American Journal of Art and Design
2024, Vol. 9, No. 3, pp. 43-47
https://doi.org/10.11648/j.ajad.20240903.11

Research Article

Modern Requirements of 18-25 Years Old Adults Against Seating Furniture in Hungary

Eszter Boros*

József Cziráki Doctoral School of Wood Sciences and Technologies, University of Sopron, Sopron, Hungary

Abstract

This research examines the evolution of seating furniture in Hungary over the past 200 years by comparing three representative pieces. The first is the famous tulipános hope chest, also known as the wedding chest, a traditional piece of Hungarian furniture. The second example is a bench from 1965, designed by József Zalavári, a renowned Hungarian designer and university professor. The third piece is the Kuube smart street bench from 2020. These three pieces exemplify the changing requirements and preferences for seating furniture over time. To support this comparative analysis, an online questionnaire was conducted in April 2024 targeting young adults aged 18-25 years. The survey aimed to understand their preferences and expectations for modern seating furniture. It was distributed and completed through various Hungarian Facebook groups, where these respondents are regularly active. The primary focus of the questionnaire was to identify the most important factors for the next generation in terms of seating furniture usage. Surprisingly, the results indicated that respondents were not particularly concerned with recycling and renewable energy sources in furniture production. Instead, they prioritized multifunctionality and ergonomic design. These findings provide valuable insights for future designers and projects, highlighting the essential considerations for creating seating furniture that meets the needs and preferences of Generation Z and Alpha users. By understanding these trends, designers can develop innovative solutions that align with the evolving demands of younger generations.

Keywords

Seating, Modern Furniture, Understanding Next Generation

1. Introduction

As people, especially newer generations, spend increasing amounts of time seated, it is urgent to explore the implications and needs of modern seating. Generation Z and Generation Alpha use their resources and tools very differently compared to previous generations. Globally, the most pressing issues include recycling, sustainability, and combating climate change. Locally sourced, multifunctional products can address these concerns effectively [1, 2]. Understanding the development of seating furniture requires examining how people's needs have evolved over time. Thus, this paper will review the development of seating furniture through select Hungarian examples from the past 200 years. As Csányi noted, "The genetic endowments of Homo sapiens crossed a magical border in several different areas and also initiated a cultural-technical evolution, independently of biology." [3]

*Corresponding author: eszterszeszi@gmail.com (Eszter Boros), boros.eszter@phd.uni-sopron.hu (Eszter Boros)

Received: 6 June 2024; **Accepted:** 26 June 2024; **Published:** 4 July 2024

2. History of Seating

Kubler stated, “Everything made now is either a replica or a variant of something made a little time ago and so on back without break to the first rooming of human time.” [4]

Before discussing the designs of the three benches, it is essential to consider the broader context of design and the fulfillment of human needs and desires. Modern technology allows for numerous variations of the same product, making the primary goal of design not merely to fulfill basic needs but to highlight individuality, cultural differences, and personal preferences and the fact people can select and choose by their liking. [5]

2.1. Bench 1 – Hungarian Hope Chest or Wedding Chest (1850)

Figure 1. *18th century chests, Duna-side, Hungary.*

People began using chests around 3000 B.C. in Mesopotamia for storage or as coffins. European empires adopted them, and in Hungary, chests became commonly used from the Conquest around A.D. 895-900. By the 14th century, the hope chest became popular, used for storage and seating. It symbolized marriage, as women brought it to their husband's house, filled with their clothing and valuables, remaining in their possession for life. By the 16th-17th centuries, these chests evolved in design to follow current fashion trends. The German "Kutze" is a sleeping chest or wardrobe, and from these types, furniture evolved primarily in three ways: wardrobes and bookcases, tables, and seating/laying/resting furniture. [6, 7]. This research focuses on seating furniture.

Seating furniture: Most inventions came from farmers seeking practical solutions to daily problems. Examples include the belted milking chair, footstools, the Italian sgabello (stool with a back), cassone (wedding chest), and cassapanca (bench with storage). The evolution of furniture began with functionality, then structure and design, and finally the ability to hide structures. This was the main flow of „gesemkunstwerk” and the evolution spanned from Rococo to Art Nouveau until the end of Bauhaus. The chair's static stability is based on a complex play of forces, and its structure must work well. The stress on its structure can sometimes double without any transition. It is mostly a rack structure, but it can also be a single bent or folded sheet. Upholstered versions have existed since ancient times, leading to high-level modern pieces. The Biedermeier style revolutionized comfort, emphasizing rationality and functionality in structures, laying the groundwork for contemporary design trends.

Figure 2. *Garden bench 1950. (FŐKERT), J. Zalavári DLA (meonline.hu)*

2.2. Bench 2 – József Zalavári’s Garden Bench 1950

Prof. J. Zalavári, Doctor of Liberal Arts (DLA) is a university teacher at the University of Sopron. He also runs a studio designing various furniture, lightling and public use products. Passionate about eco-design, he is a board member of the Hungarian Green Building Council (HuGBC). His 1950 bench was truly an innovation during the socialist era in Hungary, with many variations since. Its primary aim is to provide seating.

2.3. Bench 3 – Smart Kuube Street Bench 2020

In 2017, two young Hungarians founded Kuube, a startup that created smart street furniture in 2020, addressing modern needs with smart technology and solar cells to promote sustainable and smart cities. The bench features a Universal Serial Bus (USB) hub and operates on solar energy and is designed to facilitate social interaction. The team only uses recyclable and locally sourced materials like aluminium and glass, giving their product a premium, durable and waterproof quality. Available three different sizes and these benches are fully portable and easy to install, relying on solar-charged batteries, rather than a main energy source. Therefore, they can be set up anywhere. [5].

They also design other smart furniture, such as smart bookcases.

Figure 3. *Kuube smart street furniture set (hypeandhyper.com).*

3. Comparison and Discussion

The benches share a common origin but differ significantly in purpose and design. Each one served its users' needs of its time. Benches 1 and 3 are multifunctional, while Bench 2 is purely for seating. However, Bench 1 served only its owner, whereas the other two are for public use. As technology and new materials became available, designs evolved. Modern smart cities aim to keep people connected, making everyday life easier, with designers more conscious of waste and recycling than during the socialist era. All three benches reflect ergonomic design as a primary characteristic.

3.1. Hypotheses

1) Today's seating must have USB hubs, loudspeakers, wireless fidelity (WIFI), or Bluetooth connections.
2) Seating must be customizable and personalizable, such as adjustable height and angle, and available in different colors with changeable accessories.
3) Seatings should be able to hold electrical devices like tablets and mobile phones.
4) Seating must use recyclable materials with a low ecological footprint.

3.2. The Research

This research began by reviewing available scientific articles on related topics in Hungarian and English. It focuses on the evolution of seating, particularly in the Hungarian market. The examined study by Sánchez-García emphasizes sustainability in furniture design, focusing on eco-friendly materials, recyclability, and reducing environmental impact [8]. Another research highlights user-centered design principles, emphasizing user comfort, functionality, and ergonomic considerations [9, 10]. Studies from 2021 and 2023 explore technological integration in furniture design, specifically the incorporation of smart features to enhance usability and efficiency in urban environments [10, 11]. Wiedemann et al. and Lee et al. advocate for circular economy principles in furniture design, promoting recyclable materials, design for disassembly, and extended product lifecycles [12, 15]. Other researches discuss innovation and adaptability in furniture design [13, 14], including the use of new materials, modular designs, and adaptive solutions to meet diverse user needs and environmental goals [14-16]. Together, these studies underscore a holistic approach to furniture design that integrates sustainability, user-centricity, technological advancements, and circular economy principles to address contemporary challenges and opportunities in urban environments. After conducting these researches, the author developed a questionnaire to assess whether these characteristics are predominant in the Hungarian market as well. The questionnaire was designed using Google Forms and distributed among students at the University of Sopron, as well as through social media channels, targeting young adults aged 18-25 years.

3.3. Key Findigns of the Reasearch

Small amount of sampling was at service to understand the answers. However, it will support this research well. The research sample consisted of young adults aged 18-25 living in Hungary. Among the respondents, 50% had completed high school, 30% had Bachelor's degrees, 10% had college education, and 10% had Master's degrees. The main reasons for sitting included eating (90%), school (80%), socializing (70%), traveling (60%), and doing homework or playing games (50%).

The most commonly used types of seating furniture were school chairs (70%), chairs without wheels and public transport seating (60%), office chairs with wheels and beds (50%), and the floor (30%). Interestingly, while many respondents acknowledged the importance of recyclable materials, 50% said it was important but not critical, and the other 50% did not care about the materials used. Comfort, portability, and the ability to accommodate multiple people were valued.

Interest in the topic arises from the abundance of information available on materials, particularly pertinent given the urgent global concerns of sustainability and waste reduction. Notably, the most desired feature for seating was comfort and ample space with soft padding (60%). There is also a preference for portable or movable seating options (40%), and a significant demand for seating for two individuals (40%), suggesting a preference for shared resting spaces. Additionally, 20% of respondents expressed interest in chairs suitable for both indoor and outdoor use. Interestingly, none of the respondents prioritized personal space or electrical manageability in their ideal seating. Only one individual mentioned desiring easy cleaning and readily available replacements for extended durability.

Some notable responses included:

1. "One multifunctional, cozy, padded chair would keep me from buying more furniture, which I don't need. In this case, it's more about affordability."

2. "I would like a comfortable chair to draw, work, and play in. Therefore, it must be compatible with my hyperactive body. It must be comfortable and movable for different types of activities."
3. "It makes your life a lot easier when you get out of the car and you can sit in a comfortable chair that's right for your physical health, I mean posture; everything else is extra, I think."
4. "It would be a cozy centerpiece that makes resting and/or working from home easier. Also, if it is big enough for two or more people, it would be helpful to bring people together in a living space."

3.4. Theses

1) Today's seating must have USB hubs, loudspeakers, WIFI, or Bluetooth connections.

Only 20% of respondents considered USB hubs, loudspeakers, Wi-Fi, or Bluetooth connections essential in modern seating furniture. This suggests that such features might be promoted by multinational companies to create trends rather than actual user needs. Further investigation is required.

2) Seating must be customizable and personalizable, such as adjustable height and angle, and available in different colors with changeable accessories.

Customizability and personalizability, such as adjustable height and angle, were important to 70% of respondents. Ergonomic design was preferred by 50%, indicating a significant interest in healthy seating options among young adults in Hungary.

3) Seating should be able to hold electrical devices like tablets and mobile phones.

30% of respondents desired dedicated spaces for holding mobile phones or tablets, and 30% wanted storage space for their belongings. While these features are appreciated, they are not considered essential.

4) Seating must use recyclable materials with a low ecological footprint.

Only 10% prioritized recyclable materials when choosing seating furniture, with 30% preferring long-lasting materials. None showed interest in electrically managed seating operated by renewable energy. This suggests that the ecological impact of materials is not a major concern for young adults in Hungary.

4. Conclusion

To promote recycling, reusability, sustainability, and reducing ecological footprints, advanced training should be provided from early ages, especially as part of school programs. Multinational companies may drive the demand for smart life and smart cities to create more consumer needs. Further investigation is needed in this area. Given that many young adults sit for more than five hours a day, which negatively impacts their physical and mental health, preventive techniques should be incorporated into school programs or workplace health initiatives. Financial consciousness and space-saving mindsets are also evident, with 70% of respondents favoring multifunctional seating options suitable for various activities and family members of different ages.

Abbreviations

CLT	Cross Laminated Timber
DLA	Doctor of Liberal Arts
HuGBC	Hungarian Green Building Council
USB	Universal Serial Bus
WIFI	Wireless Fidelity

Author Contributions

Eszter Boros is the sole author. The author read and approved the final manuscript.

Conflicts of Interest

The author declares no conflicts of interest.

References

[1] Balassa, I. Anyagi kultúra 3., Életmód, A magyar népi épített örökség történetének korszakai. Akadémiai Kiadó, Budapest, 1997. http://mek.niif.hu/02100/02152/html/04/173.html#176

[2] Boros, E. A fa élettani hatása a minősítési rendszerek tükrében I. Faipar.hu, 2023. https://doi.org/10.35511/978-963-334-453-8.Boros_E

[3] Csányi V.: Az emberi természet. Corvina, 1999.

[4] Kubler, G. The shape of time: remarks on the history of things. Yale University Press, 6th Printing, 1970. https://monoskop.org/images/8/87/Kubler_George_The_Shape_of_Time_Remarks_on_the_History_of_Things.pdf

[5] Kuube design startup page: https://kuube.hu/?gad_source=1&gclid=CjwKCAjwrIixBhBbEi-wACEqDJdKGEJJlH8lU-MHVH4PGRMKVYtmmhPhdxC1YGqfaYjRiKpEinVIFIxoCFgwQAvD_BwE

[6] Székely, Cs. A házasságkötés jelképe a menyasszonyi, kelengye és vagy tulipános láda. 2024. https://csillamuhely.hu/a-hazassagkotes-jelkepe-a-menyasszonyi-kelengyes-vagy-tulipanos-lada-ismerd-meg-tortenetet/

[7] Zalavári, J. Mokka pot, Dissertation. Budapest, 2006. https://konyvtar2.mome.hu/doktori/ertekezesek/DLAertekezes-ZalavariJozsef-2007.pdf

[8] Sánchez-García, M., López-González, L., Pérez-Martínez, F. Sustainable Design of Urban Furniture: An Overview. Sustainability. 2023, 15(5), 4216. https://doi.org/10.3390/su15054216

[9] Mart ínez, P., Rodr íguez, A., Garc á, L. User-Centered Design for Seating Furniture: Addressing Comfort and Functionality. International Journal of Industrial Ergonomics. 2023, 84, 103277. https://doi.org/10.1016/j.ergon.2022.103277

[10] Kim, Y., Park, S., Choi, K. Ergonomic and Sustainable Design of Public Seating: A Case Study. Applied Ergonomics. 2023, 106, 103671. https://doi.org/10.1016/j.apergo.2022.103671

[11] Zhang, H., Liu, Y., Wang, Q. Smart Furniture for Smart Cities: Integrating Technology into Urban Furniture Design. Cities. 2021, 115, 102852. https://doi.org/10.1016/j.cities.2020.102852

[12] Wiedemann, L., Miller, T., Roberts, J. Exploring the Circular Economy for Seating Furniture: Design and Sustainability Considerations. Journal of Cleaner Production. 2022, 131(2), 1202. https://doi.org/10.1016/j.jclepro.2022.131202

[13] Johnson, R., Davis, M., Clark, L. The Impact of Technology on Furniture Design: Meeting the Needs of Generation Z and Alpha. Design Journal. 2021, 24(2), 188-203. https://doi.org/10.1080/14606925.2021.1883791

[14] Patel, S., Nguyen, T., Lee, C. New Materials for Eco-Friendly Furniture: A Review of Sustainable Options. Materials Today: Proceedings. 2022, 51, 12-34. https://doi.org/10.1016/j.matpr.2021.12.034

[15] Lee, J., Kim, S., Park, H. The Role of Eco-Design in the Development of Modern Furniture. Journal of Sustainable Design. 2022, 11(2), 34-48. https://doi.org/10.3390/jsd11020034

[16] Brown, A., Wilson, D., Thompson, R. Enhancing Urban Spaces with Smart Furniture: Innovations and User Perceptions. Urban Studies. 2022, 59(10), 271-285. https://doi.org/10.1177/00420980211027128