Therapeutic Interior Design Approaches for Posttraumatic Stress Disorder Recovery in Generation Z

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Abstract:

Generation Z has become an emotive topic these days owing to their different characteristics, as well as their new desires and ways of thinking. This paper examines the common effect of the previous generations encountered their known stressors in college through a comparative analysis with the present generation, which is facing social, digital, and global stressors leading to increased mental health problems, especially PTSD "Post-Traumatic Stress Disorder" in Generation Z. The common design concepts of interior design do not take into account the patient with PTSD needs like safety, regulation of emotions, and control over the environment. Thus, this research aims to fill the gap by examining how safe and nurturing interior spaces might be created for Generation Z patients experiencing PTSD. Some approaches include case-scenario

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analysis and identification of the principles of trauma-informed design, assessment of healing environments, and interviewing Generation Z to determine their needs. The result concentrates on design elements like biophilia, ambient lighting, neutral colour schemes, and opportunities for privacy that blend seamlessly with group settings. Consistently with this perspective, the solution proposed in this paper is a set of guidelines that include the creation of safe and calm environments, using natural materials, adaptability, and modulation of sensory inputs. These designs lead to reduced anxiety, promote emotional healing in the process, and provide self-regulation along with a route to more positive surroundings for the treatment of post-traumatic stress disorder.

Keywords:

PTSD; Generation Z; University Interiors; Therapeutic Interiors.

1.1. Introduction:

PTSD "Post-Traumatic Stress Disorder" is a growing issue affecting Generation Z, with students being the hardest hit. About 10% of college students show signs of PTSD, including trauma, anxiety, and social pressures (National Center for PTSD, 2021). This highlights the need for facilities that promote health, not disease or thought. Interior design is crucial in enhancing students' focus, managing PTSD, and forming social relationships. Secure and trendy interiors, including light, sound, touch, and space, significantly affect stress regulation, focus, and mental well-being. Incorporating safety and sheets into designs provides not only physical protection but also a necessary feeling of security for students with PTSD (Hasirci et al., 2021).

1.2. Research Objective:

This paper discusses how interior designing can provide a secure and therapeutic student environment for Generation Z students suffering from PTSD and offers practical recommendations to architects, educators, and policymakers. Drawing from literature, best practices, and intended learning environments, the paper proposes an adaptive and inclusive approach to learning environments. It considers biophilic principles, sensory design, students' well-being, and research-based safety measures that impact learning productivity.

1.3. The importance of research:

This research contributes to the ongoing dialogue on empathetic and sustainable interior design, aiming to reconstruct educational contexts as agents of understanding and overcoming emotional pain.

2.. Field of Research:

This research sits at the intersection of learning environments, mental health, and interior design, with a focus on safety, student-centered places and design for PTSD-affected Generation Z students. This essay discusses how design features that promote student happiness and learning growth include haptic accommodation and the seeming flexibility of architectural space. This discipline contributes to the discourse on disability and mental health in education by researching the design of learning environments for individuals with disabilities to promote psychological and environmental fit.

Figure (1) Symptom Of PTSD(Dakota Family Services,2023.July.)

3. Research Methodology:

3.1. Case Studies

Therapeutic education spaces adopted biomimetic design, incorporating sensory features such as colours, sounds, and appropriate learning environments for children with PTSD. Some recent examples include the University of Virginia's Contemplative Sciences Center and Arizona State University's Health Services Building: natural light, sound, and separation –reduced stress and improved well-being (Hasirci, 2021).

Several study spaces in contemporary educational institutions adopt dull tones, soft furnishings, andoptimal work chairs and descends to create tranquillity (Campbell, 2021; National Institutes of Health, 2020). In all these learning environments, four strategies: Natural elements, Zoning, and Sensory comfort demonstrate how design enhances students' positive mental health and learning outcomes for those with PTSD (Jacobs, 2021).

Figure 2 The Building of the Science Center at the University of Virginia (Contemplative Sciences Center, April,2024)

3.2.1. Research Approach

The research employed questionnaires to explore recommended areas in special consideration for the student victims of PTSD and interior design. Multiple strategies were adopted to gather data on specific design features that would promote safety and healing in university learning spaces.

3.2.2. Data Collection

Additionally, A survey with 52 respondents was conducted at the University of Hertfordshire Hosted by GAF in Egypt to understand how the built environment at the university affects the mental health of students. The results revealed significant preferences and needs, including:

- Environmental Impact on Mental Health: 40 out of the 52 participants said that their mental health in general and PTSD in specific is significantly affected by environmental factors.
- Colour Preferences: Using the results of the survey and the observations from the target persons' interaction with the room, some conclusions can be drawn Some of the important conclusions are as follows: 33 of the students were in favour of the earthy and pastel tones, hence advocating for the need to use colours that will calm students.
- Lighting Preferences: 32 participants indicated that they appreciated natural lighting, therefore acknowledging that itmakes them feel uplifted.
- Need for Calm Spaces: 36 respondents stressed that a quiet and calm environment contributes to enhanced concentration.
- Natural Elements: Preference towards natural landmarks was also observed; 48 of the students preferred vegetation and water motifs. Additionally, 36 students explained that such elements help them pay attention to academic activities.

3.3.Analysis Framework

The data were therefore systematically compared using an assignment of evaluation and assessment of secure and therapeutic design aspects. Environmental suitability assessment was also among the criteria to be met by the proposed designs, as well as psychological support offered to the students with PTSD and the functionality of the designs.

As a result, utilising an evidence-based design approach offered key information about the requirements of students and provided guidelines for creating a comfortable environment and supportive interiors for improved mental well-being

4. **Previous studies:**

4.1 Understanding PTSD: A list of symptoms is followed by triggers of these symptoms and, finally, by the environment that is required in case of an SLE flare.

PTSD is marked by symptoms that limit a patient's functioning, such as intrusive thoughts, hyperarousal, avoidance behaviours, mood swings, or other types of emotional dysregulation (National Centre for PTSD, 2021). Possible types might embrace visuals such as noise, light or

enclosed spaces, which learning environments are replete of. According to Jacobs (2021), Generation Z is hurrying through pressure, the internet, social media, and disturbances like increased PTSD checker by academic pressure, social media impact, and encounters with global disasters. These factors increase the demand for systems that limit the generalisation of sensory information and stabilise affective states.

Some of the learning environments meant for Gen Z students suffering from PTSD should not just have functionality; they should also have restorative design to cater for their psychological needs. Studies have also indicated that designing for sound inclusion or exclusion, the use of quiet and transition areas, and materials that are acoustically soft – absorptive or diffusive – reduce stress and hypervigilance (Springer, 2021). Furthermore, the ability to have some control over their environment with objects such as dimmers, movable furniture, and noise shields can calm the students. To this generation, with changing integration and flexibility, there is nothing comparable to the therapeutic dimension of interior design to minimise the intensity of PTSD and guarantee reception into an emerging community (Hasirci et al., 2021).

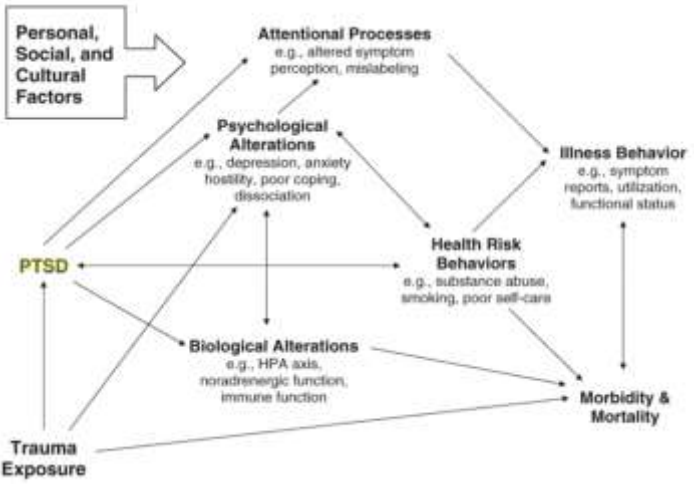

Figure (3) A model connecting PTSD and traumatic exposure to physical and mental health (Schuurman Green 2004.p.248)

First, understanding complicated aspects of PTSD and properly identifying symptoms and triggers points to the fact that the environment should not be left to coincidence. Efficiency in the creation of spaces

contributes to both enhanced academic performance and well-being, as these specified spaces provide calming and safe environments that are also malleable for the representatives of this age group.

4.2. Interior Design: An Aspect of Health Promotion

Interior design is critical in defining mental health status and can significantly affect PTSD sufferers. Studies have shown that there is legitimacy to designing psychological and somatic effects; some principles of architectural design can even reduce stress symptoms (Neufert et al., 2012). Such an approach increases the importance of designing interiors that do not hinder the well-being of users and often enhances it, especially if the facility is intended for use by qualified subjects such as Children with PTSD Gen Z students.

Specific preventative strategies within the American design framework thus comprise the use of natural lighting, biophilic interfaces, and spatial planning devoid of excessive stimulation. For instance, light from large windows or skylights can be beneficial to the mood of a person as well as regulation of the sleep-wake cycle (Hasirci et al., 2021). The rationale of Ana on how biophilic design incorporates natural materials and plants as well as natural motifs and patterns) has also been proven to reduce cortisol levels, which means that it helps the occupants to relax and attain emotional well-being (Jacobs, 2021).

Acoustic management is another important aspect of designing for mental health. If chosen, noise can cause people with PTSD to become more alert and make focus more challenging (Springer, 2021). Soundproofing or materials that reduce echoes and reverberations, as well as setting up specific isolated, quiet areas and organising the space in such a way that noisy zones are physically displaced from quieter, less noisy ones, can significantly improve the general safety feelings and comfort feelings of learners in educational facilities.

Flexibility and inclusion in interior design promote mental health among individuals. The design concepts that include modular furniture, adjustable lighting and dynamic space arrangements enable the student to have control over the ambient environment, which can be of special importance to individuals with PTSD (Panero et al., 2001). In addition, inclusive design covers the needs of people, such as ratio layout for students with physical disabilities, encouraging them to fit into the space.

4.3. The findings of the related research in applying therapeutic and secure design principles

The combination of therapeutic and secure design features has been deemed crucial to the construction of meaningful settings that facilitate mental health recovery for patients diagnosed with PTSD in particular. Many papers emphasis how design solutions should mainly address aspects such as security, comfort, and the state of one's people's emotions. There are design principles that have been found relevant to supporting people with PTSD, and these are security or predictability, biophilia, calmness and sensory integration, and restoration.

One of the main requirements emphasized in PTSD rehabilitation settings is confinement, which is the subject of another respect meant at the strategic-segment level. Essentially, Smith (2020) argues that interior spatial configurations allow interiors to offer the needed security. For people with PTSD, features like sightlines from one area of a room to another or other areas that cannot be hidden from view, as well as access ports, which are visible in secure university environments, serve as a self-perception of control mechanisms. Smith (2020) also goes further to argue that creating private alcoves in larger public areas is helpful for trauma healing since such alcoves allow clients to regain their emotional equilibrium.

Biophilic design is another important aspect of design therapy; according to the investigation, such design positively affects mental health. Hasirci (2021) elaborated on biophilia and how works of nature, including plants, natural lighting and water features, can be applied to promote wellness. Research shows that beneficial effects achieved through visualising the natural environment can be achieved even within closed rooms (Hasirci, 2021). Since the reaction of people with PTSD is also recognised as a part of the stress oxytocin reaction, biophilic design becomes a tool to decrease stress and begin healing. As Hasirci and Demirkan stated (2021), the application of nature in university settings reduces the effects of stress related to the urban setting and assists the psychological health of students.

Sensory integration spaces are also recognised as an important aspect of the therapeutic approach to design. According to the National Institutes of Health (2020), low-stimulation environments can be beneficial in helping a person with PTSD since they are sensitive to light, sound, and

visual stimulation. These strategies to minimise sensory overload include low-intense illumination, pale colours, and noise-diminishing materials. These features are useful to build a more relaxing atmosphere and minimise chances of evoking PTSD symptoms, in instances where facilities with a controlled environment that is free from noise-affecting stimulants, the persons in question can feel relaxed and want protection because professed (National Institutes of Health, 2020).

Figure 4 Interior Biophilic design(Architecture Courses, April.2024)

Also, restorative spaces have been considered important for mental health recovery processes. Panero, Zelnik and De Chiara (2001) stated that comfort, privacy and a link to nature should be provided within environments. These restorative environments are, therefore, intended to let the individual detach from the environment and recover at the psychological and physiological levels. Smith (2020) stated that these spaces are characterized by elements like comfortable chairs and sofas, warm light and decorations, as well as natural light and elements important for people with PTSD. Restorative places can be used to relate overwhelming experiences in normal operations, enhancing mental health recovery.

5. Framework for Security and Therapeutic Interior Design

Designing safe and therapeutic spaces needs to account for sensory design, safety concerns, and biophilic elements. Combined, they intend to meet the needs of Generation Z students with PTSD, creating cultures that promote posttraumatic thriving and learning.

The conceptual model highlights the use of five key design principles that focus on the sensibility of the interiors. Daylight integration in building design, when combined with controllable artificial lighting, produces variable interior conditions that can be customised to meet

different preferences. As Inter finds out through a survey with students, earthy and pale colours are appropriate for eliciting a state of tranquillity; they both come close to the idea associated with the concept of health (NIH, 2020). Mild patterns prevent excess stimulus, and noise-insulating materials and background sounds influence hushed surroundings (Jacobs, 2021; Hasirci & Demirkan, 2021). Big spaces and flexible spaces or zones add the value of multi-function in which students can read, discuss, and even rest. Mobile systems, including modular furniture and movable partitions, Allow flexibility in room layouts and configurations (Smith, 2020).

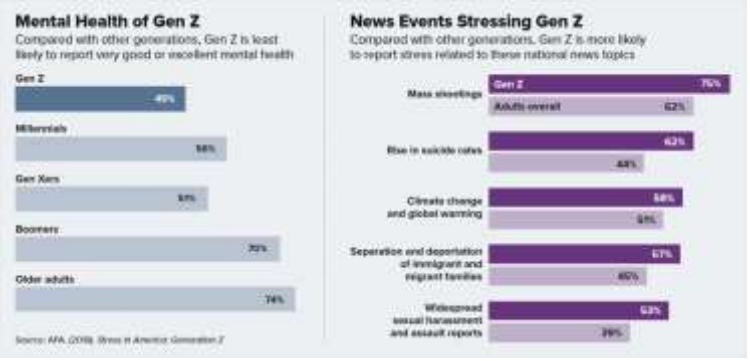

Figure 5 Generation Z mental health suffers the most among the other generations (American Psychological Association, 2019)

Therapeutic design is characterised by safety and security requirements. Enclosures of entries with key cards and CCTV surveillance ensure the provision of secure spaces with easy access while at the same time avoiding compromising isolation (ProQuest, 2020). Smoke alarms, firefighting equipment such as extinguishers, and fire escape exits help to meet the stipulated standard in safety measures (Panero, Zelnik & De Chiara, 2001). Another feature is that buildings are designed to be accessible; there are ramps and wider corridors, and ergonomic furniture is bought to make them friendly to those with disabilities (Neufert & Kister, 2012).

The exterior greenery remains an important part of the therapeutic interior since Biophilic design principles are part of the therapeutic concept. Verticals and intermediates are facilitated through open space framed large windows, opening vertical blue and green walls, and shaded interfacing cascading outside within indoor areas, increasing the kinetic activity and

fresh air circulating within the building (Hasirci, 2021). Initiations such as green signage, interacting live walls and water fountains are calming and assist in depression or stress offloading (National Institutes of Health, 2020). However, the application of wooden, bamboo or stone tones not only establishes the relation of the user to nature but also fits the concept of sustainability (Jensen, 2020).

It is possible to conclude that by including sensory design, the concept of safety, and biophilia in this approach, the resulting interior design ensures that spaces are malleable and protective yet comforting for learners with PTSD. It focuses on such aspects of design as the capability to enhance mental health and promote academic achievements.

6. Findings and Discussion

6.1. Effects of Specific Design Features on Students' Mental Health

Academic environmental design features have a big impact on themental health ofstudents by affecting their social, emotional, and cognitive experiences. While poorly built spaces can lead to tension, anxiety, and disengagement, well-planned spaces can provide a supportive atmosphere that promotes excellent mental health.

6.1.1. Natural Light and Ventilation

With the hope of gaining exposure to natural light, it has been found that it does have effects on the mood as well as the energy levels of the students, meaning that it does have effects on concentration and anxiety (Panero Zelnik & De Chiara 2001). Cross ventilation also helps to create a healthier indoor environment as it helps minimize fatigue levels as well as enhance alertness to recommend more classroom and study area environments as recommended by Smith (2020).

6.1.2. Biophilic Design

The study of biophilia and biophilic design has shown clear beneficial effects on students' mental health through exposure to natural elements. Research shows that the incorporation of indoor plants, natural materials such as wood and stone, and exposure to the outside view decreases stress and increases the level of happiness (Hasirci, 2021). Most students get transferred to other classes and hence get exposed to natural environments that help reduce their blood pressure, improve their cognitive abilities, and promote relaxation, thus creating a serene academic environment (Hasirci & Demirkan, 2021).

Figure 6 Therapeutic Interior design in University (Idom, February 2024)

6.1.3. Acoustics

Noise which interferes with concentration and garners negative effects on the emotional setup of a learner should be avoided at all costs. High noise levels negatively affect subjects, including Noise stress and organizational citizenship behavior. By adding acoustic treatments to the areas that allow for it or adjusting the layout of rooms to have places that actively counter noise pollution, students' concentration will be enhanced, and stress levels will be lowered (National Institutes of Health, 2020).

6.1.4. Spatial Layout and Flexibility

Organic designs give various possibilities for the configuration of space – work zones and study booths – so students can create a comfortable environment. As will be discussed, such spaces being able to flexibly change throughout the learning process are crucial for student well-being, providing warmth, assertiveness, and protection (Campbell, 2021). Besides, disordered or ungainly conditions can create a sense of disorder, while ordered or organised beautiful conditions improve the sense of order.

6.2. Practical Suggestions for Including Safe and Healing Interiors in Educational Settings

Academic interiors must have therapeutic design aspects that enhance psychological safety, comfort, and security to support mental well-being. Here are a few reasonable suggestions to help you do this:

6.2.1. Incorporating Natural Elements

Indeed, biophilic design needs to form part of the fabric. Natural materials such as plants both indoors and end number of wooden furniture and HVAC systems with a view of plants can contribute to the creation of the

atmosphere. Furthermore, green roofs and gardens in universities provide open and segregated areas for relaxation and destressing (Hasirci, 2021).

6.2.2. Creating Flexible Spaces

It is thus important that academic settings present different spatial conditions that can be utilised in many ways. This comprises reading and research zones, learning environments that support students to work in groups and comfortable areas where learners can rest and recover. Space-saving furniture and portable dividers can be beneficial and create feelings of independence when it comes to the usage and organisation of spaces (Panero et al., 2001).

6.2.3. Prioritizing Acoustic Comfort

Efficient acoustic treatment of classrooms and other shared spaces is important to reduce noise levels and focus. Employing requisites such as sound-insulating materials, acoustic wall or ceiling solutions, and appropriate geometric configurations of modern workspaces can provide a peaceful atmosphere which is conducive to the psychological fitness of occupants. This is so especially true for PTSD or anxiety disorder students, who are usually very sensitive to noise (National Institutes of Health, 2020).

6.2.4. Designing for Safety

It is important to note that it is imperative that any space feels safe for the body and mind. These features involve adequate signs to be displayed, proper corridors to walk, brightly lit areas and evacuation maps. Glass partitions can be used, and since the partitions are translucent, people will not feel confined while working or attending a meeting.

6.2.5. Sustainable and Eco-friendly Design

Some sustainable design practices are cost-saving and protect natural resources hence, they also assist students in having a healthy mind. One can design the spaces by employing efforts such as using environmentally friendly materials, efficient lighting and greenery in the surroundings. Moreover, sustainable design practice minimizes environmental degradation, better conducive classroom indoor air quality and decreases the health risk of toxic chemicals exposure to students (Panero et al., 2001).

6.3. Key Challenges

Designing academic interiors can be a distinctly difficult task due to such primary concerns as aesthetics, ergonomics and security. Thus, environments

that have to be aesthetically appealing to lift mood and stimulate creative thinking have to meet practical and safety demands.

6.3.1. Balancing Aesthetics with Functionality

At this stage, colours and furniture design should always reflect the functionality required by the room. Bright colours like yellow and blue can enhance creativity and diminish stress (Jacobs, 2021). However, bright and dark colours might be disruptive in a few spaces. From aesthetics to functionality of environments implies that while arriving at designs that enhance the general outlook of the environment and point towards the general well-being of the student, they must also not interfere with the learning capabilities of students.

6.3.2. Maintaining Safety Standards

In completing this project, It has been concluded that safety at a certain point cannot be sacrificed under the guise of creating beauty. For example, Gehl's (2010) claim and other claims that glass walls are modern and aesthetically pleasing must indicate that they are tempered or made of shatterproof materials to avoid accidents. In the same way, it means that the furniture selected for the room ought to be durable, ergonomically suited and well within the reach of all students with disabilities (Neufert et al., 2012). Hence, legislated requirements for fire safety, including escape routes, also need to be unobtrusively incorporated into architectural designs to serve the full safety of all students.

6.3.3. Sustainable Design with Mental Health Benefits

The implementation of sustainability in academic design not only contributes to the environmental objectives but also plays a role in managing mental health. Innovative features give learners improved indoor environment quality, which includes Implementing low-VOC paints, good lighting, and green areas (Hasirci, 2021).

7. Implications for Educational Design

7.1. Benefits of Safe Designs for Learners and Institutions in the Long Run

There are several long-term advantages for both students and educational institutions when safe and therapeutic design features are incorporated into learning settings. Universities may create environments that promote academic achievement, personal development, and emotional wellness by giving students' mental health priority via careful spatial design.

7.1.1. Improved Mental Health and Well-being

Aspects like Biophilic design, Natural Light and Acoustic treatment can reduce stress and anxiety greatly, ensuring an environment that enables

good mental health. As cases of depression and anxiety in students have emerged, there is a need for schools, colleges, and universities that embrace secure therapeutic environments to deal with these problems. Studies show that students who get to be in comfortable, relaxing environments have lower levels of nervousness and improved additional psychological comfort (Hasirci, 2021). It could also lead to improved performance because high stress and anxiety may affect focus and extreme mental execution (Hasirci & Demirkan, 2021).

7.1.2. Enhanced Academic Performance and Engagement

When a student practices mental well-being through sociability due to environmental support, the student should focus on his studies and engage academically. A silent and colorful environment has a positive effect in that students can direct their focus more and thus increase their responses, meaning that more information will be grasped with better performance in class (Panero et al., 2001). The long-term advantages are to have more successful and motivated graduates and improvement of the overall image of the institution as one which focuses on the welfare of students.

7.1.3. Reduction in Student Attrition:

These challenges affect high dropout rates at universities and learners with PTSD, depression, anxiety or other mental health problems. This way, universities will decrease the attrition rates and increase the retention of such learners by fashioning spaces within learning institutions to cater for such learners. The students support areas that assist learners to deal with mental strain that they encounter while studying can enable them to cope with other issues they face in their studying Therefore, students can stay in their programs (Jacobs, 2021). Since the development of this component fosters the positive development of students, it strengthens the stability and achievement of the institution.

7.1.4. Increased Institutional Appeal:

Schools and other learning centers that have embraced the concept of designing for improved mental health can promote themselves as institutions that embrace student welfare. Such sentiments prove to enhance well-being, which may appeal to aspiring students who want to find academic havens. Further, the institutions that have secure and therapeutic designs prove that they value the well-being of learners as much as the academization process (Smith, 2020).

7.1.5. Sustainability and Long-Term Cost Savings:

Low-emission materials, efficient lighting, and creating facilities that promote a strong connection with nature benefit the immediate environment and the overall facility expenses. Implementation of sustainable practices leaves much to be desired in institutions since the costs of utilities and maintenance may be lower, and the lifespan of built structures may increase (Hasirci, 2021). In addition, design for sustainability in learning and working spaces increases productivity by enhancing health among students and officers and reduces incidences of sickness and the overall costs of healthcare.

7.2. Results Adapted for Additional Vulnerable Groups

Some of the principles which have been observed for designing for the students threatened by PTSD are effective for developing for other deprived groups such as Disabled survivors, traumatised learners, and international students. These principles include biophilia, reduced acute sensations and stress, physical and psychological comfort and accessibility that combine to implement or enhance the access and facility of amenities to as many people as possible.

7.2.1 Design for Individuals with Disabilities:

For individuals with physical disabilities, accessible features such as ramps with a 1:12 slope ratio, doors with at least 36 inches width, and restrooms provided with at least 33-inch to 36-inch grab bars for the convenience of mobility-impaired people are important requirements (National Institutes of Health, 2020). Furthermore, dedicated quiet areas with soft tones of colors and soft furniture can help establish low-arousal physical environments that promote the learning of students who might have autism spectrum disorders or other related sensory processing disorder interests (Hasirci & Demirkan, 2021). The policies applied at Yale University, Schwarzman Center, which utilize some restricted areas and special rooms' design, prove that such measures can help to create a stable and focused emotional environment for those people who need it. As done in the Contemplative Sciences Center at the University of Virginia, incorporating the biophilic features of natural light, vegetation, and open-air layout brings out the oriental nature of these design strategies as stress relievers and sources of focus (Smith, 2020).

7.2.2 Recovery Trauma Sensitive Design:

The measures employed in teaching children with PTSD, which include soundproofing, cleaning, and the provision of grass areas are also effective

for any other traumatised person. For instance, those who suffer domestic abuse or refugees are normally under the pressure of stress, noise, and social conflicts, which can be solved by the use of proper lighting, heat and cool control, acoustics, and green plants. Research has indicated that the presence of plant life lowers cortisol levels, overall stress and rates of fatigue by 12% (Smith, 2020). University of California, Berkeley's Mental Health Resource Centre is one good example where principles of natural ventilation, indoor plants and modular chairs have been applied ubiquitously where any person feels safe and welcome. Such approaches indicate that elements, which help to recover from PTSD, also make environments for trauma survivors in rehabilitation or recovery settings more accessible (Hasirci, 2021).

7.2.3 Design for International Students:

Potential issues of the first-year international students Major challenges observed among international students include The first-year international students have to cope with the differences in culture and language. This transition is facilitated by design approaches that target the social aspect and cultural affiliation of people. For instance, warm colors and soft furniture create the emotions of inclusion in the interior of the Arizona State University Health Services Building (Campbell, 2021). Study lounges and Activity centers enhance social interaction, extend friendliness and help develop togetherness among the international students. Culture-based art and multi-language signage also help break cultural barriers and provide both the emotional and academic support they require (Smith, 2020).

Due to the integration of such studies, it is possible to state that the same design features, such as biophilic elements, sensory comfort, accessibility, and emotional safety can affect people of different demographics. All of these tactics tend towards the health, welcome of all, participation, and success of client groups such as the disabled, physically and sexually assaulted, and internationals. The cases of Gutman Library at Harvard Graduate School of Education and Schwarzman Center at Yale University demonstrate the applicability of these principles that prove how therapeutic and secure design will empower all the vulnerable categories in facilities for learning (National Institutes of Health, 2020). The reason for this is twofold, not only does it improve the quality of life of the client,

but it also works in concurrence with the overall institutional directive of creating an environment that supports all students.

8. Conclusion

This research shares the benefits realized from ID on student experience and mental health in schools and colleges. Tools and interventions, including biophilia, natural light, sensory gardens, reduction of noise interference, and use of sustainable materials, positive impact stress, anxiety, fatigue levels, overall learning interest levels, and learners' academic achievement.

It is beneficial for students with PTSD, disabilities or other mental health issues as they contribute to well-being and institutions' success factors – such as retention, reputation, etc. Interior design serves agendas associated with mental health by providing safe, safe, effective and equitable learning environments for human growth, learning and well-being. Finally, interior design goes beyond the mere decorative level, benefits the human mind, heals, and contributes to creating barrier-free, sustainable learning spaces.

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أساليب التصميم الداخلي العلاجي للتعافي من اضطراب ما بعد الصدمة في الجيل القادم

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المستخلص:

لقد أصبح الجيلZ موضوعًا عاطفيًا هذه الأيام نظرًا لخصائصهم المختلفة، فضلاً عن رغباتهم وطرق تفكيرهم الجديدة. تبحث هذه الورقة في التأثير المشترك للأجيال السابقة التي واجهت ضغوطاتها المعروفة في الكلية من خلال تحليل مقارن مع الجيل الحالي، الذي يواجه ضغوطًا اجتماعية ورقمية وعالمية تؤدي إلى زيادة مشاكل الصحة العقلية، وخاصة اضطراب ما بعد الصدمة "اضطراب ما بعد الصدمة" في الجيل .Z لا تأخذ مفاهيم التصميم الشائعة للداخلية في الاعتبار احتياجات المريض المصاب باضطراب ما بعد الصدمة مثل الأمان وتنظيم العواطف والسيطرة على البيئة. وبالتالي، يهدف هذا البحث إلى سد الفجوة من خلال فحص

كيفية إنشاء مساحات داخلية آمنة ومغذية لمرضى الجيل Z الذين يعانون من اضطراب ما بعد الصدمة. تتضمن بعض الأساليب تحليل سيناريو الحالة وتحديد مبادئ التصميم المستنير بالصدمة، وتقييم بيئات الشفاء، ومقابلة الجيل Z لتحديد احتياجاتهم. تركز النتيجة على عناصر التصميم مثل حب الحياة، والإضاءة المحيطة، وأنظمة الألوان المحايدة، وفرص الخصوصية التي تمتزج بسلاسة مع إعدادات المجموعة. تماشياً مع هذا المنظور، فإن الحل المقترح في هذه الورقة هو مجموعة من المبادئ التوجيهية التي تتضمن إنشاء بيئات آمنة وهادئة، باستخدام مواد طبيعية، والقدرة على التكيف، وتعديل المدخلات الحسية. تؤدي هذه التصميمات إلى تقليل القلق، وتعزيز الشفاء العاطفي في هذه العملية، وتوفير التنظيم الذاتي جنبًا إلى جنب مع الطريق إلى محيط أكثر إيجابية لعلاج اضطراب ما بعد الصدمة.

الكلمات المفتاحية:

اضطراب ما بعد الصدمة؛ الجيل زد؛ التصميمات الداخلية للجامعات؛ التصميمات الداخلية العلاجية.