glass doors, and other timber with heavy texture, which can cause visual glare, should be avoided; and space needs to be well-defined, with recognizable distinctions between internal, external and transitional areas, which allow the user to perceive his or her situation as a prerequisite for autonomy. In the case of public activity areas, appropriate richness in the environment can motivate patients to participate in activities.

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4.2. Control of Legibility

Furthermore, space needs to allow users to perceive their location with explicit recognition and direct accessibility to the basic infrastructures, which is crucial for guiding patients to exercise self-determination and self-exploration. The infrastructure here mainly refers to the circulation elements, such as lifts, stairs, reception, and help points. According to research, how to enter, how to leave, and how to get help are essential concerns of patients once they enter the building [9]. If these foundational issues are addressed at the beginning and the patient becomes familiar with their surroundings in a short period, it will be much easier for the patient to feel more comfortable and confident in exploring the space. In addition, transparency is also one of the keys to improving the legibility of the building, its impact not only strengthens the perceptual connections between the different spaces but also extends beyond the building to the street, offering passers-by the opportunity to observe the therapy happening within the building. Therefore, an overall scenario with improved spatial legibility in young people's mental health treatment can be: a large central courtyard throughout the levels to increase transparency, and the staircase will be placed in the central courtyard as a sign of natural movement, which is close to the entrance and in a prominent position. This vertical movement is observable from the various activity spaces in the interior, enabling the patient to perceive the building as a whole while maintaining a constant subconscious curiosity and interpretation of the building. Besides, the helping points are distributed at each level near the arrival point with reduced size, allowing patients to identify where to obtain help when needed.

5. Passive Guidance

While the manipulation of spatial elements creates a clear and stable physical healing environment for the patient, passive guidance focuses on psychological implications for the patient at a subconscious level, for example, implying the type of activity, social attributes, and accessibility.

5.1. Sensory Stimulation

Introducing different levels of sensory stimulation based on different needs is one of the approaches to providing unconscious guidance to the patient. According to Spivack, Low-level sensory stimuli are defined as those types or amounts of information present in the patient's perceptual field that are not intrusive to his consciousness but provide a source of reassurance about the reliability and continuity of the life process; high-level sensory stimuli are those that stimulate the person's consciousness or provide involvement with the surroundings or other people [15]. In short, a level of stimulation relates to the number of options for interaction suggested by the environment. In addition, as indicated by Spivack, the lower-level stimuli consist mainly of natural elements such as natural light, flowing water, trees, grass, and wind, while the higher-level stimuli consist of more options to facilitate people's communication. This idea was further sublimated in Lesley Collier's lecture. She proved that reducing stimulation levels can increase tolerance, making people more relaxed and open to others [19]. Concerning the detailed design, apart from the natural elements, body experience can also be integrated into the individual consulting room, such as the deep pressure touch provided by a heavy blanket and linear movement offered by the rocking chair.

5.2. "Introstatic" vs. "Extrodynamic"

In the book *Therapy by Design*, the authors also propose two essential spatial characteristics for passive guidance: "Introstatic" and "Extrodynamic" [20]. In brief, it is related to spatial scale, flexibility, and predictability. To be more specific, "Introstatic" space contains more controlled and predictable activities that usually happen in small and intimate spaces, such as one-to-one

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consultations. In contrast, "Extrodynamic" space includes less predictable and more creative activities with equipment and furnishings that would be portable and suitable for spontaneous or programmed manipulation by users and staff. However, considering the need to grant users the option of customizing the space, there might be an opportunity to integrate these two spatial features in some specific circumstances. For instance, in a one-to-one consulting room, a clear indication of seating place will be provided to guide users, which makes the space more predictable at first glance and provides a sense of safety, while a range of flexible furniture will also be offered in the room, which will be found during their self-exploration time and providing the chance to promote a self-controlled environment.

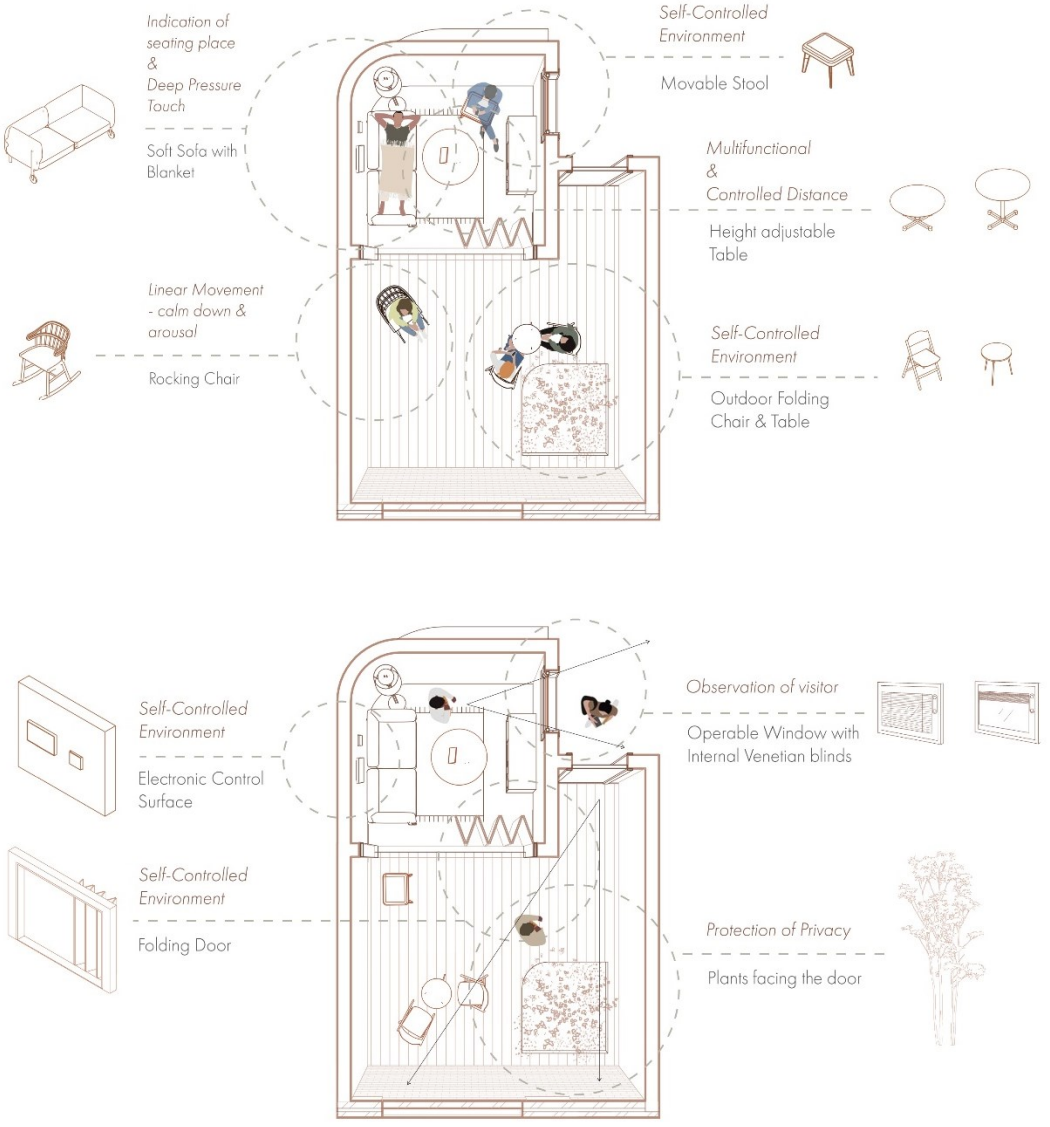

Figure 2: A Prototype of a Private Consulting Room

5.3. The Intimacy Gradient

Meanwhile, the intimacy of the gradient will be considered to establish the foundation that ensures a smooth transition for users from one space to another. According to Sivadon's proximity-distance

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dialectic, People with mental illness often have ambivalence, which is over-reliance on the security gained through proximity to others and avoidance of contact with others [21]. Enabling patients to observe situations before committing to entering or retreating is a solution to this situation. Therefore, the intimacy gradient suggested by Christopher Alexander is needed, which refers to the space with a gradual increase or reduction in privacy level [22].

5.3.1. Private Space

The one-to-one consulting room has the highest degree of privacy, which needs to be characterized by high predictability and low sensory stimulation levels. Figure 2 shows the new prototype of a private consulting room based on this study. Firstly, the interior and exterior space in the private zone is well-defined by a solid masonry wall; Besides, there is a secondary corridor between each consulting room, which provides privacy for patients to enter the room; in addition, there will be an operable window in the wall of the aisle, providing patients with the opportunity to observe visitors in the corridor from inside. Furthermore, different from a traditional consulting room, it contains an interior space with the feeling of home. Such familiarity and intimacy are conveyed by the variety of furniture, such as TV cabinets and floor lamps. Natural materials, such as red brick and wood, can also evoke childhood memories, which relate to shelter and protection in human self-consciousness [23]. Besides, there is a visual connection with the upper floor from the high-level window, enabling the understanding of the further therapy process.

5.3.2. Semi-private Space

Furthermore, there is the need for individual places near and in the vision of common areas. This semi-private space seems to be a buffer zone between complete privacy and openness. According to Alexander, it can be the Small, well-articulated places alongside the common areas, such as corners, cubby holes, and alcoves. It creates a sense of togetherness even when there is no planned group activity and when people wish to engage themselves in their ways. Also, it might increase the flexibility in using a common room, which means people feel freer to enter and retreat without the fear of disrupting the focus of a group activity. In addition, corresponding to person-centered care, this space provides comfort and respect for moods of despair. Instead of being forced to continue the therapy, users can easily retreat from the activity space and stay in the individual space when feeling uncomfortable with the treatment.

5.3.3. Public Space

Activities in common areas should be of varying intensity with externally predictable characteristics. Comparing group therapies such as art classes, gardening, and drama performances, their spatial predictability is progressively weakened, and sensory stimulation is enhanced, thus social interaction is increased. Low sensory-stimulation level in art classes allows patients to adapt to more complex social relationships by providing the implication of increased openness and flexibility in spatial form [22]. The space for larger group therapy is proposed in a more random and informal setting compared to other spaces. As suggested by Collier, this setting can be considered as an indication of interaction [19].

6. Conclusion

In conclusion, transforming young people's psychotherapy is a long process that involves a wide range of aspects in practice. As this model is highly flexible, organic, and sustainable, it is important to minimize the risk of dangerous behaviors in young patients due to excessive lack of control and

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restriction, thus, it is necessary to implement detailed planning of functional distribution, place settings, spatial sequence, and sensory experience through the architectural language from a human-centered perspective, thus realizing the subconscious environment that can provide patients with hints and guidance for better self-decision-making and self-exploration. As a result, the traditional mode of psychotherapy centers is fundamentally changed, and a new type of healing space with distinctive objectives and humanistic care is established, allowing psychological consultation to be integrated into the lives of residents regularly, and improving the overall mental health of the nation.

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