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The Changing Conception of Methodology: A Commentary on the Application of User Centric Design

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Introduction

This article provides a commentary on the study conducted by Al Subhi *et al.* [1], in this special issue on mental health disorders. Al Subhi *et al.* [1], provide concise summaries of the literature in the field of design thinking. This encompasses methodologies such as a user-centric framework. In general, literature is contrasted and extracts valuable methodological knowledge that is necessary for the implementation of dynamic processes in health institutes. This paper emphasizes the potential of design thinking to transform static healthcare processes into dynamic ones that are more beneficial to society, patients, and physicians. To establish a user-centric framework that is personalized, it is crucial to employ qualitative research methods, including brainstorming and customer journey mapping.

Flood *et al.* [2], highlight the importance of user-centric design in healthcare and pharmaceuticals. They advocate involving users in design processes to address complex health issues, using methods like journey mapping, prototyping, and user testing. The study concludes that collaboration between designers and organizations is essential for effective user-centric design.

Al Subhi *et al.* [1] explored the application of design thinking as an intervention in the educational process. Researchers have made significant efforts to integrate design thinking into academia, recognizing its potential to influence education in various ways as follows:

Key Arguments

1. **Potential and implementation**: Panke [3] discusses how design thinking can improve education, its implementation in different settings, the tools and methods involved, and its limitations. While beneficial, design thinking faces challenges such as lack of creativity confidence, team conflicts, and limited long-term impact.
2. **User-centric approach**: Flood *et al.* [2] emphasize the importance of a user-centric approach in healthcare, highlighting journey mapping, prototyping, and user testing as essential methods. Interdisciplinary collaboration is crucial for effective design thinking.
3. **Library services**: Bjornen and Ippoliti [4] illustrate how journey mapping and design thinking can enhance library services by helping researchers organize data. This involves understanding user experiences through mapping their research journey.
4. **Strategic approach**: Achieving successful educational outcomes requires a dynamic, strategic approach with well-defined objectives. A user-centric design mindset is essential for addressing complex issues and evaluating policy effectiveness.
5. **Widespread use**: Design thinking is used to train teachers, develop curricula, and create evidence-based library services. However, there is potential for further research into the overall processes and policies of educational institutions, depending on the cultural embedding with an organization.
6. **Emotional connection**: Liedtka and Ogilvie [5] advocate for managers to adopt a designer's mindset, emphasizing empathy and emotional connection with customers to create exceptional designs.

7. **Revolutionizing education**: Recent studies suggest that a design mindset can transform the educational process, making it more dynamic and engaging. The design process cycle includes diagnosis, innovation, and implementation.

8. **Revised design process**: Oliver [6] present a revised design process aimed at aligning products with customer needs, emphasizing efficiency, customer-centricity, and innovation.

9. **Creativity and problem-solving**: Design thinking involves divergent and convergent thinking, exploring all potential solutions before homing in on the most effective one.

10. **Current research**: Focuses on the initial stages of the design process, using techniques like customer journey mapping, value chain analysis, mind mapping, and brainstorming.

11. **Customer journey mapping (CJM)**: CJM is crucial in design thinking, involving goal setting, understanding the customer, designing the experience, and evaluating the design. Critical touchpoints are identified that influence the overall experience.

12. **Marketing and education**: The customer journey concept is applied to education, dividing the process into introduction (pre-purchase), during study (buy), and post-study (post-purchase) phases.

These key arguments clearly demonstrate the transformative potential of design thinking in education. There is a need to emphasize a user-centric approach, strategic planning, and continuous evaluation to achieve meaningful improvements in mental health disorder pathways as well.

Critical Analysis

Al Subhi *et al.* [1] have introduced a novel application of design thinking in the educational sector, which is a fresh perspective on improving educational processes. Moreover, introducing User-Centric Framework; by focusing on the needs of end-users, the paper emphasizes empathy and feedback, which are crucial for creating effective educational systems [1]. This approach can be particularly beneficial in mental health disorder by fostering empathy and understanding among patients and doctors [7]. Journey mapping is a user-centric design tool that helps identify user needs during the research design phase. Starting with user engagement, it offers a thorough understanding of the student experience from both physical and emotional perspectives. By visualizing complex data, journey mapping makes it easier to interpret service users' experiences and pinpoint areas for improvement. In the context of mental health, this can lead to more personalized and supportive learning environments [8]. In terms of methodology, the use of customer journey mapping and brainstorming provides a structured way to gather insights and generate ideas, making the research robust and actionable. These methods can be adapted to understand the experiences of individuals with mental health disorders and improve mental health services.

Critical Analysis of Design Thinking in Education Applied to Mental Health Disorders

Design thinking, a human-centered approach to problem-solving, has shown promise in various fields, including education and healthcare. When applied to mental health disorders, design thinking can offer innovative solutions that are empathetic, user-centric, and effective to clinicians to understand their patients. This analysis explores the application of design thinking in mental health education and treatment, supported by examples and case studies:

Strengths

1. **Empathy and user-centric approach**: Design thinking emphasizes empathy, which is crucial in mental health care. By understanding the experiences and needs of individuals with mental health disorders, interventions can be tailored to provide more effective and compassionate care. For example, the Loneliness Lab used design thinking to address loneliness, a common issue in mental health, by empathizing with affected individuals and co-creating solutions with them.

2. **Creativity and innovation**: Design thinking encourages creativity and innovation, leading to the development of novel interventions. For instance, virtual reality (VR) experiences have been designed to help patients with anxiety disorders confront and manage their fears in a controlled environment. This innovative approach can make therapy more engaging and effective.

3. **Structured problem-solving**: The structured framework of design thinking (empathize, define, ideate, prototype, test) ensures that solutions are well-thought-out and tested before implementation. This methodical approach can lead to more reliable and effective mental health interventions. The Centers for Disease Control and Prevention's (CDC) review of design thinking in healthcare found that interventions developed using this approach were generally more successful and well-received by patients.

4. **Collaboration and interdisciplinary learning**: Design thinking promotes collaboration among various stakeholders, including mental health professionals, patients, and designers. This interdisciplinary approach can lead to more holistic and comprehensive solutions.

For example, the Mayo Clinic has successfully used design thinking to improve patient care by involving a diverse team of healthcare providers and designers.

Weaknesses

1. **Implementation challenges**: Implementing design thinking in mental health care can be challenging due to resistance to change and the need for significant training and resources. Mental health professionals may need to develop new skills and mindsets to effectively use design thinking.

2. **Resource intensive**: The design thinking process can be resource-intensive, requiring time, materials, and support that may not be readily available in all mental health settings. This can limit its widespread adoption.

3. **Potential for superficial solutions**: There is a risk that design thinking may lead to superficial solutions if not applied rigorously. The emphasis on rapid prototyping and iteration can sometimes result in a lack of depth in the solutions generated.

4. **Assessment and evaluation**: Measuring the impact of design thinking on mental health outcomes can be difficult. Traditional assessment methods may not capture the full range of benefits provided by design thinking, such as increased patient engagement and satisfaction.

Case Studies and Examples

1. **The Loneliness Laboratory**: This initiative employed design thinking to address loneliness, a significant mental health issue. By empathizing with individuals experiencing loneliness and involving them in the design process, the Loneliness Laboratory developed interventions that were more attuned to their needs and preferences.

2. **Virtual reality for anxiety disorders**: VR experiences have been designed to help patients with anxiety disorders confront their fears in a controlled environment. This innovative use of technology, guided by design thinking principles, has shown promise in making therapy more engaging and effective.

3. **Mayo Clinic**: The Mayo Clinic has applied design thinking to improve patient care by involving a diverse team of healthcare providers and designers. This collaborative approach has led to more holistic and patient-centered solutions.

4. **Mobile apps for mental health**: Design thinking has been used to develop mobile apps that provide patients with mental health conditions access to therapy and support services. These apps are designed with the user in mind, ensuring they are user-friendly and meet the specific needs of patients.

The following table **(Table 1)** provides a clear overview of the various factors to consider when implementing design thinking in mental health disorders. Design thinking offers a promising approach to addressing mental health disorders by fostering empathy, creativity, and collaboration. While there are challenges in implementation and resource requirements, the potential benefits of more personalized and effective mental health interventions make it a valuable approach. By learning from successful case studies and continuously refining the process, design thinking can play a crucial role in improving mental health care.

Table 1. Summarizes design thinking's strengths, weaknesses, opportunities and threats in implementing mental health disorders.

Category	Details
Strengths	- **Empathy and user-centric approach**: Ensures mental health interventions meet the dynamic needs of individuals. - **Creativity and innovation**: Encourages novel solutions, making therapy more engaging and effective. - **Structured problem-solving**: Provides a systematic framework for identifying challenges and generating solutions. - **Collaboration and interdisciplinary learning**: Promotes teamwork among mental health professionals, patients, and designers, leading to holistic solutions.
Weaknesses	- **Implementation challenges**: Requires a cultural shift and training, which can be met with resistance. - **Resource intensive**: Needs time, materials, and support that may not be available in all settings. - **Potential for superficial solutions**: Risk of generating shallow solutions if not applied rigorously. - **Assessment and evaluation**: Difficult to measure the impact using traditional methods.
Opportunities	- **Integration with technology**: Enhances effectiveness through tools like VR and mobile apps. - **Professional development**: Training programs can equip mental health professionals with necessary skills. - **Policy support**: Encourages innovation and flexibility in mental health care through supportive policies.
Threats	- **Resistance to change**: Focus on traditional methods may limit flexibility needed for design thinking. - **Equity and access**: Risk of benefiting primarily well-resourced settings, exacerbating inequalities. - **Sustainability**: Maintaining momentum over the long term can be challenging without ongoing support and resources.

Limitations

1. **Scope of study**: The paper primarily focuses on the initial phases of design thinking (WHAT IS and WHAT IF). It would be beneficial to see how the later phases (WHAT WOWS and WHAT WORKS) are integrated into the framework, especially in the context of mental health interventions [8].

2. **Empirical evidence**: While the qualitative approach is valuable, incorporating quantitative data could strengthen the findings and provide a more comprehensive view of the impact of design thinking on educational processes, including mental health education [7].

3. **Generalizability**: The study is based on specific data from students and expert opinions from teachers and management. Expanding the sample size and including diverse educational institutes could enhance the generalizability of the results, particularly in mental health settings [8].

Personal Insights

The paper presents a compelling argument in favor of the implementation of a design perspective in educational institutions. I concur with the authors' assertion that educational processes can be rendered more dynamic and effective by comprehending and empathizing with end-users. This method has the potential to establish supportive environments that cater to the distinctive requirements of individuals with mental health disorders in the mental health pathway. Nevertheless, a more comprehensive understanding of the advantages and obstacles associated with the integration of design thinking in mental health education could be achieved by broadening the study's scope and incorporating quantitative data. The absence of comprehensive data is a significant concern in determining the complete extent of the impact of this approach. Nevertheless, the implementation of a design mindset can significantly improve mental health practices by promoting empathy and addressing a variety of requirements.

Conclusion

The significant potential of design thinking for establishing a dynamic process in healthcare is widely recognized. The specific details for implementing these new techniques to transform the static processes of healthcare institutions into dynamic systems that address the evolving demands of patients continue to be developed. The complexity of health systems, characterized by diverse process flows, stakeholders, time frames, and locations, poses significant challenges that must be addressed to fully harness the advantages of design thinking in healthcare. Nevertheless, the user-centric framework put out by the authors represents a substantial advancement in the domain of mental health disorders. This approach is applicable to most clinical and paraclinical fields. Future study might concentrate on integrating all stages of design thinking and including quantitative data to further substantiate the findings.

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