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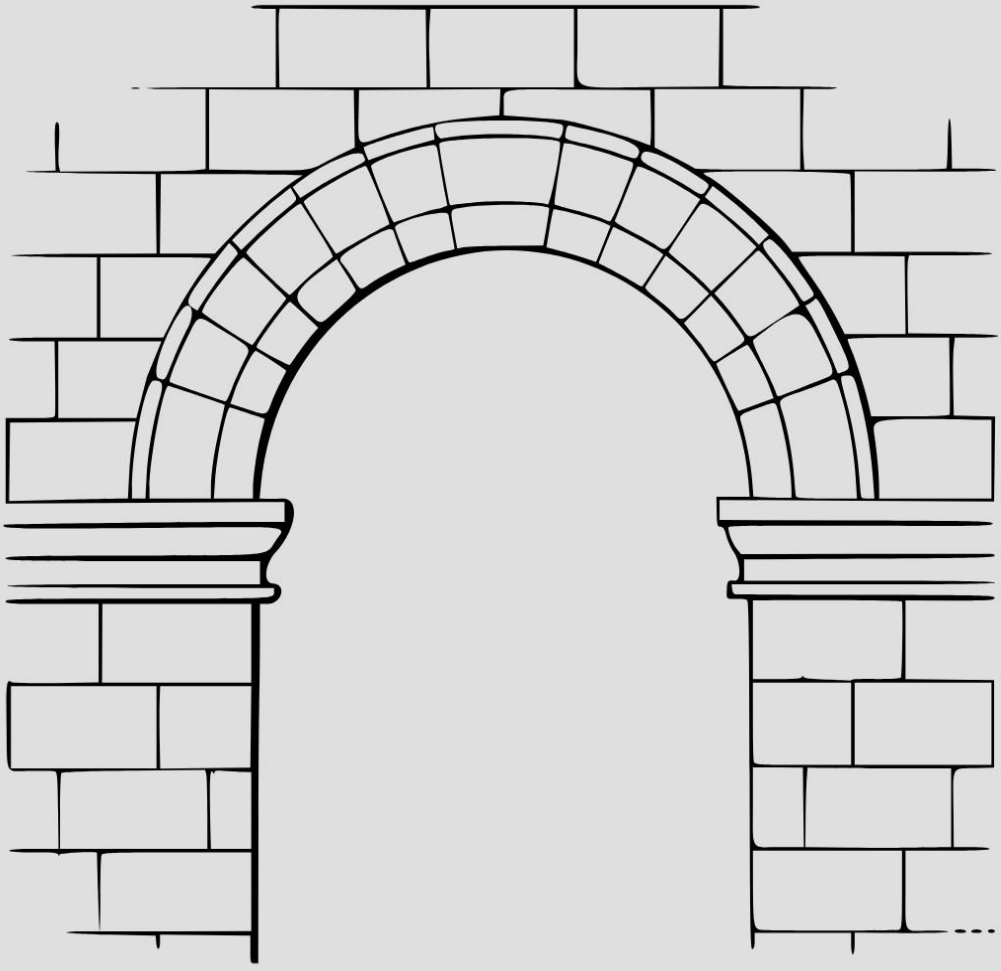

Anatolian Journal of Mental Health

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Research Article
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Play and Its Effect in Child Development

Çocuk Gelişiminde Oyun ve Etkileri

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ABSTRACT

This review was written to evaluate the importance of play in childhood and its effects on children. Regardless of the culture and society, the play, which is the most effective learning tool of childhood, contributes greatly to the development of the child. In recent years, it has been included in the education systems of developed countries. In this education system, there are conscious and planned activities that aim at the physical, mental, emotional and social development of human beings and are accepted as the basic source of the growing generations. These activities, which are an integral part of general education, allow children to learn behaviours such as learning, decision-making, cooperation, ordering, organising, sharing and respecting the rightsof others during play. Play enables children to practice, evaluate and perfect the skills they will need in the future. Research shows that play contributes positively to children's mental, emotional and psychomotor development. Although plays are dividedinto different groups, they basically help children adapt to the real world and are effective in meeting their psychological and physical needs.

Keywords: child, play, development

ÖZET

Bu derleme, çocukluk döneminde oyunun önemi ve çocuklar üzerine etkisini değerlendirmek amacıyla yazılmıştır. Yaşanan kültür, toplum fark etmeksizin çocukluk döneminin en etkin öğrenme aracı olan oyun, çocuğum gelişimine büyük katkı sağlamaktadır. Son yıllarda gelişmiş ülkelerin eğitim sistemlerine de dahil edilmektedir. Bu eğitim sisteminde, insanın fiziksel, zihinsel, duygusal ve sosyal gelişimini hedefleyen, yetişen nesillerin temel kaynağı olarak kabul edilen bilinçli ve planlı faaliyetler bulunmaktadır. Genel eğitimin ayrılmaz bir parçası olan bu faaliyetler, çocukların öğrenme, karar verme, iş birliği, sıralama, düzenleme, paylaşma ve başkalarının haklarına saygı gösterme gibi davranışları oyun sırasında öğrenmelerine olanak tanır. Oyun, çocukların ileride ihtiyaç duyacakları becerileri pratik yapmalarını, değerlendirmelerini ve mükemmelleştirmelerini sağlar. Yapılan araştırmalar, oyunun çocukların zihinsel, duygusal ve psikomotor gelişimlerine olumlu katkı sağladığını göstermektedir. Oyunlar, farklı gruplara ayrılsa da, temelde çocukların gerçek dünyaya uyum sağlamalarına yardımcı olurken psikolojik ve fiziksel ihtiyaçlarını karşılama konusunda da etkilidir.

Anahtar Kelimeler: çocuk, oyun, gelişim

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INTRODUCTION

The pre-school period is called the magic years of life in the literature and it is a very dangerous period to neglect. Negative physical or psychological developments that may be experienced in this period when development is the fastest after the intrauterine period may cause permanent damages in the future of the individual (Koçyiğit, Tuğluk and Kök, 2007). The main reason for this situation is related to the fact that it covers the process given in the family environment and educational institutions, which covers the time until the beginning of basic education, where developmental areas are largely completed and personality is shaped (Ayan and Memiş, 2012; Bekmezci and Özkan, 2015). In addition, life tasks such as establishing self-control over the child's own behaviour, developing an attitude towards social groups and forming value judgements also take place in this period (Shaffer and Kipp, 2013). The most basic learning tool in all these processes has always been play regardless of culture from past to present (Ayan and Memiş, 2012).

Play is an activity that entertains and gives pleasure to the child as well as providing important benefits to physical, emotional, social, cognitive and language development (Akandere, 2006). In order for children to be developmentally healthy, they need play as much as they need nutrition and sleep (Bekmezci and Özkan, 2015). Play is the most effective way to prepare children for adult life and supports children developmentally in many aspects. In this review, it is aimed to examine the importance of play for childrenin general and in which aspects it supports children.

The Importance of Play for Children

The Turkish Language Association (TDK) defines play as an activity that improves intelligence and abilities, is formed within the framework of certain rules, and serves to spend a pleasant time (TDK, 2024). However, when child development is considered, itmay be insufficient to characterise play only as entertainment. When evaluated from this point of view, play can also be defined as all activities carried out with their own intrinsic motivation. Play is important for children regardless of culture and society. So much so that the play process has been carried to international political platforms and children's right to play has been protected by conventions. The "Convention on the Rights of the Child" adopted by the United Nations General Assembly on 20 November 1989 was ratified and accepted by the state parties.UNICEF in Article 31, Paragraph 1 of the Convention "States Parties recognise the child's right to rest, leisure, play and age-appropriate recreation, and to participate freely in cultural and artistic life." states that have signed the Convention have taken the child's right

to play under protection (UNICEF, 2004).In the researches, it has been determined that plays contribute to many aspects such as realising their emotions, developing their creativity, making friends, learning social norms, developing their mental activities, and physically developing their muscle and bone structures (Akandere, 2006; Yavuzer, 2001).These contributions are directly related to the type of play and the age of the child. As a need of childhood, play enables the child to develop the skills that he/she will use in the future. In other words, thanks to play, the child will be able to overcome many of the problems he/she will face in the future.

Researches stated that children use their own bodies at the age of one, especially to express their emotional skills, and in the second year, they make progress in interacting with others, living or non-living. He stated that play activities are effective in the child's gaining self-confidence and controlling objects. As he approaches the age of three, he becomes increasingly more coordinated and harmonious in plays. Piaget associates this development with the development of mental processes. Similarly, Vygotsky stated that play helps the child to organise himself/herself and to acquire the skills to perform high-level cognitive operations (Tsao, 2002).

According to Hurwitz (2009), it is possible to categorise children's plays under five headings:

- Practical Plays: These are plays that children play repetitively, such as playing with sand, for recreational purposes only.
- Building Plays: These are plays in which children make or produce something new, such as building blocks.
- Rough-and-Tumble Plays: These are plays with funny, similes and harsh behaviour (not aggressive).
- Drama Plays: These are the plays played by putting the child himself/herself in the place of an object or a person and playing a role.
- Rules Plays: Plays with specific rules.

Colwell and Lindsey (2005) categorised plays into four categories:

- Exercise Plays: These are plays that involve physical strength but do not involve sociability and are played by moving from one place to another in a large area.
- Rough-and-Tumble Plays: It is also possible to call these plays contact-contact plays. They are roughness in a natural environment that involves sociability and is done in play and there is no intention to harm the other party. For example: tickling, wrestling, spinning, chest-to-chest pushing, hitting and running, chasing, rolling together.

- Simulation Plays: These are plays based on pretending to be something or someone else by putting the playtools in the place of another thing or person. In these plays, new names are given to objects and role transitions are made. Such as making a car out of a slipper and driving it.
- Other Plays: These are the types of plays that are not similar to the above. Such as singing, drawing pictures.

Play and its effects

The child's ability to realise his/her vital functions in physical, mental, cognitive and social aspects is parallel with a healthy development. One of the most important dynamic components in this process is learning (Özer and Özer, 2000). Learning is a concept that appears as a product of experiences. Play is the most effective method of learning for children. Thanks to this method, it can provide physical, mental and social development (Aral, Kandır, and Başar, 2002). The child perceives, then understands, then learns and develops concepts, objects, social rules, rights and struggle in play. In general, play affects children in many ways and contributes to their development (Özer, Gürkan and Ramazanoğlu, 2006). While the effects of plays differ according to their types, their general effects have been analysed in terms of physical, emotional, social and mental aspects.

The effects of play on the physical development of the child

In general, play contributes to both growth (measurable increase in height and body weight) and development (maturation of a growing organism as a result of changes in the structure and biochemical composition of its tissues). Children can repeat some movements continuously in their plays, which is an important dynamic that accelerates muscle development. For example, plays that require physical strength such as running, jumping, climbing, leaping and crawling ensure the regular functioning of the child's musculoskeletal system as well as respiratory, circulatory, digestive and excretory systems. Thus, oxygenation increases, blood circulation and nutrient transport to tissues accelerate (Özer, Gürkan and Ramazanoğlu, 2006; Yayla, 2016).

A child who plays a moving playfor the first time learns with his/her mind on the one hand and with his/her muscles on the other. Each time the same playis played, both the mind and muscles reinforce the movements related to that playa little more. As a result, a kind of muscle memory is formed. A child who has played an active playmany times can, after a

while, easily perform the movements related to that playwith the help of muscle memory without using his/her mind much. Muscles perform the movementsthey have learnt before more easily than the movements they do not know. This comfort accelerates and strengthens muscle development (Kuru, 2009).

The effects of play on the emotional development of the child

According to psychoanalytic theorists, play is associated with children's emotional development and helps them cope with negative experiences (Barnett, 2013). Play plays an important role in the process of initiating children's emotional relationships and is related to the emotions experienced by children. In addition, play provides an environment where children try to understand their emotions by experiencing them again (Özdoğan, 2004).
Children learn to control various emotional reactions by experiencing them through plays. Especially through plays related to animals, children can gain feelings of empathy, love and protection (Gökçen, 2005; Poyraz, 2003). Play provides a social and psychological environment as well as emotional satisfaction for children. In this environment, children experience various emotions and develop by experiencing these emotions (Uzman and Ersanlı, 2007).

Play helps children learn to control their emotional reactions, escape from their problems and learn to trust themselves (Akandere, 2006). Experiences play an important role in the development of emotions such as love, joy, pain, sadness, fear, anger and jealousy (Tuğrul, 2010). Families should observe their children's plays and communicate with them to understand their emotional development (Başal, 2010; Elibol, Kılış and Burdurlu, 2006). In addition, the recent pandemic, which has negatively affected the whole world and caused social restrictions, has also caused serious psychological problems and home restrictions for children (Kaplan, Kürümlüoğlugil and Bütün, 2021). Again, for such negative situations, plays can be the most important key to emotional relief.

The effects of play on the social development of the child

In the play environment, children interact with each other and learn some social behaviours such as cooperation, helping, sharing, and finding solutions to the problems they face. Children who play plays and communicate with their peers easily learn some skills and behaviour examples related to social life and gain an environment where they can gain various experiences (Yayla, 2016). Play is the most natural socialisation space for children. Children learn social skills, relationships, love and sharing through play. Play helps children to realise

the concepts of "me" and "someone else" and helps them learn to give and receive. At school and in their environment, children live by observing what is right and wrong. Play teaches children to obey rules; because in order to play a play, the rules must be obeyed. In the plays they play among themselves, children shame, condemn or exclude those who do not follow the rules. Similarly, there are rules in social life. Just as not every child can behave freely in a play, not every individual can behave as they wish in society. Plays offer children the opportunity to learn the rules they will follow in their future lives under the guidance of adults (Yavuzer, 2003; Yörükoğlu, 2002).

The effects of play on the mental development of the child

Children produce different solutions by coping with the problems they encounter through plays. This process supports children's fast learning abilities, especially in the preschool period. Play provides children with the opportunity to actively learn and apply information, and in this way, the information learnt becomes more permanent (Kıldan, 2001). In addition, children develop important skills such as curiosity, comprehension skills, intelligence and reasoning while actively using their senses during play. Play contributes to children's mental development and strengthens their cognitive abilities while supporting the learning process (Hazar, 2005).

According to Vigotsky, play is an important order for children's cognitive development and imaginary situations are perceived as reality. Children develop their emotional skills while getting to know their environment and society through plays (Poyraz, 2003). In addition, the experiences shared by children increase the child's knowledge and support mental processes. It is also stated that play contributes to the process of learning mental concepts and applying various mental operations during children's growth process (Akandere, 2006).

Finally, it is emphasised that play enables children to enter the literacy process and develops their creative thinking (Poyraz, 2003). In this context, the impact of play on children's mental development, together with children's active participation and experiences, provides an environment that supports their learning and cognitive abilities.

CONCLUSION

In conclusion, children's relationship with play is a fundamental part of their development. Play helps children develop their social, emotional, mental and physical skills, while at the same time supporting the learning process and nurturing their curiosity. Play allows children to develop their creativity, problem-solving abilities and communication

skills. Therefore, understanding the importance of play for preschool children contributes to their healthy growth and development. As educators, parents and society, appreciating the value of play and encouraging children to play can help them grow up to be happier, healthier and more successful individuals.

Moreover, the integration of plays into the education system can make children's learning experiences more effective. Play-based learning approaches attract students' attention, increase their motivation and encourage in-depth learning. At the same time, practical applications of skills learnt through plays allow students to solve real-world problems and direct their own learning process. Plays integrated into the education system can help students develop important skills such as critical thinking, co-operation, leadership and empathy. Therefore, the wider use of plays in educational programmes can enable students to learn more deeply, increase their academic achievement and support them to be better equipped for the future.

Research Statement

Ethical Aproval: The study does not require ethical approval.

Conflict of Interest: The authors declare that there is no conflict of interest for the study.

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REFERENCES

- Akandere, M. (2006). Eğitici Okul Oyunları. Nobel Yayıncılık, Ankara.
- Aral, N., Kandır, A., & Yaşar, M.C. (2002). Okul Öncesi Eğitim ve Okul Öncesi Eğitim Programı. Geliştirilmiş 2.Baskı, Ya-Pa Yayın Pazarlama, İstanbul
- Ayan, S., & Memiş, U. A. (2012). Erken çocukluk döneminde oyun. *Selçuk Üniversitesi Beden Eğitimi ve Spor Bilim Dergisi*,*14*(2), 143-149.
- Barnett, L. A. (2013). Children's perceptions of their play: scale development and validation. *Child Development Research*,
- Başal, H. (2010). Geçmişten Günümüze Türkiye'de Geleneksel Çocuk Oyunları. 1. Baskı. Morpa Kültür Yayınları, Ankara.
- Bekmezci, H., & Özkan, H. (2015). Oyun ve oyuncağın çocuk sağlığına etkisi.*İzmir Dr. Behçet Uz Çocuk Hastalıkları Dergisi*,*5*(2), 81-87.
- Colwell, M.J., & Lindsey, E.W. (2005). *Preschool Childrens' Pretend and Physical Play and Sex of Play Partner: Connections to Peer Competence*, *Sex Roles, 52*(7/8), 497-509.
- Elibol, C., Kılıç, Y., & Burdurlu, E. (2006). Okul öncesi çocuk oyuncaklarında malzeme kullanımı ve 4-6 yaş çocuklarının renk tercihleri. *Aile ve Toplum Eğitim Kültür ve Araştırma Dergisi, 3*:35-43.
- Gökçen, Ç.F. (2005). *Eğitsel oyunlar ve uygulama yöntemleri. Erken çocuklukta gelişim ve eğitimde yeni yaklaşımlar*. İstanbul: Morpa Kültür Yayınları.
- Hazar, M. (2005). Beden Eğitimi ve Sporda oyunla Eğitim. Ankara: Tutibay
- Hurwitz, S. C. (2003). To Be Successful-Let Them Play!, *Childhood Education, 79*(2): 101-102.
- Kaplan, V., Kürümlüoğlugil, R., & Bütün, B. (2021). COVID-19 pandemisine bağlı karantina sürecinin ergenlerin gelecek beklentileri ve anksiyete düzeylerine etkisi. *Çocuk ve Gelişim Dergisi,4*(7), 12-23.
- Kıldan, A.O. (2001). *Oyunun çocukların gelişim özelliklerine etkisi*. (Master's thesis). Selçuk Üniversitesi, Konya.
- Koçyiğit, S., Tuğluk, M.N., & Kök, M. (2007). Çocuğun gelişim sürecinde eğitsel bir etkinlik olarak oyun. *Atatürk Üniversitesi Kazım Karabekir Eğitim Fakültesi Dergisi, 16*:325-42.

- Kuru, O. (2009). *Dokuz yaş çocuklarının psiko-motor gelişimlerinde oyunun etkisi.* (Master's thesis,). Fırat Üniversitesi. Elazığ
- Memiş, D. A. (2006). Oyunun Çocuk Gelişimine Etkisi ve Eğitimdeki Önemi, Ulusal Sınıf Öğretmenliği Kongresi, 14-16 Nisan, Gazi Üniversitesi, Kök Yayıncılık, Ankara.
- Özdoğan, B. (2004). *Çocuğa oyunla yardım*. Çocuk ve oyun. Anı Yayıncılık, Ankara.
- Özer D.S., Özer K. (2000). Çocuklarda Motor Gelişim. Kazancı Kitap Tic. A.Ş., İstanbul.
- Özer, A., Gürkan, A. C., & Ramazanoğlu, O. (2006). Oyunun çocuk gelişimi üzerine etkileri.*Fırat Üniversitesi Doğu Araştırmaları Dergisi*,*4*(3), 54-57.
- Poyraz, H. (2003). Okul Öncesi Dönemde Oyun ve Oyuncak. Anı Yayıncılık, Ankara.
- Shaffer, D. R., & Kipp, K. (2013). *Developmental psychology: Childhood and adolescence*. Cengage Learning.
- Şen, M. (2010). Erken çocukluk eğitiminde oyun ve önemi. İçinde: Diken İH (ed). Erken Çocukluk Eğitimi. Pegem Akademi, Ankara.
- Tsao, L. (2002). How Much Do We Know About the Importance of Play in Child Development?, *Childhood Education, 78*(4), 230-233
- Tuğrul, B. (2010). Oyun temelli öğrenme. İçinde: Zembat R (ed). Okul Öncesinde Özel Eğitim Yöntemleri. Anı Yayıncılık, Ankara.
- Türk Dil Kurumu (TDK). http://www.tdk.gov.tr/ Erişim Tarihi:29.02.2024.
- UNICEF. (2004). Çocuk Haklarına Dair Sözleşme. Ankara.
- Uzman, E., & Ersanlı, K. (2007). Eğitim Psikolojisi. Lisans Yayıncılık, İstanbul.
- Yavuzer, H. (2001). Doğum Öncesinden Ergenlik Sonuna Kadar Çocuk Psikolojisi, Remzi Kitabevi, İstanbul.
- Yavuzer, H. (2003). *Bedensel, zihinsel ve sosyal gelişimiyle çocuğunuzun ilk altı yılı*. Remzi Kitabevi, İstanbul.
- Yayla, M. (2016). *Ebeveynlerin çocuk oyunları hakkındaki görüşleri ve çocuklarının oyunlarına katılımları ile ebeveyn çocuk yetiştirme tutumları arasındaki ilişkinin incelenmesi.* (Master's thesis). Pamukkale Üniversitesi, Denizli
- Yörükoğlu, A. (2002). *Çocuk ruh sağlığı çocuğun kişilik gelişimi eğitimi ve ruhsal sorunları.* Özgür Yayın Dağıtım, İstanbul.

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The Role of Family in Trauma Recovery: A Review of the Literature

Travmanın İyileşmesinde Ailenin Rolü: Literatür İncelenmesi

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ABSTRACT

Trauma has significant physical, emotional, and psychological effects worldwide, and family involvement is vital for healing and resilience. Various family interventions, Eye Movement Desensitization and Reprocessing and family therapy or family-based Cognitive-Behavioural Therapy (CBT) can aid in trauma recovery have shown effectiveness in reducing trauma symptoms and enhancing family functioning. However, family dynamics can contribute to stress and trauma, making it crucial to understand the relationship between family processes, trauma exposure, and recovery outcomes. A literature review using the Scopus database identified several themes, including the impact of trauma on families and children, family interventions for trauma recovery, trauma's influence on family dynamics, specific populations affected by trauma. It is important to recognize the diverse needs and strengths of each family in promoting healing and resilience.

Key words: family processes, trauma recovery, narrative review, PTSD, resilience

ÖZET

Travmanın dünya çapında önemli fiziksel, duygusal ve psikolojik etkileri vardır ve ailenin katılımı iyileşme ve dayanıklılık için hayati öneme sahiptir. Travmanın iyileşmesine yardımcı olabilecek çeşitli aile müdahaleleri, Göz Hareketleriyle Duyarsızlaştırma ve Yeniden İşleme ve aile terapisi veya aile temelli Bilişsel-Davranışçı Terapi (CBT), travma semptomlarını azaltmada ve aile işleyişini geliştirmede etkili olduğunu göstermiştir. Ancak aile dinamikleri strese ve travmaya katkıda bulunabilir, bu da aile süreçleri, travmaya maruz kalma ve iyileşme sonuçları arasındaki ilişkinin anlaşılmasını hayati hale getirir. Scopus veritabanını kullanan bir literatür taraması, travmanın aileler ve çocuklar üzerindeki etkisi, travmanın iyileşmesi için aile müdahaleleri, travmanın aile dinamikleri üzerindeki etkisi, travmadan etkilenen belirli popülasyonlar dahil olmak üzere çeşitli temalar belirledi. İyileşmeyi ve dayanıklılığı teşvik etmede her ailenin farklı ihtiyaçlarını ve güçlü yönlerini tanımak önemlidir.

Anahtar kelimeler: aile süreçleri, travma iyileşmesi, gözden geçirme, TSSB, dayanıklılık

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INTRODUCTION

Trauma is a widespread and significant issue affecting individuals and communities worldwide (Saul, 2022). It can take many forms, including experiences of war, displacement, violence, natural disasters, and family conflict. The effects of trauma can be long-lasting and severe, impacting physical, emotional, and psychological well-being. While trauma recovery is a complex and multifaceted process, research has shown that the support and involvement of family members can be essential in facilitating healing and promoting resilience (Saul, 2022).

The role of family in trauma recovery has received increasing attention in recent years, with studies highlighting the positive impact of family support, communication, and resilience in reducing distress and promoting recovery (Zautra et al., 2010). Family plays a crucial role in the recovery from trauma. Family members can provide emotional support, validation, and a sense of safety and security. They can also help individuals to process traumatic events, cope with the aftermath, and build resilience. Family interventions, such as psycho-education, family therapy, and parenting programs, have been shown to be effective in reducing the symptoms of trauma and improving family functioning (Carr, 2019). However, family dynamics can also be a source of stress and trauma (Boszormenyi-Nagy, 2014), and not all families are equally able to provide support and care in the aftermath of traumatic events.

Family dynamics refers to the patterns of interaction, communication, and relationships among members of a family system. These dynamics are influenced by various factors, including family structure, roles, communication styles, values, beliefs, and cultural background (Gergen, 2015). It is crucial to understand the complex interplay between family processes, trauma exposure, and recovery outcomes, to develop effective interventions that can support families in their healing journey.

Moreover, trauma can have a ripple effect on the entire family system, with each member affected in different ways. For instance, a traumatized parent may have difficulty providing emotional support to their children, which can result in children experiencing trauma symptoms themselves. Understanding the impact of trauma on family dynamics is important for developing effective interventions.

In this review, we will explore the role of family in trauma recovery, drawing from a range of literature on the topic. We will examine the impact of trauma on families, the different ways in which families can support recovery, and the challenges and barriers that families may face in the process. We will also consider the implications of this research for clinical practice and policy, highlighting the need for a family-centred approach to trauma recovery that

recognizes and addresses the unique needs and strengths of each family. Overall, the review of literature on the role of family in trauma recovery will provide insights on the effectiveness of family interventions, the impact of trauma on family dynamics, and the importance of including family in the treatment of trauma.

METHODOLOGY

The purpose of this scoping review is to explore the relationship between family processes, trauma exposure, and recovery outcomes, with a focus on understanding the impact of trauma on families and children, evaluating the effectiveness of family interventions for trauma recovery, examining trauma's influence on family dynamics, and identifying specific populations affected by trauma.

Search strategy

The search strategy included using keywords like “family processes”, “trauma”, and “families” to find relevant articles. We searched the most widely indexed database, Scopus and Google Scholar advanced search. Initially, a search on the Scopus database yielded 37 results and that of Google Scholar's advanced search produced 25 articles after applying the inclusion and exclusion criteria to ensure relevance. Additionally, during the discussion phase of the review, we sought additional articles to strengthen the arguments presented herein.

Inclusion Criteria

Based on the inclusion criteria that considered subject areas, document type, source type, and language, the results were narrowed down. Review articles from journals in five subject areas, namely medicine, psychology, social sciences, nursing, and environmental science, were considered, and only articles published in English were included.

After applying these criteria, the search produced 34 articles, which were further checked for duplicates. One duplicate was found and removed, remaining 33 articles for analysis. To organize the findings, a literature table was used to capture information on targeted populations and study design employed. Commonalities of the findings were identified and grouped into headings.

TYPES OF TRAUMA

Trauma has been recognized as a psychological phenomenon since the beginning of recorded history, with descriptions of traumatic events and their effects dating back to ancient civilizations (Ray, 2015). The types of traumatic events that have been identified have evolved over time, as understanding of the phenomenon has developed.

One of the earliest recognized types of trauma was physical injury, such as wounds sustained in battle. This was followed by recognition of the psychological effects of traumatic events, including the emotional and mental impact of war and other disasters(Nuttman-Shwartz and Dekel, 2008). In recent times, the range of traumatic events that have been recognized has expanded significantly, with recognition of the long-term psychological effects of abuse, neglect, and other forms of interpersonal violence (Baranowsky and Gentry, 2015).

The different types of trauma that have been identified can be broadly categorized into three groups: acute trauma, chronic trauma, and complex trauma. Acute trauma refers to a single traumatic event, such as a natural disaster or an accident. Chronic trauma refers to repeated exposure to traumatic events over time, such as on-going abuse or combat exposure. Complex trauma, also known as developmental trauma, refers to the cumulative effects of multiple traumas over time, particularly in childhood (Ray, 2015).

Understanding the different types of trauma is important in the context of family and trauma recovery, as the type of trauma experienced can affect the ways in which individuals and families respond to trauma and the types of interventions that are most effective in promoting recovery. For example, individuals who have experienced chronic trauma may have more complex symptoms and require more intensive and longer-term interventions, whereas individuals who have experienced acute trauma may benefit more from brief, focused interventions (Cloitre et al., 2009).

CAUSES OF TRAUMA

Adverse Childhood Experiences (ACEs)

Adverse childhood experiences refer to negative and potentially traumatic events that occur during childhood, it can have a significant impact on an individual's development and well-being. These experiences can include physical, emotional, or sexual abuse, neglect, household dysfunction, and exposure to violence, among others (Felitti et al., 2019). Children who experience ACEs are at a higher risk of developing a wide range of physical and mental health problems later in life, including depression, anxiety, substance abuse, and chronic illnesses (Felitti et al., 2019; Zarse, et al., 2019).

Sexual abuse

Sexual abuse which involves any unwanted sexual activity can also cause significant trauma in individuals. Sexual abuse can occur at any age, but it is particularly damaging when it occurs during childhood or adolescence (Oddone-Paolucci et al., 2017). The effects of sexual abuse can be long-lasting and pervasive, and can include a range of emotional and psychological symptoms, such as depression, anxiety, post-traumatic stress disorder (PTSD), dissociation, and sexual dysfunction (Fergusson et al., 2013; Oddone-Paolucci et al., 2017).

Family conflict and dysfunction

Families that are characterized by conflict, dysfunction, or instability can create an environment that is stressful and unpredictable for children, which can increase their risk of experiencing trauma (Hutt, 2014). Family conflict and dysfunction can manifest in various ways, such as parental conflict, divorce, substance abuse, or physical and emotional abuse or neglect, and can have long-term effects on an individual's emotional and psychological well-being. Family conflict and dysfunction can lead to chronic stress and emotional dysregulation, which can make it difficult for individuals to cope with stressful or traumatic experiences later in life.

Attachment disruptions

Attachment disruptions occur when the bond between a child and their primary caregiver is disrupted or inconsistent, which can lead to a range of negative outcomes, including trauma (Hutt, 2014). Children who experience attachment disruptions may have difficulty forming and maintaining healthy relationships in adulthood, and may also struggle with emotional regulation, self-esteem, and other areas of functioning. Attachment disruptions can have a lasting impact on an individual's ability to trust others and form healthy relationships, which can make it challenging to engage in the supportive relationships that are essential for trauma recovery.

Natural Disasters

Natural disasters such as earthquakes, floods, hurricanes, and wildfires can lead to trauma for those who experience them. Trauma resulting from natural disasters can cause symptoms such as anxiety, depression, and PTSD (North and Pfefferbaum, 2013). The severity and duration of the trauma can depend on the extent of the disaster and the individual's proximity to the event. In addition, research has also found that natural disasters can lead to

long-term mental and physical health problems for survivors, such as chronic pain, respiratory issues, and substance abuse (Norris et al., 2002). These health problems may persist long after the initial traumatic event, making it crucial to provide on-going support and interventions for those affected by natural disasters.

War and Conflict

Exposure to war and conflict can lead to trauma for those involved, including military personnel and civilians. Trauma resulting from war and conflict can cause symptoms such as anxiety, depression, and PTSD (Porter and Haslam, 2005). The severity and duration of the trauma can depend on the individual's proximity to the conflict, the intensity of the violence, and the duration of the conflict. Additionally, research has found that exposure to war and conflict can also result in a range of physical health problems, such as chronic pain, cardiovascular disease, and respiratory disorders (Steel et al., 2009). These physical health problems can further exacerbate the psychological impact of the trauma.

Medical Trauma

Medical trauma can result from a wide range of experiences, including serious illness, medical procedures, hospitalization, and medical errors. Medical trauma can lead to symptoms such as anxiety, depression, and PTSD, and can be acute or chronic depending on the severity and duration of the medical event (De Young, et al., 2021). In addition, medical trauma can have long-lasting effects on individuals, especially children, who may develop fear and avoidance of medical procedures, leading to difficulties in seeking medical care in the future (Kenny, 2008). Furthermore, research has found that individuals who experience medical trauma may also struggle with feelings of loss of control, vulnerability, and a sense of betrayal by healthcare providers (Woods et al., 2009). Therefore, it is essential for healthcare providers to be aware of the potential for medical trauma and to provide trauma-informed care to promote healing and prevent further harm.

Impact of trauma on children and families

Trauma can have significant and long-lasting impacts on children and families, particularly in situations of war, displacement, and forced migration. The Syrian conflict, for instance, has had devastating effects on children, who are exposed to violence, displacement, and loss of loved ones. Studies have shown that Syrian children are at risk of experiencing

mental health problems, such as anxiety, depression, and post-traumatic stress disorder (PTSD) (Alpak et al., 2015).

Moreover, trauma can be transmitted across generations, leading to intergenerational cycles of trauma and psychological distress. This is particularly relevant for refugee families, where parents may have experienced trauma in their country of origin or during their journey to a new country. Studies have shown that trauma experienced by parents can impact their children's mental health, behaviour, and development (Buhman, et al., 2018).

Immigration detention is another traumatic experience that can have severe mental health consequences for refugee families. Research has highlighted the negative impact of detention on children's psychological well-being, including symptoms of anxiety, depression, and PTSD (Hodes et al., 2008). Family separation, uncertainty, and lack of control over their lives are some of the factors that can contribute to these negative outcomes.

Impact of trauma on family dynamics

Family dynamics as used in this context refer to the patterns of interaction, communication, and relationships between family members. These patterns can be shaped by a variety of factors such as family structure, cultural values, personality traits, life experiences, and social norms. The family dynamics that have been discussed here are limited to; impact of trauma on family roles and relationships, impact of trauma on family communication, connection, and boundaries and impact of trauma on intergenerational trauma: breaking the cycle.

Impact of trauma on family roles and relationships

Trauma can disrupt the balance of power and the roles that family members play within the family system. For example, a parent who is dealing with trauma may become emotionally distant or less involved in parenting responsibilities, while a child who has experienced trauma may become withdrawn or exhibit challenging behaviors that disrupt family routines (Baranowsky and Gentry, 2015). These changes in family roles and relationships can create a sense of instability and unpredictability within the family system. Children who are accustomed to relying on their parents for support and guidance may feel abandoned or neglected when a parent is struggling with trauma, while parents may feel overwhelmed and unsure of how to provide effective support to their children. Additionally, these disruptions to family roles and relationships can lead to feelings of guilt, shame, or blame among family members, further complicating the process of trauma recovery (David and Eth, 2014).

It is important for families to seek out appropriate support and resources to help navigate the complex dynamics that can arise in the aftermath of trauma. This may include family therapy, individual therapy, support groups, or other forms of professional assistance. By working together to address the impact of trauma on family dynamics, families can begin to rebuild a sense of safety, stability, and trust within their relationships.

Impact of trauma on family communication, connection, and boundaries

Trauma can also impact communication within the family, leading to misunderstandings, conflicts, or a breakdown in communication altogether. Family members may struggle to express their emotions or may avoid discussing the trauma altogether, which can create tension and further disrupt family relationships (Baranowsky and Gentry, 2015). In addition to creating communication difficulties, trauma can also impact the ability of family members to trust and connect with one another. Family members may feel reluctant to open up and share their thoughts or feelings, fearing that they may be judged or rejected by others. This can lead to a sense of isolation and a breakdown in the sense of family unity and support that is crucial for healing from trauma (Courtois and Ford, 2019).

Furthermore, when communication is disrupted within the family, it can be difficult to establish healthy boundaries and maintain a sense of safety. Family members who have experienced trauma may struggle to recognize and respond appropriately to boundaries, which can lead to further conflict and distress within the family system (Stoddard and Claridge, 2023).

Impact of intergenerational trauma on a family

Trauma can also have intergenerational effects, meaning that it can be passed down from one generation to the next. For example, a parent who experienced trauma in childhood may struggle with parenting their own children and may unintentionally perpetuate patterns of trauma and dysfunction within the family (David and Eth, 2014). Intergenerational trauma can also affect the brain and biological makeup of subsequent generations, leading to higher risk of mental and physical health problems. Understanding and addressing intergenerational trauma is important for breaking the cycle of trauma and promoting healing and resilience within families and communities.

Impact of trauma on resilience to traumatic experiences

Resilience is the ability to adapt to and cope with adversity, including traumatic experiences. While trauma can have a devastating impact on individuals, families, and communities, it can also foster resilience (Ungar, 2011). Traumatic experiences can challenge an individual's sense of safety, control, and trust, and disrupt their sense of identity and purpose (Ray, 2015). However, individuals who have experienced trauma can also develop a heightened sense of empathy, compassion, and self-awareness, and a greater appreciation for the present moment (Levine, 2015).

Impact of trauma on Indigenous populations

Indigenous populations in North America experience significant mental health disparities, including higher rates of depression, anxiety, and suicide than non-Indigenous populations, due in part to the historical trauma they have endured (Antonio, et.al, 2020). Colonization, genocide, and forced assimilation have disrupted Indigenous communities, leading to the loss of cultural traditions and practices, and resulting in a sense of disconnection from their cultural identity. This disconnection from culture can contribute to negative mental health outcomes such as depression, anxiety, and substance abuse (Henderson, et.al., 2021).

The impact of historical trauma on Indigenous populations is significant and cannot be overlooked when addressing mental health disparities. Despite these challenges, many Indigenous individuals and communities exhibit remarkable resilience, rooted in their cultural traditions and practices. However, the loss of cultural traditions and practices has resulted in a disconnection from culture, contributing to negative mental health outcomes.

A comprehensive approach is required to address mental health disparities among indigenous populations, one that acknowledges the impact of historical trauma and promotes indigenous resilience. This involves increasing access to culturally appropriate mental health services and supporting indigenous communities in revitalizing and reclaiming their cultural traditions and practices (Machado-Vaz, 2016; Wexler, 2014).

The complex interactions between family systems and trauma, and how different elements of the family system can impact and be impacted by traumatic events is illustrated in Fig 1. It can also serve as a useful tool for clinicians, policymakers, and researchers to better understand the importance of including the family in the treatment and recovery process for individuals who have experienced trauma. This figure is the creation of the authors, depicting our conceptual framework from the synthesis of literature.

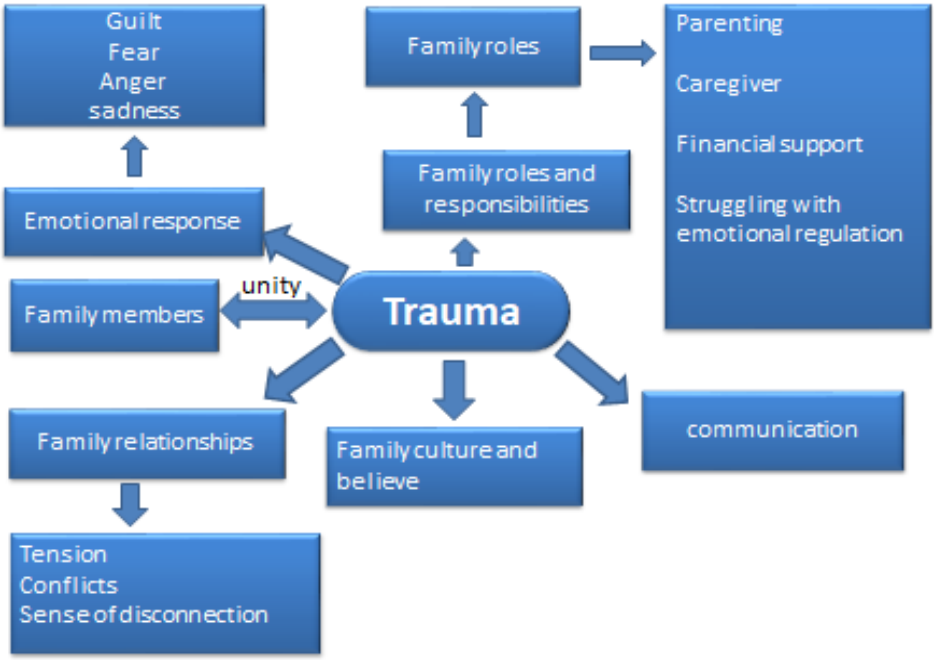

Fig 1: Interactions between family culture and beliefs

Trauma recovery Interventions

Trauma recovery is a complex process that requires specialized interventions. Various interventions have been shown to be effective in supporting trauma recovery (Schäfer et al., 2018). A detailed search of the literature has pointed to two most effective interventions for trauma recovery, including individual therapies and family interventions.

Cognitive-behavioural therapy (CBT) is an evidence-based intervention that has been shown to be effective in treating post-traumatic stress disorder (PTSD) and other trauma-related conditions. CBT focuses on helping individuals understand and challenge negative thoughts and behaviours related to their trauma (Larsen, Fleming and Resick, 2019). For instance, a meta-analysis by Thompson-Brenner et al., (2003) found that CBT was effective in reducing posttraumatic stress disorder (PTSD) symptoms across a range of populations, including those who experienced interpersonal violence and natural disasters.

The Eye Movement Desensitization and Reprocessing (EMDR), uses eye movements to help individuals process and reduce the emotional intensity of traumatic memories (Forester, 2018). EMDR is often used in conjunction with other therapies and interventions, such as cognitive-behavioural therapy, to address a wide range of trauma-related symptoms and improve overall functioning in individuals who have experienced trauma. It is a well-researched and evidence-based intervention that has been shown to be effective in treating various types of trauma, including complex trauma and post-traumatic stress disorder (PTSD),

a review by (Crawford-Faucher, 2014) found that EMDR was an effective treatment for PTSD, with some studies suggesting it may be more efficient than other trauma-focused therapies.

Family interventions, such as family therapy and parenting programs, can also be effective in supporting trauma recovery. Family therapy focuses on improving communication, reducing conflict, and enhancing coping skills within families affected by trauma(Cohen and Mannarino, 2022). Parenting programs aim to improve parenting skills and strengthen the parent-child relationship, which can help children and adolescents affected by trauma (Lieberman et al., 2005).

Functional Family Therapy (FFT) is an evidence-based intervention that has shown promising results in treating PTSD in youth, by focusing on improving family dynamics and communication. FFT is a short-term, solution-focused therapy that aims to promote positive changes in the family system by addressing risk factors and strengthening protective factors. In the context of trauma recovery, FFT works by addressing dysfunctional family patterns that may be exacerbating symptoms of PTSD in youth. A study conducted Robbins et al., (2011) found that FFT was effective in reducing PTSD symptoms in youth who had experienced traumatic events. Specifically, the study found that youth who received FFT had significant reductions in PTSD symptoms compared to those who received “standard care” defined as conventional treatments commonly provided to individuals who have experienced traumatic events. These conventional treatments may include interventions such as individual therapy, group therapy, medication management, or a combination of approaches.

Resilience-focused interventions can also be helpful in supporting trauma recovery within families. Resilience-focused interventions typically involve building upon existing strengths within the family system to promote resilience and adaptation(Walsh, 2015). For example, a therapist might work with a family to identify areas of strength or resilience, such as a shared sense of humour or a history of overcoming challenges, and help to build upon these strengths to promote recovery. The concept of resilience is crucial in trauma recovery, referring to an individual's ability to adapt and recover from traumatic events (McCleary and Figley, 2017). Various means to develop resilience include social support, positive coping strategies, and cognitive-behavioural interventions (Sandal, 2017). Family support is also a significant factor in promoting resilience in those affected by trauma, as it provides emotional support, practical assistance, and a sense of belonging.

Interventions for developing resilience include psychotherapy, CBT, mindfulness-based interventions, and trauma-focused therapies (Reynolds, 2019). For instance, Cognitive-

behavioural therapists view depression, anxiety disorders, substance abuse, and related issues as stress-related mental health dysfunctions that are a product of dysfunctional thinking (Ehring, 2022). According to stress and resilience theories, it is not the stressor itself but the individual's cognitive appraisal of the stressor that leads to stress reactions (Ghiasuddin et al., 2015). Therefore, changing an individual's thought patterns into a more constructive pattern of thought can lead to more adaptive emotional and behavioural responses to stress.

Mindfulness-based interventions, such as mindfulness-based stress reduction (MBSR), have also been found to be effective in building resilience. MBSR involves practicing mindfulness techniques, such as meditation and deep breathing, to cultivate awareness and acceptance of present moment experiences. This can help individuals develop greater emotional regulation and self-awareness, which can enhance resilience (Chiesa and Serretti, 2010).

Trauma-focused therapies, such as Eye Movement Desensitization and Reprocessing (EMDR), can be particularly helpful for individuals who have experienced trauma or adverse life events. EMDR aims to process and desensitize traumatic memories, reduce symptoms of post-traumatic stress disorder (PTSD), and improve overall resilience (Cusack et al., 2016).

Another important aspect of trauma recovery in families is addressing communication difficulties. Poor communication can lead to misunderstandings, conflict, and a lack of trust among family members. Family therapy can help families learn effective communication strategies and improve their ability to express emotions. It is important to note that addressing communication difficulties in families impacted by trauma can be a challenging process, and may require on-going support and practice outside of therapy sessions (Hamwey, et al., 2020). Effective communication can help family members affected by trauma to feel understood and heard, promoting healing and rebuilding trust within the family system.

Attachment-Based Family Therapy (ABFT) is an evidence-based intervention that focuses on strengthening the attachment bond between parents and their children. In families impacted by trauma, ABFT can help repair any disruptions in the attachment bond and promote healing (Diamond et al., 2012). ABFT aims to repair and strengthen the attachment bond between parents and their children by focusing on five core tasks: creating a secure emotional environment, reframing the problem as a failure of attachment, promoting alliance building, promoting emotional engagement and expression, and promoting autonomy and competency (Diamond et al., 2012). ABFT can be an effective intervention for trauma recovery in families, especially for those where trauma has affected the attachment bond between parents and their children.

CONCLUSION

This review highlights the difficulty and the connected nature of various factors that contribute to mental health disparities among specific populations. Addressing these disparities requires an all-inclusive approach that takes into account the unique experiences and needs of each population. Studying the role of family in trauma recovery is important as family members can provide critical emotional support, validation, and a sense of safety and security to individuals who have experienced trauma. Family members can offer a listening ear, a shoulder to cry on, and a sense of connection that can be instrumental in reducing distress and promoting healing. Family members can help individual process traumatic events, cope with the aftermath, and build resilience through the sharing of their own experiences, offering practical advice, and providing reassurance and encouragement, family members can help individuals feel less alone in their recovery journey and develop the skills and strategies needed to move forward. Again, understanding the impact of trauma on family dynamics is important for developing effective interventions. Trauma can have a ripple effect on the entire family system, with each member affected in different ways.

Key Takeaways from the Review:

- Mental health is influenced by the interaction of individual, familial, and societal factors.
- Childhood experiences, particularly adverse childhood experiences (ACEs), can have a lasting impact on mental health outcomes.
- Family dynamics, including communication patterns and emotional support, can play a significant role in mental health outcomes.
- Trauma, particularly historical trauma experienced by Indigenous populations, can have intergenerational effects on mental health outcomes.
- Resilience is an important factor in promoting positive mental health outcomes, and can be fostered through cultural practices and traditions.

Future Research Directions:

- More research is needed to understand the mechanisms linking childhood experiences, family dynamics, and mental health outcomes.
- Research should focus on developing interventions that promote resilience and address the intergenerational effects of trauma.

- Further research is needed to understand the unique mental health needs of specific populations, including Indigenous populations and other marginalized communities.

Implications for Practice:

- Mental health professionals should consider the impact of childhood experiences and family dynamics when working with clients.
- Culturally appropriate interventions, grounded in the traditions and practices of specific populations, may be more effective in promoting positive mental health outcomes.
- Policies and programs aimed at promoting mental health should take into account the unique needs and experiences of specific populations, particularly those who have experienced historical trauma.

Research Statement

Ethical Aproval: The study does not require ethical approval.

Conflict of Interest: The authors declare that there is no conflict of interest for the study.

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REFERENCES

- Alpak, G., Unal, A., Bulbul, F., Sagaltici, E., Bez, Y., Altindag, A., Dalkilic, A., & Savas, H. A. (2015). Post-traumatic stress disorder among Syrian refugees in Turkey: A cross-sectional study. *International Journal of Psychiatry in Clinical Practice, 19*(1), 45–50.
- Antonio, M. C., Keaulana, S., Keli ‘iholokai, L., Felipe, K., Vegas, J. K., Pono Research Hui, W., ... and Ho-Lastimosa, I. (2020). Reclaiming ‘Āina Health in Waimānalo. *International Journal of Environmental Research and Public Health, 17*(14), 5066.
- Baranowsky, A. B. and Gentry, J. E. (2015). Trauma practice: Tools for stabilization and recovery. In Hogrefe Publishing. Sage Publication.
- Boszormenyi-Nagy, I. (2014). Invisible Loyalties. Routledge.
- Buhman, C., Mortensen, E. L., Lundstrøm, S., Ryberg, J., Nordentoft, M., & Ekstrøm, M. (2018). Symptoms, quality of life and level of functioning of traumatized refugees at psychiatric trauma clinic in Copenhagen. *Torture Journal, 24*(1), 15–15.
- Carr, A. (2019). Family therapy and systemic interventions for child-focused problems: the current evidence base. *Journal of Family Therapy, 41*(2), 153–213.
- Chiesa, A., & Serretti, A. (2010). A systematic review of neurobiological and clinical features of mindfulness meditations. *Psychological Medicine, 40*(8), 1239–1252.
- Cloitre, M., Stolbach, B. C., Herman, J. L., Van Der Kolk, B., Pynoos, R., Wang, J., & Petkova, E. (2009). A developmental approach to complex PTSD: Childhood and adult cumulative trauma as predictors of symptom complexity. *Journal of Traumatic Stress, 22*(5), 399–408.
- Cohen, J. A., & Mannarino, A. P. (2022). Trauma-Focused Cognitive Behavioral Therapy for Children and Families. *Child and Adolescent Psychiatric Clinics of North America, 31*(1), 133–147.
- Courtois, C. A., & Ford, J. D. (2019). Sequenced relationship-based treatment for Complex Traumatic Stress Disorders. In Humanising Mental Health Care in Australia (pp. 211–222).
- Crawford-Faucher, A. (2014). Psychological therapies for chronic posttraumatic stress disorder. *American Family Physician, 90*(7), 454.
- Cusack, K., Jonas, D. E., Forneris, C. A., Wines, C., Sonis, J., Middleton, J. C., Feltner, C., Brownley, K. A., Olmsted, K. R., Greenblatt, A., Weil, A., & Gaynes, B. N. (2016).

Psychological treatments for adults with posttraumatic stress disorder: A systematic review and meta-analysis. *Clinical Psychology Review, 43*, 128–141.

- David, D., & Eth, S. (2014). The sequelae of our millennial war. *The Journal of Nervous and Mental Disease, 202*(2), 88–90.
- De Young, A. C., Paterson, R. S., Brown, E. A., Egberts, M. R., Le Brocque, R. M., Kenardy, J. A., ... & Haag, A. C. (2021). Topical review: Medical trauma during early childhood. *Journal of Pediatric Psychology, 46*(7), 739–746.
- Diamond, G., Creed, T., Gillham, J., Gallop, R., & Hamilton, J. L. (2012). Sexual trauma history does not moderate treatment outcome in attachment-based family therapy (ABFT) for adolescents with suicide ideation. *Journal of Family Psychology, 26*(4), 595–605.
- Ehring, T. (2022). Cognitive behavioural therapy. In Trauma Sequelae (Vol. 491, pp. 235–259).
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (2019). Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE)Study. *American Journal of Preventive Medicine, 56*(6), 774–786.
- Fergusson, D. M., McLeod, G. F. H., & Horwood, L. J. (2013). Childhood sexual abuse and adult developmental outcomes: Findings from a 30-year longitudinal study in New Zealand. *Child Abuse and Neglect, 37*(9), 664–674.
- Forester, D. (2018). Eye Movement Desensitization and Reprocessing (EMDR). In Trauma-Informed Approaches to Eating Disorders. Guilford Press.
- Gergen, K. J. (2015). An Invitation to Social Construction.
- Ghiasuddin, A., Luk, S., Hishinuma, E., Shrestha, H., & Lawler, A. (2015). “Marathon Boy”: The use of film in problem-based learning in child psychiatry. *Indian Journal of Psychiatry, 57*(3), 320–321.
- Hamwey, M. K., Gargano, L. M., Friedman, L. G., Leon, L. F., Petrsoric, L. J., & Brackbill, R. M. (2020). Post-traumatic stress disorder among survivors of the September 11, 2001 world trade center attacks: a review of the literature. *Primary Care Companion to the Journal of Clinical Psychiatry, 17*(12), 4344.

- Henderson, Zuleka R., Tricia N. Stephens, Anna Ortega-Williams, and Q. L. W. (2021). Conceptualizing healing through the African American experience of historical trauma. *American Journal of Orthopsychiatry, 91*(6), 763.
- Hodes, M., Jagdev, D., Chandra, N., & Cunniff, A. (2008). Risk and resilience for psychological distress amongst unaccompanied asylum seeking adolescents. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 49*(7), 723–732.
- Hutt, J. M. (2014). Child maltreatment. In Forensic and Legal Dentistry (Vol. 1, pp. 159–164).
- Kenny, M. C. (2008). Treating Trauma and Traumatic Grief in Children and Adolescents. *Journal of Psychological Trauma, 7*(1), 63–65.
- Larsen, S. E., Fleming, C. J., & Resick, P. A. (2019). Residual symptoms following empirically supported treatment for PTSD. *Psychological Trauma: Theory, Research, Practice, and Policy, 11*(2), 207.
- Levine, P. A. (2015). Trauma and memory: Brain and body in a search for the living past: A practical guide for understanding and working with traumatic memory. In Trauma and memory: Brain and body in a search for the living past: A practical guide for understanding and working with traumatic memory. North Atlantic Books.
- Lieberman, A. F., Van Horn, P., & Ippen, C. G. (2005). Toward evidence-based treatment: Child-parent psychotherapy with preschoolers exposed to marital violence. *Journal of the American Academy of Child and Adolescent Psychiatry, 44*(12), 1241–1248.
- Machado-Vaz, J. (2016). Philosophical Issues in Psychiatry III: The Nature and Sources of Historical Change. *Revue De Synthese, 137*(1–2).
- McCleary, J., & Figley, C. (2017). Resilience and trauma: Expanding definitions, uses, and contexts [Editorial]. *Traumatology, 23*(1), 1–3.
- Norris, F. H., Friedman, M. J., Watson, P. J., Byrne, C. M., Diaz, E., & Kaniasty, K. (2002). 60,000 disaster victims speak: Part I. An empirical review of the empirical literature, 1981-2001. *Psychiatry, 65*(3), 207–239.
- North, C. S., & Pfefferbaum, B. (2013). Mental health response to community disasters: A systematic review. *JAMA, 310*(5), 507–518.
- Nuttman-Shwartz, O., & Dekel, R. (2008). Training students for a shared traumatic reality. *Social Work, 53*(3), 279–281.

- Oddone-Paolucci, E., Genuis, M., & Violato, C. (2017). A meta-analysis of the published research on the effects of pornography. In The Changing Family and Child Development (Vol. 135, Issue 1, pp. 48–59).
- Porter, M., & Haslam, N. (2005). Predisplacement and postdisplacement factors associated with mental health of refugees and internally displaced persons: A meta-analysis. *JAMA, 294*(5), 602–612.
- Ray, A. (2015). The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma. *The Permanente Journal, 19*(3).
- Reynolds, C. F. (2019). Building resilience through psychotherapy. *World Psychiatry, 18*(3), 289–291.
- Robbins, M. S., Feaster, D. J., Horigian, V. E., Rohrbaugh, M., Shoham, V., Bachrach, K., Miller, M., Burlew, K. A., Hodgkins, C., Carrion, I., Vandermark, N., Schindler, E., Werstlein, R., & Szapocznik, J. (2011). Brief strategic family therapy versus treatment as usual: Results of a multisite randomized trial for substance using adolescents. *Journal of Consulting and Clinical Psychology, 79*(6), 713–727.
- Sandal, G. M. (2017). Psychological resilience. In Space Safety and Human Performance (pp. 183–237).
- Saul, J. (2022). Collective trauma, collective healing: Promoting community resilience in the aftermath of disaster. Routledge.
- Schäfer, I., Hopchet, M., Vandamme, N., Ajdukovic, D., El-Hage, W., Egreteau, L., Javakhishvili, J. D., Makhashvili, N., Lampe, A., Ardino, V., Kazlauskas, E., Mouthaan, J., Sijbrandij, M., Dragan, M., Lis-Turlejska, M., Figueiredo-Braga, M., Sales, L., Arnberg, F., Nazarenko, T., … Murphy, D. (2018). Trauma and trauma care in Europe. *European Journal of Psychotraumatology, 9*(1), 1556553.
- Steel, Z., Chey, T., Silove, D., Marnane, C., Bryant, R. A., & Van Ommeren, M. (2009). Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: A systematic review and meta-analysis. *JAMA, 302*(5), 537–549.
- Stoddard, C., & Claridge, R. S. (2023). Book Review: Crimes that changed our world: Tragedy, outrage, and reform. Criminal Justice Review. *Criminal Justice Review, 48*(4), 535–536.

- Thompson-Brenner, H., Glass, S., & Westen, D. (2003). A multidimensional meta-analysis of psychotherapy for bulimia nervosa. Clinical Psychology: *Science and Practice, 10*(3), 269–287.
- Ungar, M. (2011). The social ecology of resilience: Addressing contextual and cultural ambiguity of a nascent construct. *American Journal of Orthopsychiatry, 81*(1), 1–17.
- Walsh, F. (2015). Strengthening family resilience. In Guilford Publications. (3rd ed.). Guilford Press.
- Wexler, L. (2014). Looking across three generations of Alaska Natives to explore how culture fosters indigenous resilience. *Transcultural Psychiatry, 51*(1), 73–92.
- Woods, K. C., Buchanan, N. T., & Settles, I. H. (2009). Sexual Harassment Across the Color Line: Experiences and Outcomes of Cross- Versus Intraracial Sexual Harassment Among Black Women. *Cultural Diversity and Ethnic Minority Psychology, 15*(1), 67–76.
- Zarse, E. M., Neff, M. R., Yoder, R., Hulvershorn, L., Chambers, J. E., & Chambers, R. A. (2019). The adverse childhood experiences questionnaire: Two decades of research on childhood trauma as a primary cause of adult mental illness, addiction, and medical diseases. *Cogent Medicine, 6*(1), 1581447.
- Zautra, A. J., Arewasikporn, A., & Davis, M. C. (2010). Resilience: Promoting well-being through recovery, sustainability, and growth. *Research in Human Development, 7*(3), 221–238.

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Sosyal Medyada Yayınlanan Formül Mama Reklamlarının Kadınların Emzirme Motivasyonlarına Etkisi

The Effect of Formula Mama Advertisements on Women's Breastfeeding Motivations in Social Media

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ÖZET

Dünya Sağlık Örgütü (DSÖ), bebeklerin yaşamın ilk saatinde emzirmeye başlanmasını, altı ay boyunca sadece anne sütüyle beslenmesini, daha sonra da beslenme açısından yeterli ve güvenli tamamlayıcı gıdalar almasını, emzirmenin ise en az iki yaşına kadar devam etmesini önermektedir. Ancak, global olarak bebeklerin yarısından azı DSÖ önerilerine uygun olarak beslenmektedir. Emzirmenin bir seçenek olmadığı durumlarda, bebek maması 12 aya kadar kabul edilebilir bir alternatiftir. Ancak, günümüzde sosyal medya kullanımının yaygınlaşması ile birlikte gebeler ve anneler birincil bilgi kaynağı olarak sosyal medyayı kullanmakta, mamaları konu alan ve uygun olmayan agresif reklamlara maruz kalmakta ve bunun sonucunda gerekli olmayan durumlarda bile mama kullanmayı tercih etmektedirler. Bunun yanı sıra, formül mama üreten şirketlerin, hastanelerle ve sağlık çalışanları ile doğrudan etkileşime geçmesi, ücretsiz numunelerin dağıtılması gibi nedenler sonucunda sağlık çalışanları arasında emzirme teşviki üzerine çatışma yaşanmaktadır. Mamaların gereksinim dışında kullanılması ve sağlık çalışanları arasındaki farklı yaklaşımlar ise emzirme üzerinde olumsuz etkiler yaratmaktadır. Tüm Dünya'da emzirme oranlarının giderek azalması, anne ve bebek sağlığı açısından küresel bir tehlike yaratmaktadır. Bu nedenle, anneleri ve ailelerini, anne sütü yerine geçen ürünlerin tanıtımlarının olumsuz etkilerine karşı acil korumaya ihtiyaç vardır. Bu derlemenin amacı, sosyal medyada yayınlanan mama reklamlarının emzirme üzerine olan etkilerinin incelenmesidir.

Anahtar Kelimeler: Emzirme, sosyal medya, formül mama.

ABSTRACT

The World Health Organisation (WHO) recommends that infants should start breastfeeding within the first hour of life, be exclusively breastfed for six months, receive nutritionally adequate and safe complementary foods thereafter, and continue breastfeeding until at least two years of age. However, globally, less than half of infants are fed in accordance with WHO recommendations. When breastfeeding is not an option, infant formula is an acceptable alternative for up to 12 months. However, nowadays, with the widespread use of social media, pregnant women and mothers use social media as their primary source of information, are exposed to aggressive and inappropriate advertisements about infant formula, and as a result prefer to use formula even when it is not necessary. In addition, there is conflict among health workers over breastfeeding promotion as a result of direct interaction of formula companies with hospitals and health workers and distribution of free samples. The use of infant formulas for non-essential purposes and different approaches among health professionals have negative effects on breastfeeding. The gradual decline in breastfeeding rates all over the world poses a global threat to maternal and infant health. Therefore, there is an urgent need to protect mothers and their families against the negative effects of the promotion of breastmilk substitutes. The aim of this review was to analyse the effects of formula adverts on social media.

Keywords: Breastfeeding, social media, formula mama.

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GİRİŞ

Emzirme, hem annenin hem de bebeğin sağlığı üzerinde önemli etkilere sahiptir (Victora ve diğerleri, 2016). Ayrıca, emzirme küresel bir sağlık önceliğidir ve Dünya Sağlık Örgütü (DSÖ) tarafından belirlenen Sürdürülebilir Kalkınma Hedefleri 2030 yılı gündeminin önemli bir parçasıdır (UNICEF, 2016). Küresel boyutta bir öneme sahip olmasına rağmen emzirme oranları halen istendik düzeyde değildir. Dünya çapında sadece anne sütüyle beslenen 0-6 aylık bebeklerin %44'tür (DSÖ, 2023).

Dünya Sağlık Örgütü (DSÖ), bebeklerin yaşamın ilk saatinde emzirmeye başlanmasını, altı ay boyunca sadece anne sütüyle beslenmesini, daha sonra da beslenme açısından yeterli ve güvenli tamamlayıcı gıdalar almasını, emzirmenin ise en az iki yaşına kadar devam etmesini önermektedir (DSÖ, 2023). Dünya çapındaki bebeklerin yarısından azı bu önerilere uymaktadır (Neves ve diğerleri, 2022). Birleşmiş Milletler Uluslararası Çocuklara Acil Yardım Fonu (UNICEF), 2014 ile 2021 yılları arasında altı aydan küçük bebeklerin %45'inden azı yalnızca anne sütüyle beslendiğini belirtmiştir (UNICEF, 2021). Dünya çapındaki emzirme oranlarının düşük olmasının temel nedenlerinden birisi, anne sütü yerine geçen ürünlerin agresif pazarlamasıdır (DSÖ, 2016). Ticari süt formülleri, dünya çapında bebekler (0-12 ay) ve küçük çocuklar (13-36 ay) için pazarlanan ve anne sütü yerine tüketilen bir üründür. Formül mama, kullanım amacına göre dört kategoriye ayrılmaktadır. Bunlar; standart bebek maması (0-6 ay için), bebek devam maması (7-12 ay), yürümeye başlayan çocuk veya büyüme sütleri (13-36 ay) ve özel mama (belirli bozukluklar, hastalıklar veya tıbbi durumlar için)'dır. (Piwoz ve Huffman, 2015; Rollins de diğerleri, 2016). Anne sütü yerine geçen bu ürünlerin kullanıma teşvik edilmesi, küresel anlamda emzirme uygulamalarını iyileştirme çabalarını engellemektedir (DSÖ, 2017).

Sosyal medya, ebeveynlerin anne sütü ve emzirme hakkında bilgi edinebileceği hızlı ulaşılabilir bir kaynaktır (Newby ve diğerleri, 2015). Ayrıca, sosyal medyanın daha fazla erişim ve daha iyi fırsatlara sahip olması nedeniyle şirketler buralarda etik olmayan kampanyalar ile (manipülatif pazarlama taktikleri ile ebeveynlerin endişelerini ve isteklerini istismar etmek, uygunsuz sağlık ve beslenme iddialarında bulunmak gibi) ürünlerinin tanıtımını yapmaktadırlar (Prado ve Rinaldi, 2020). Sosyal medyada yer alan bu tanıtım reklamlarının emzirme üzerine olumsuz etkilerinin olduğu düşünülmektedir. Bu derlemenin amacı, sosyal medyada paylaşılan mama reklamlarının emzirme üzerine etkilerinin incelenmesidir.

Sosyal Medya ve Anne Sütü Yerine Geçen Ürünlerin Reklamları

Sosyal medya, insanların başkalarıyla özgürce etkileşim kurmasına olanak tanımakta ve pazarlamacıların tüketicilere ulaşması, onlarla etkileşim kurması için birçok yol sunmaktadır (Appel ve diğerleri, 2020). Sosyal medya kullanıcılarının sayısı her geçen yıl giderek artmaktadır ve 2021 yılında küresel nüfusun yaklaşık %53,6'sı olan 4.2 milyara ulaşmıştır (Mahalingham ve diğerleri, 2023). Formül mama pazarlayan şirketler, ürünlerini tanıtmak amacıyla sosyal ağ sitelerini kullanmaktadır (Abrahams, 2012). Şirketler sosyal ağ sitelerinde (sosyal medya, üretici web siteleri, çevrimiçi perakendeciler, bloglar, mobil uygulamalar ve dijital yayın hizmetleri), birden fazla dijital kanalda, hediyeler, indirimler ve kuponlar gibi geleneksel pazarlama stratejileri kullanılarak entegre bir şekilde bebeklerin yapay beslenmesini normalleştiren ve emzirmeyi zayıflatan reklamlarla genç kadınlara ve ailelerine ulaşmaktadırlar (Jones ve diğerleri, 2022; Franco-Lares ve diğerleri, 2023).Formül mamaların her yerde pazarlanması emzirme uygulamalarını olumsuz yönde etkilemektedir (Rollins ve diğerleri, 2016). Bu zararlı pazarlamanın örnekleri arasında doğumhanelerde ücretsiz ürünlerin bulundurulması yer almaktadır (Hernández-Cordero ve diğerleri, 2022). Sağlık çalışanlarının teşviki, kitle iletişim araçları, web tabanlı reklamcılık ve akıllı telefon kullanımının artmasıyla birlikte formül mamaların tanıtımı da artmaktadır (Zhang ve diğerleri, 2013; Liu ve diğerleri, 2014). Ayrıca, kadınlar gebelik ve ebeveynlik döneminde birincil bilgi ve duygusal kaynak olarak medyayı kullanmaktadır (Hearn ve diğerleri, 2013). Formül mamaların kontrolsüz bir şekilde pazarlanması, kullanımının artması ve emzirme oranlarının düşmesi ile birlikte çocuk ölümleri artmıştır. Bu nedenle DSÖ tarafından 1981'de emzirmenin korunması ve teşvik edilmesi, gerektiğinde anne sütü yerine geçen gıdaların yeterli bilgi ve bilgiye dayalı olarak uygun şekilde kullanılmasının sağlanması yoluyla bebekler için güvenli ve yeterli beslenmenin sağlanmasına katkıda bulunmak amacıyla'' Anne Sütü Muadillerinin Pazarlanmasına İlişkin Uluslararası Kurallar (Kod)'' yayınlandı (DSÖ, 1981).

Dünya Sağlık Örgütü, Anne Sütü Muadillerinin Pazarlanmasına İlişkin Uluslararası Kurallarını (Kod), aşağıdaki gibi belirtmiştir (DSÖ,1981),

- Gebe kadınlara, bebek ve küçük çocuk annelerine ulaşmayı amaçlayan bilgilendirici ve eğitici materyallerde, anne sütü yerine geçen ürünlerin kullanımını idealize edecek resim veya metin kullanılmamalıdır.
- Üreticiler ve distribütörler tarafından sağlık profesyonellerine sağlanan bilgiler bilimsel ve olgusal konularla sınırlı olmalı ve biberonla beslemenin emzirmeye eşdeğer veya üstün olduğu yönünde bir ima veya inanç yaratmamalıdır.

- Ne ambalajın ne de etiketin üzerinde bebek resimleri bulunmamalıdır; bebek maması kullanımını idealleştirecek başka resim veya metinler de bulunmamalıdır.
- Kuralların kapsamına giren ürünlerin kamuya yönelik hiçbir reklamı veya başka bir promosyonu yapılmamalıdır.
- Ulusal mevzuatta özel olarak öngörülmediği sürece, anne sütü yerine geçen ürünler için beslenme ve sağlık iddialarına izin verilmemelidir.
- Sağlık çalışanlarına ücretsiz numune dağıtımı ve hediyeler verilmemelidir.
- Emzirmenin yararlarını ve doğru emzirme talimatlarını içeren bilgilendirici ve eğitici materyaller hazırlanmalıdır.
- Hiçbir şirketin sosyal medya kanalları da dahil olmak üzere gebe kadınlar veya anneler, babalar ve bakıcılarla doğrudan veya dolaylı temas kurmamalıdır.

Dünya Sağlık Örgütü, anne sütü yerine geçen ürünlerin pazarlama kurallarını belirtmiş olsa da, şirketlerin bir çoğu kurallara uymamaktadır. Anne sütü yerine geçen ürünlerin uygunsuz şekilde pazarlanması ve agresif şekilde tanıtılması, emzirmeyi zayıflatmakta ve tüm dünya koşullarında anne ve bebek sağlığı açısından tehlike oluşturmaktadır (Piwoz ve Huffman, 2015).

Anne Sütü Yerine Geçen Ürünlerin Reklamlarının Kadınların Emzirme Motivasyonları Üzerine Etkisi

Anne sütü, bileşim, bağışıklık özellikleri, sağlık ve gelişim sonuçları açısından benzersizdir (Rollins ve diğerleri, 2023). Dünya Sağlık Örgütü (DSÖ)'nün emzirme önerilerine uyulduğunda, her yıl 800.000'den fazla bebek ölümünün önlenebileceği belirtilmektedir (Victora ve diğerleri, 2016). Emzirmenin bir seçenek olmadığı durumlarda, bebek maması 12 aya kadar kabul edilebilir bir alternatiftir (AAP, 2012). Ancak, anne sütü yerine geçen ürünlerin uygunsuz bir şekilde pazarlanması ve agresif şekilde tanıtılması emzirmeyi olumsuz etkilemekte küresel bir sorun haline gelmektedir (Piwoz ve Huffman, 2015). Pazarlamanın, emzirmenin alternatiflerine ilişkin algılanan sosyal normları şekillendirdiği ve bebekler için en uygun gıdanın ne olduğuna dair çarpık bir görüş yaratarak seçimleri önyargılı hale getirebileceği bilinmektedir (Lozada-Tequeanes ve diğerleri, 2020). Anne sütü yerine geçen ürünlerin, tüketicilere kitle iletişim araçları ve basılı reklamlar yoluyla doğrudan iletişime geçilmesi, ücretsiz malzeme ve promosyonlar verilmesi, şirket web siteleri ve sosyal medya aracılığıyla internet pazarlaması her geçen gün artmaktadır (Piwoz ve Huffman, 2015). Amerika'da 2021 yılında, formül mama ürünlerin üretimini yapan beş

şirketin web sitelerinin incelendiği çalışmada, şirketlerin web sitelerinde formül mama kullanımını teşvik ettiği ve emzirmeden caydırıcı içerikler paylaştığı belirtildi. Hatta bazı şirketler emzirmenin formül mama beslemesinden daha zor olduğuna vurgu yaptığı bildirilmektedir (Pomeranz ve diğerleri, 2023).

Anne Sütü Yerine Geçen Ürünlerin Reklamlarının Anne Psikolojisi Üzerine Etkisi

Anne sütü yerine geçen ürünlerin uygunsuz pazarlanmasının annelerin ve bebeğe diğer bakım veren kişilerin bilgilerini, niyetlerini, inançlarını, öz yeterliliklerini ve sosyal normlarını değiştirerek optimal emzirme davranışları üzerinde olumsuz etkisi vardır (Piwoz ve Huffman, 2015). 2021 yılında, Amerika'da, anne sütü yerine geçen ürünleri üreten beş şirketin

Formül mamanın dijital pazarlamasının emzirme ve tamamlayıcı beslenme üzerine etkisinin incelendiği bir çalışmada, katılımcıların %93,9'unun reklamlara maruz kaldığı bildirildi. Çalışmanın sonucunda da reklamları daha çok izleyen ebeveynlerin bebeklerini anne sütü ile besleme oranlarının düşük olduğu belirtilmektedir. Ayrıca, reklamlara daha çok maruz kalan ebeveynlerin bebeklerine formül mama, şekerli içecekler ve işlenmiş gıdaları verdikleri bildirilmektedir. (Unar-Munguía ve diğerleri, 2022). Anne sütü muadillerinin uygunsuz bir şekilde pazarlanması ve şirketlerin direkt olarak hastaneler ve sağlık uzmanlarıyla etkileşime girmesi, sağlık profesyonellerin emzirme desteği konusunda çatışma yaşamasına da neden olmaktadır (Robinson ve diğerleri, 2019). Meksika'da,18 aydan küçük bebekleri olan annelerin anne sütü yerine geçen ürünlerine pazarlamasına maruz kalma ile bebek besleme uygulamaları arasındaki potansiyel ilişkinin incelenmesi amacıyla yapılan çalışmanın sonucunda, bir sağlık uzmanı ve/veya akraba tarafından anne sütü yerine geçen ürünlerin %76,2 oranında tavsiye edildiği ve bir hastanede anne sütü yerine geçen ürünlerin %18,6 oranında dağıtımının yapıldığı bildirildi. Doktorlar/çocuk doktorları tarafından annelere mama kullanmaları önerildiğinde, karma beslenme olasılığı emzirmeye kıyasla önemli ölçüde daha yüksek olduğu belirtildi (Hernández-Cordero ve diğerleri, 2022). Chanmpeny ve ark. (2019), yeni doğanlar arasında anne sütü yerine geçen ürünler ile beslenmeyi etkileyen faktörleri değerlendirmek amacıyla yaptıkları çalışmada, bir sağlık uzmanından destek almaları ve arkadaş/ aile tavsiyesinin formül mama kullanımını arttırdığı bildirilmektedir (Champeny ve diğerleri, 2019). Meksika'da anne sütü yerine geçen ürünlerin internet, sosyal medya ve televizyon aracılığıyla reklam ve pazarlanmasını incelemek amacıyla yapılan çalışmanın sonucunda, reklamların Anne Sütü Muadillerinin

Pazarlanmasına İlişkin Uluslararası Kurallarına uygun olmadığı belirtilmektedir (Lozada-Tequeanes ve diğerleri, 2020).

Anne Sütü Yerine Geçen Ürünlerin Zararları

Emzirmenin uygun olmadığı durumlarda, formül mamalar kabul edilebilir bir alternatif olsa da birçok yan etkisi bulunmaktadır (AAP, 2012).

Formül mamaların kullanımı; nekrotizan enterokolit gibi gastrointestinal sistem hastalıklarının görülmesine, solunum yolu enfeksiyonu da dahil olmak üzere bulaşıcı hastalıklarda artışın olmasına,formül mamanın kontaminasyonu veya sulandırma sorunlarının olumsuz etkilere neden olması (örneğin bakteriyel enfeksiyon veya yanık yaralanması), kolik, kabızlık, zatürre ve ölümcül ishalin görülmesi kısa ve uzun vadeli sağlık risklerinin artmasına neden olmaktadır (Munblit ve diğerleri, 2020; Rollins ve diğerleri, 2016).

Anne sütü yerine geçen ürünlerin önemli ekolojik zararları da vardır: paketleme, tedarik zincirleri ve biberonla besleme aparatlarının tümü karbon ayak izine sahiptir ve çevreye dayanıklı plastiklerin salınmasına neden olur (Rollins ve diğerleri, 2016 annenin bebeğini emzirmemesi sonucu anne için meme kanseri riski artmaktadır (Victora ve diğerleri, 2016). Ayrıca, formül mamaların satın alma maliyetinin artması ekonomik olarak da zarar vermektedir (Munblit ve diğerleri, 2020).

SONUÇ VE ÖNERİLER

Anne sütü, yenidoğanın büyümesi ve gelişmesi için gerekli olan tüm besin öğelerini içermektedir. Günümüzde, anne sütü yerine üretilen hiçbir ürün anne sütünün içeriğini karşılamamaktadır. Formül mama üreten şirketler, sosyal medya alanlarında yaygın ve uygun olmayan biçimde reklam yapmakta, sosyal medya kullanım oranları gün geçtikçe artmakta, gebeler ve anneler birincil ve duygusal kaynak olarak sosyal medyayı yaygın bir biçimde kullanmaktadır. Mama üreten firmalar direkt olarak sağlık çalışanlarına ve hastanelere ulaşmakta, ücretsiz numune dağıtımı yapmaktadır. Bu durum, sağlık profesyonellerinin emzirme eğitimleri üzerinde çatışma yaşamalarına neden olmaktadır. Sağlık profesyonellerinin, özellikle de doktorlar/çocuk doktorlarının, annelerin bebeklerini nasıl besleyeceklerine ilişkin uygulamalarına ilişkin karar vermeleri üzerinde güçlü bir etkiye sahiptir. Sağlık profesyonellerinin anneler üzerindeki bu etkisi anne sütü yerine geçen ürünlerin kullanımına teşvik edilmesinin, tanıtılmasının önemli bir kaynağıdır. Anneleri ve ailelerini, kitlesel medya kanalları aracılığıyla iletilen ve uygun olmayan bir biçimde düzenlenmiş, anne sütü yerine geçen ürünlerin tanıtımlarının emzirme üzerine olumsuz

etkisine karşı acil korumaya ihtiyaç vardır. Bu bağlamda, formül mama tanıtımlarının yapıldığı reklamların yerine emzirmeye ve anne sütünün verilmesine teşvik edecek reklamların yer alması önerilmektedir. Ayrıca, formül mama reklamlarının, Dünya Sağlık Örgütü'nün, Anne Sütü Muadillerinin Pazarlanmasına ilişkin Uluslararası kurallarına göre denetlenmesi gerekmektedir.

Research Statement

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REFERENCES

- American Academy of Pediatrics (AAP). (2012). Policy statement: breastfeeding and the use of human milk. *Pediatrics. 129*:e827–e841.
- Champeny, M., Pries, A. M., Hou, K., Adhikary, I., Zehner, E., & Huffman, S. L. (2019). Predictors of breast milk substitute feeding among newborns in delivery facilities in urban Cambodia and Nepal. *Maternal & Child Nutrition, 15*, e12754.
- Franco-Lares, B., Lara-Mejía, V., Lozada-Tequeanes, A. L., Villanueva-Vázquez, C., & Hernandez-Cordero, S. (2023). Legislation on marketing of breast-milk substitutes in digital and social media: a scoping review. *BMJ Global Health, 8*(3).
- Hearn, L., Miller, M., & Fletcher, A. (2013). Online healthy lifestyle support in the perinatal period: what do women want and do they use it? . *Australian Journal of Primary Health, 19*(4), 313-318.
- Hernández-Cordero, S., Lozada-Tequeanes, A. L., Fernández-Gaxiola, A. C., Shamah-Levy, T., Sachse, M., Veliz, P., & Cosío-Barroso, I. (2020). Barriers and facilitators to breastfeeding during the immediate and one month postpartum periods, among Mexican women: A mixed methods approach. *International Breastfeeding Journal, 15*(1), 1-12.
- Hernández-Cordero, S., Vilar-Compte, M., Castañeda-Márquez, A. C., Rollins, N., Kingston, G., & Pérez-Escamilla, R. (2022). Exposure to marketing of breastmilk substitutes in Mexican women: Sources and scope. *International Breastfeeding Journal, 17*(1), 16.
- Hernández-Cordero, S., Lozada-Tequeanes, A. L., Shamah-Levy, T., Lutter, C., González de Cosío, T., Saturno-Hernández, P., . . . Grummer-Strawn, L. (2019). Violations of the International Code of Marketing of Breast-milk Substitutes in Mexico. *Maternal & Child Nutrition, 15*(1), e12682.
- Liu, A., Dai, Y., Xie, X., & Chen, L. (2014). Implementation of international code of marketing breast-milk substitutes in China. *Breastfeeding Medicine, 9*(9), 467-472.
- Lozada-Tequeanes, A. L., Hernández-Cordero, S., & Shamah-Levy, T. (2020). Marketing of breast milk substitutes on the internet and television in Mexico. *Journal of Paediatrics and Child Health, 56*(9), 1438-1447.
- Neves, P. A., Barros, A. J., Baker, P., Piwoz, E., Santos, T. M., Gatica-Domínguez, G., . . . Victora, C. G. (2022). Consumption of breast milk, formula and other non-human milk by children aged under 2 years: analysis of eighty-six low-and middle-income countries. *Public Health Nutrition, 25*(3), 680-688.

- Newby, R., Brodribb, W., Ware, R. S., & Davies, P. S. (2015). Internet use by first-time mothers for infant feeding support. *Journal of Human Lactation, 31*(3), 416-424.
- Piwoz, E. G., & Huffman, S. L. (2015). The impact of marketing of breast-milk substitutes on WHO-recommended breastfeeding practices. *Food and Nutrition Bulletin, 36*(4), 373-386.
- Pomeranz, J. L., Chu, X., Groza, O., Cohodes, M., & Harris, J. L. (2023). Breastmilk or infant formula? Content analysis of infant feeding advice on breastmilk substitute manufacturer websites. *Public Health Nutrition, 26*(5), 934-942.
- Prado, I. S. C. F., & Rinaldi, A. E. M. (2020). Compliance of infant formula promotion on websites of Brazilian manufacturers and drugstores. *Revista de Saude Publica, 54*, 12.
- Robinson, H., Buccini, G., Curry, L., & Perez-Escamilla, R. (2019). The World health organization code and exclusive breastfeeding in China, India, and Vietnam. *Maternal & Child Nutrition, 15*(1), e12685.
- Rollins, N., Piwoz, E., Baker, P., Kingston, G., Mabaso, K. M., McCoy, D., . . . Russ, K. (2023). Marketing of commercial milk formula: a system to capture parents, communities, science, and policy. *The Lancet, 401*(10375), 486-502.
- Rollins, N. C., Bhandari, N., Hajeebhoy, N., Horton, S., Lutter, C. K., Martines, J. C., . . . Victora, C. G. (2016). Why invest, and what it will take to improve breastfeeding practices?. *The Lancet, 387*(10017), 491-504.
- Unar-Munguía, M., Santos-Guzmán, A., Mota-Castillo, P. J., Ceballos-Rasgado, M., Tolentino-Mayo, L., Aguilera, M. S., . . . Bonvecchio, A. (2022). Digital marketing of formula and baby food negatively influences breast feeding and complementary feeding: a cross-sectional study and video recording of parental exposure in Mexico. *BMJ Global Health, 7*(11), e009904.
- United Nations Children's Fund (UNICEF). (2021). Global Breastfeeding Collective. Global Breastfeeding Scorecard 2021. Available date: 01.02.2024. Available at: https://www.globalbreastfeedingcollective.org/global-breastfeeding-scorecard-2021
- United Nations Children's Fund (UNICEF). 2021. Infant and young child feeding. Available date: 01.02.2024. Available at: https://data.unicef.org/topic/nutrition/infant-and-young-child-feeding/#status Victora, C. G., Bahl, R., Barros, A. J., França, G. V., Horton, S., Krasevec, J., . . . Rollins, N. C. (2016). Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *The Lancet, 387*(10017),475-490.

- World Health Organization (WHO). (2023). Infant and young child feeding. Available date: 01.02.2024. Available at: https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding.
- World Health Organization (WHO). (2017). International Code of Marketing of Breast-milk Substitutes. Available date: 28.04.2024. Available at: https://iris.who.int/bitstream/handle/10665/254911/WHO-NMH-NHD-17.1-eng.pdf
- World Health Organization (WHO). (2016). Guidance on ending the inappropriate promotion of foods for infants and young children. Available date: 01.02.2024 Available at: https://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_7Add1-en.pdf?ua=1
- World Health Organization (WHO). (1981). International Code of Marketing of Breast-milk Substitutes. Available date: 28.04.2024. Available at: https://www.who.int/nutrition/publications/code_english.pdf
- Zhang, Y., Carlton, E., & Fein, S. B. (2013). The association of prenatal media marketing exposure recall with breastfeeding intentions, initiation, and duration. *Journal of Human Lactation, 29*(4), 500-509.

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19. Yüzyılda Uyku Hijyeni Kavramı ve Uyku Kalitesine Yönelik Tavsiyeler

The Concept of Sleep Hygiene in the 19th Century and Recommendations for Sleep Quality

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ÖZET
Yaşam süresinin büyük bir kısmını oluşturan uyku, çağlar boyunca insanların dikkatini çekmiş; çeşitli kültürlerde ve zamanlarda düşünürler, uykunun gizemine dair eserler üretmiş, uykunun sağlıkla olan ilişkisini ortaya koymaya çalışmışlardır. 19. yüzyılda da oldukça ilgi çeken bu konu, yüzyılın sonlarına doğru fizyolojik ölçümdeki gelişmeler sayesinde daha bilimsel ve deneysel olarak incelenebilir hale gelmiştir. Ancak henüz bilimsel bir olgunluğa erişmeden evvel, aynı yüzyılın ilk yarısından itibaren uykuya yönelik eserler yazılmıştır. Bu eserler; uyurgezerlik, uykusuzluk gibi uyku bozukluklarını konu edinmenin yanı sıra uykunun canlılar için gerekli olup olmadığı, ne kadar ve nasıl uyunması gerektiği gibi bilgileri de içermektedir. Bu bilgiler bağlamında ortaya çıkan ve eser isimlerinde ya da içeriklerinde sıklıkla kullanılan 'uyku hijyeni' kavramını, belirli öneriler doğrultusunda uykunun daha kaliteli hale getirilmesi olarak tanımlamak mümkündür. Makalede, 19. yüzyıl bağlamında; William Whitty Hall, Robert Macnish gibi hekimlerin uyku üzerine ürettikleri eserlere değinilmiş ve uyku araştırmalarına yönelik tutumlar, sağlıklı bir uykunun nasıl olması gerektiğine, diğer bir ifadeyle 'uyku hijyeni'nin nasıl sağlanacağına dair iddialara yer verilmiştir. 19. yüzyılda uykuyu konu edinen eserlerde 'uyku hijyeni' kavramının ve uykunun gerekliliğine dair fikirlerin incelenmesi amaçlanmıştır.
Anahtar Kelimeler: uyku, uyku hijyeni, uyku kalitesi, sağlıklı uyku, mental sağlık

ABSTRACT
Sleep, which constitutes a large part of the lifespan, has attracted people's attention throughout the ages; thinkers in various cultures and times have produced studies about the mystery of sleep and tried to reveal the relationship between sleep and health. This subject, which attracted much attention in the 19th century, became more scientifically and experimentally examined thanks to the developments in physiological measurement towards the end of the century. However, before it reached scientific maturity, studies on sleep were written in the first half of the same century. In addition to covering sleep disorders such as sleepwalking and insomnia, these studies also include information about whether sleep is necessary for living things, how much, and how to sleep. It is possible to define the concept of 'Sleep Hygiene,' which emerged in the context of this information and is frequently used in the titles or contents of works, as a set of recommendations for better sleep quality. In the article, in the context of the 19th century, studies on sleep produced by physicians such as William Whitty Hall and Robert Macnish were mentioned, as attitudes towards sleep research and claims about what a healthy sleep should be like, in other words, how to ensure 'sleep hygiene,' were examined.
Anahtar Kelimeler: sleep, sleep hygiene, sleep quality, healthy sleep, mental health

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GİRİŞ

Uykunun deneysel bilgiye dayalı şekilde ve ölçüm temelli olarak ele alınışı, 19. yüzyılın ikinci yarısında meydana gelen gelişmelerle mümkün olmuştur. Uzun süreli uykusuzluğun insan ve hayvanlarda meydana getirdiği değişikliklerin araştırılması, uyku sırasında vücut ısısı ya da dolaşım sistemi gibi işlevlerde meydana gelen değişikliklerin fizyolojik ölçümlerinin yapılmaya başlanması, uykunun giderek daha fazla bilimsel olarak araştırılmasına katkıda bulunmuştur. Bu çalışmaların yaygınlaşmasından önce, uykunun kendisi ve içeriğiyle ilgili elde edilebilecek bilgiler, uyuyan kişinin hekime verdiği bilgiler ve kişi uykudayken hekimin dışarıdan yaptığı gözlemler ile sınırlıydı. Bu bilgiler dönemin genel tıbbi bağlamı ve akıl yürütmeler aracılığıyla yorumlanıyordu. Bu yorumlamalar; uykunun gerekliliği, nasıl ve ne kadar uyunması gerektiği, uykusuzluk, uyurgezerlik gibi uyku bozuklukları hakkında bilgiler içeriyordu (Schulz ve Salzarulo, 2015). En temel meselelerden biri ise daha kaliteli uyumanın yollarını araştırmak olan uyku hijyeniyle ilgiliydi.

Bu makalede; 19. yüzyılda uykuyu konu edinen eserlerde uyku hijyeni kavramının ve uykunun gerekliliğine ilişkin fikirlerin incelenmesi amaçlanmıştır.

19. Yüzyılda Uyku

19. yüzyılda uyku ile ilgili yayımlanmış olan eserler değerlendirildiğinde; bu eserlerden bazıları ‘hijyen’ kelimesini doğrudan kullanmış, bazıları ise bölüm isimlerinde yer vermiştir. Örneğin Amerikalı Hekim William Whitty Hall ‘Sleep or the Hygiene of the Night (Uyku ya da Gecenin Hijyeni)’ eserini yayımlamıştı (Hall, 1870). Benzer şekilde Rus Hekim Maria Manaceine eserine ‘Sleep: Its Physiology, Pathology, Hygiene and Psychology (Uyku: Fizyolojisi, Patolojisi, Hijyeni ve Psikolojisi)’ ismini vermişti (Manaceine, 1897). Amerikalı Nörolog James Leonard Corning yayımlanan ‘Brain-Rest (Beyin Dinlenmesi)’ eserinde uyku hijyenine dair bir bölüm ayırmış, İskoç Hekim Robert Macnish ise ‘The Philosophy of Sleep (Uyku Felsefesi)’ eserinin son bölümünü uykunun yönetimine ayırmıştı (Corning, 1883; Macnish, 1836).

19. yüzyılda uyku hakkında yazılan eserlerde; uyku süresinin toplam yaşam süresinde önemli bir kısma karşılık geldiğine, dolayısıyla uyku araştırmalarının değerli çalışmalar olduğuna dair ifadelere rastlamak mümkündür. Örneğin İngiliz Hekim John Addington Symonds yayımladığı ‘Uyku ve Rüyalar (Sleep and Dreams)’ eserinin girişinde şu ifadelere yer vermiştir (Symonds, 1851, s. 2):

"Hayatımızın üçte birini içinde geçirdiğimiz bu durum hakkında bir şeyler bilmek, değersiz bir araştırma değildir. Ama yine de ilk başta aklınıza şu düşünce gelebilir: Uykudan

daha iyi bilinen ne olabilir ki? Bu hepimizin ortak deneyimidir. Ancak ne kadar basit ve açık görünse de onu ne kadar çok araştırırsak, ilginç ve meraklı spekülasyonlar ve yanıtlanması kolay olmayan sorular açısından o kadar zengin olduğunu göreceğiz."

Benzer şekilde, Amerikalı Hekim William Whitty Hall 'Uyku ve Gece Hijyeni (Sleep and Night Hygiene)' eserinin girişinde şu ifadelere yer vermiştir (Hall, 1870, s. 1):

"Gece oda kapısının kapanmasıyla sabah açılması arasında insan yaşamının üçte biri geçer ve insanın fiziksel, zihinsel ve ahlaki karakteri büyük ölçüde bu kapının kullanılma şekline bağlıdır."

İngiliz Hekim Henry Holland 'Chapters on Mental Physiology (Mental Fizyoloji Bölümleri)' eserinde "Varoluşun neredeyse üçte birinin dış dünyadan bu kadar ayrı bir durumda geçmesinden daha tuhaf ne olabilir ki?" sözüyle uykunun önemine dikkat çekmek istemiştir (Holland, 1852, s. 78). Uykuya verilen önem onun kaliteli bir şekilde geçirilmesine yönelik araştırmaları beraberinde getirmiştir.

Robert Macnish, yazdığı 'The Philosophy of Sleep (Uyku Felsefesi)' adlı eserinde uykunun doğasına dair değerlendirmelerde bulunmuş ve uykusuzluk, kâbuslar, uyurgezerlik ve uykuda konuşma dâhil olmak üzere çeşitli uyku bozukluklarına değinmiştir (Macnish, 1834). Macnish'e (1834, ss. 2-6) göre uyku sağlıklı ve sağlıksız olmak üzere iki çeşittir. Sağlıklı uykunun huzurla dolu olduğunu aktarmış ve sağlıklı uyumayı başarabilen insanı, tıpkı güneşin ortaya çıktığı anda sisin dağılmasına benzetmiştir. Uykunun yorgunluğu ortadan kaldıracağını, kişinin kendisini enerjik hissedeceğini, zihinsel ve bedensel tüm potansiyelini kullanabileceğini söylemiştir. Diğer bir ifadeyle; Macnish'e (1834, ss. 2-6) göre, bedensel organizmamızın ve zihinsel yetilerimizin yenilenmesi için sağlıklı uyku gereklidir. Aynı şekilde Hekim Charles Stowell, 'A Healthy Body (Sağlıklı Bir Vücut)' eserinde; uykuyu, yorulan ve uyuşuk hale gelen bedenin onarım şekli olarak görür (Stowell, 1891, s. 140). Manaceine (1897, ss. 65-69), yayımladığı 'Uyku: Fizyolojisi, Patolojisi, Hijyeni ve Psikolojisi' adlı eserinde uykunun gerekliliği üzerine yazarken hayvanlar ve insanlar üzerinde yapılmış deneysel çalışmalara yer verir. On köpek yavrusu üzerinde yapılan kısıtlı yiyeceğin ve uykusuzluğun karşılaştırmalı bir çalışmasını anlatır. Uykusuzluğun beslenme eksikliğine göre daha ölümcül sonuçlara sebep olacağına dair bulunan sonucu aktarır. Daha sonra insanlar üzerinde yapılan bir deneyden bahseder ve 90 saat boyunca uyanık tutulan insanların tepki süresinde, motor yeteneklerinde, hafızalarında ve dikkatlerinde gerileme gösterdiklerini bildirir. Manaceine (1897, ss. 65-69), deneklerin uyuduktan sonra hızlıca kaybettikleri yeteneklere kavuştuğuna vurgu yaparak uykunun gerekli olduğunun altını çizer. 'Sleep and its Derangements (Uyku ve Düzensizlikleri)' kitabında uykunun gerekliliğine yer veren

Hekim William Alexander Hammond ise çeşitli organların ve kasların gün içerisinde dinlenme fırsatı bulduğunu ancak beynin hiçbir şekilde dinlenmediğini, uykuda bile kısmen dinlendiğini ve uyku sayesinde gücünü yenileyebildiğini ifade etmiştir (Hammond, 1869, ss. 9-10).

19. yüzyıl hekimleri eserlerinde, uyku gerekliliğinin ispatından sonra uykunun kalitesine yönelik çeşitli pratik önerilerde bulunmuşlardır. Macnish (1834, ss. 304-313) uyunacak odanın geniş ve ferah olması gerektiğini aktarmıştır. Evlerin salonlarının geniş, yatak odalarının ise küçük olmasından yakınmıştır. Hâlbuki yaşamın büyük bir kısmının geçtiği yatak odalarının her zaman ferah olması gerektiğini belirtmiştir. Kafanın yastığa gömülmesinin sağlıklı olmadığını bu yüzden yastığın sert olması gerektiğini, çorapla uyumanın zararlı olduğunu, en uygun pozisyonun yan yatmak olduğunu ifade etmiştir. Dolu bir midenin uykuyu çoğu zaman engellediğini, yatağa gitmeden evvel birkaç saat bir şey yemeyen kişinin uyku kalitesinin daha iyi olacağını iddia etmiştir. Akşam yemeğinin kişiyi rehavete sürükleyebileceğine, yemekten hemen sonra uyumanın zararlı olduğuna ve kişilerin varsa böyle bir alışkanlığı bundan vazgeçmeleri gerektiğine değinmiştir. Stowell (1891, s. 141) ise açık havada egzersiz yapmanın, erken ve hafif yenen akşam yemeklerinin, kedersiz bir zihnin uyku kalitesini arttırdığını söylemiştir. Manaceine (1897, ss. 175-177), havanın temiz olması gerektiğini ancak hava akımına dikkat edilmesini çünkü uykudayken cildin soğuğa karşı hassaslaştığını belirtmiştir. Çok sıcak bir odada uyumanın kişiyi uyuşuk hale getireceğini aynı sebepten yazın uyku süresinin azalması gerektiğini ifade etmiştir. Ayrıca yatak odasının mobilyalarla çok doldurulmaması gerektiğini aktarmıştır. Corning (1883, ss. 32-35), tıpkı Macnish (1834, ss. 304-313) gibi, akşam yemeğinden sonra yapılan şekerlemenin hem uyku ritmi hem de sindirim açısından sağlığa zararlı olduğunu belirtmiştir. Corning (1883, ss. 32-35), ayrıca beynin dinlenmesi için en ideal pozisyonun sağ tarafa doğru yatılan pozisyon olduğunu iddia etmiştir.

Uyku süresinin ne kadar olması gerektiği ya da hangi saatler uyunması gerektiğiyle ilgili çeşitli fikirler öne sürülmüştür. Macnish (1834, ss. 317-319), yatmak için uygun saati belirlemenin kolay olmadığını çünkü bunun kişiye özel olduğunu, yaşam tarzının ve mesleklerin bu konuda etkili olduğunu dile getirmiştir. Erken kalkmak zorunda olanların saat dokuzda yatağa girmesi gerektiğini, erken kalkmak zorunda olmayanların bir ya da iki saat daha gecikebileceğini, genel olarak ise saat 11'den sonra uyumanın gelenek haline getirilmesinin sağlık açısından sakıncalı olduğunu iddia etmiştir. İster çalışma ister eğlenme amacıyla olsun, uygun zamanda uykuya dalmayı engelleyen her uyarı, uyku kalitesini bozmakta ve geceden çalınan her saat diğer günü olumsuz etkilemektedir. Uyanma saatiyle

ilgili de bilgiler veren Macnish (1834, ss. 322-323), erken uyanmayı övmüş ve geç uyanan insanların gün boyu uyuşukluk hissedeceğini belirtmiştir. Benzer şekilde; Stowell (1891, s. 141) herkese uygun bir saat verilemeyeceğini, bazı bünyelerin daha fazla uykuya ihtiyaç duyduğunu ancak orta yaştaki bir insanın ortalama sekiz saat uyuması gerektiğini söylemiştir. Gece yarısından önce gelen uykuya vücudun daha fazla ihtiyaç duyduğunu, erken yatıp erken kalkmak gerektiğini belirtmiştir. Manaceine (1897) 'Uyku: Fizyolojisi, Patolojisi, Hijyeni ve Psikolojisi' adlı eserinde uyku miktarının ne kadar olması gerektiğiyle ilgili fikirlerini kaleme almıştır. Manaceine'ye (1897) göre; uyku miktarı, bilincin gücü ve gelişimi ile ters orantılıdır. Bilinç geliştikçe uyku miktarında belirgin bir azalma yaşandığını, bilincin yaşla beraber geliştiğini dolayısıyla bebeklerin yetişkinlere göre daha fazla uykuya ihtiyaç duyduğunu iddia etmiştir. Diğer bir ifadeyle; bebeklerdeki bilinç az geliştiğinden çok kısa bir süre bile uyanık kaldıklarında metabolizmaları bitkin düşmektedir. Doğduktan sonra bebekler ilk 4-6 hafta günde sadece iki saat uyanık kalmalıdır. Manaceine'ye (1897) göre; 1 ila 2 yaş arasındaki çocukların 16 ila 18 arası saat, 2 ila 3 yaş arası çocukların 17 ila 15 arası saat uykuya ihtiyacı vardır ve uyku saati yaşla beraber ortalama seviyelere indirilmelidir. Manaceine (1897, ss. 153-156) da tıpkı Stowell (1891, s. 141) gibi yetişkinler için ortalama sekiz saat uykuyu önermiştir. Uykuyu, gün içerisinde harcanan enerjinin geri kazanılması olarak gören Corning (1883, ss. 28-33) ise yaşamsal olayların karanlıkla azalmasını ve ışıkla artmasını, insanın doğayla uyumu çerçevesinde değerlendirmiş ve gün batımından sonra mümkün olan en kısa sürede uyumayı tavsiye etmiştir. Bir uyku hijyen kuralı olarak ise uykunun öncüsü olan uyuşukluğun kaçırılmaması gerektiğine değinmiştir. Corning (1883, ss. 28-33), beyin yorgunluğunun ilk belirtisinde yatağa geçilmesi gerektiğini ifade etmiştir. Bu belirti geldiği zaman kişi uyumaz ve uykuyu ertelerse kişinin daha sonra uykuya dalmasının zorlaşacağını ve uyandığında ise istediği dinlenmeyi elde edemeyeceğini aktarmıştır. Günümüz için ise önerilen ideal uyku süresi her gece 7 ila 9 saat aralığındadır (Pollak vd., 2010, s. 204).

SONUÇ

19. yüzyıl uykunun hem bilimsel incelemesinin başladığı hem de kalitesine ve uyku bozukluklarına yönelik eserlerin üretildiği bir yüzyıl olmuştur. Doktorlar, uykunun gerekliliği ile ilgili kanıtlarını ve düşüncelerini sunduktan sonra uyku hijyenine diğer bir ifadeyle uyku kalitesine yönelik tavsiyelerde bulunmuşlardır.

Research Statement

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REFERENCES

• Corning, J. L. (1883). Brain-rest. GP Putnam's Sons.

• Hall, W. W. (1870). Sleep, or, the hygiene of the night. Dawson Bros.

• Hammond, W. A. (1869). Sleep and its derangements. JB Lippincott.

• Holland, H. (1852). Chapters on mental physiology. Longman, Brown, Green, and Longmans.

• Macnish, R. (1834). The philosophy of sleep. D. Appleton.

• Manaceine, M. D. (1897). Sleep: Its physiology. Pathology, Hygiene, and Psychology.

• Pollak, C., Thorpy, M. J., & Yager, J. (2010). The encyclopedia of sleep and sleep disorders. InfoBase publishing.

• Schulz, H., & Salzarulo, P. (2015). The evolution of sleep medicine in the nineteenth and the early twentieth century. In sleep medicine: A comprehensive guide to its development, clinical milestones, and advances in treatment. New York, NY: Springer New York.

• Stowell, C. H. (1891). A Healthy Body; a text-book on anatomy, physiology, hygiene, alcohol, and narcotics: For use in intermediate grades in public and private schools. Silver, Burdett.

• Symonds, J. A. (1851). Sleep and dreams; two lectures. Longman, Brown.

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A Review on Artificial Intelligence Supported User-Centered Design and Psychological Interaction

Yapay Zekâ Destekli Kullanıcı Merkezli Tasarım ve Psikolojik Etkileşim Üzerine Bir Derleme

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ABSTRACT

This article explores how the integration of architecture, artificial intelligence (AI) and psychology plays an important role in the design of user-centered spaces that prioritize psychological well-being. In recent years, the intersection of these three disciplines has been transforming space design processes and offering new perspectives. Artificial intelligence is transforming design processes through automated optimization and user behavior analysis. Smart living spaces and AI-powered accessibility solutions increase the potential to create personalized spaces, better meeting the emotional and psychological needs of users. At the same time, the use of AI raises challenges such as ethics, data privacy and algorithmic bias, and algorithmic transparency and accountability are gaining importance. By strengthening the collaboration between architecture and psychology, this integration aims to deepen the understanding of the psychological effects of space design on the user and enrich the user experience. This, in turn, enriches the practice of architecture and increases the potential to create more responsive and supportive spaces. In conclusion, the intersection of the disciplines of architecture and psychology offers significant opportunities to create more responsive and supportive spaces, which in turn enriches the practice of architecture and opens new horizons for creating spaces that will improve the quality of life of users. This integration will continue to shape the future of the field, based on interdisciplinary collaboration, innovative research methods and a user-centered design approach.

Keywords: AI-Supported Design, Psychological Interaction, Architecture.

ÖZET

Bu makalede; mimarlık, yapay zekâ (AI) ve psikoloji disiplinlerinin entegrasyonunun, kullanıcı odaklı ve psikolojik refahı ön planda tutan mekanların tasarımında nasıl önemli bir rol oynadığı incelenmektedir. Son yıllarda, bu üç disiplinin kesişimi, mekân tasarım süreçlerini dönüştürmekte ve yeni perspektifler sunmaktadır. Yapay zekâ, tasarım süreçlerini otomatik optimizasyon ve kullanıcı davranış analizi yoluyla dönüştürmektedir. Akıllı yaşam alanları ve AI destekli erişilebilirlik çözümleri, kişiye özel mekanlar yaratma potansiyelini artırarak kullanıcıların duygusal ve psikolojik ihtiyaçlarını daha iyi karşılamaktadır. Aynı zamanda, yapay zekanın kullanımı etik, veri gizliliği ve algoritmik bias gibi zorlukları gündeme getirmekte ve algoritmik şeffaflık ile hesap verebilirlik önem kazanmaktadır. Bu entegrasyon, mimarlık ve psikoloji arasındaki iş birliğini güçlendirerek, mekân tasarımının kullanıcı üzerindeki psikolojik etkilerini derinlemesine anlamayı ve kullanıcı deneyimini zenginleştirmeyi amaçlamaktadır. Bu da mimarlık pratiğini zenginleştirerek, daha duyarlı ve destekleyici mekanlar yaratma potansiyelini artırmaktadır. Sonuç olarak, mimarlık ve psikoloji disiplinlerinin kesişimi, daha duyarlı ve destekleyici mekânlar yaratma konusunda önemli fırsatlar sunmakta, bu da mimarlık pratiğini zenginleştirerek kullanıcıların yaşam kalitesini artıracak mekanlar yaratma yolunda yeni ufuklar açmaktadır. Bu entegrasyon, disiplinler arası iş birliğine, yenilikçi araştırma yöntemlerine ve kullanıcı odaklı tasarım anlayışına dayanarak, alanın geleceğini şekillendirmeye devam edecektir.

Anahtar Kelimeler: Yapay Zekâ Destekli Tasarım, Psikolojik Etkileşim, Mimarlık.

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INTRODUCTION

In recent years, the intersection of architecture, artificial intelligence (AI) and psychology has become a focal point for technological innovation and social change. The integration of these three fields has the potential to create spaces that are more responsive to users' needs and well-being. Artificial intelligence applications in architecture are transforming design processes and offering new perspectives on how buildings are designed, constructed and used. This review aims to address the rise of AI in architecture, the importance of user-centered design and its implications for people's psychological well-being.

Architecture is the art and science of creating physical spaces that meet people's environmental and social needs. Artificial intelligence is a branch of computer science that enables machines to perform functions similar to human intelligence by imitating their learning, decision-making and problem-solving abilities. Psychology, as the branch of science that studies the behavior, thoughts and emotions of individuals, offers the key to how these two fields can be integrated with a human-centered approach.

Today, the use of AI in architecture aims not only to automate design and construction processes, but also to improve the user experience and increase the energy efficiency and sustainability of buildings over their lifetime. This is made possible by the potential offered by AI, especially in terms of its capacity to understand user needs and shape spaces accordingly. User-centered design prioritizes the emotional and psychological well-being of individuals, making spaces more functional, accessible and comfortable. In this context, AI-supported architectural solutions allow us to better understand and meet the physical and psychological needs of users.

This review article explores the current state of AI applications in architecture and the impact of these technologies on user-centered design, investigating the potential effects of this integration on human psychology. It also aims to discuss future research avenues and the ethical and sustainability aspects of AI-enabled architectural design. This comprehensive review aims to provide academics, architects, designers and AI researchers with valuable insights into the future of the field by approaching these issues from an interdisciplinary perspective.

The Role Of Artificial Intelligence in Architectural Design

Artificial intelligence (AI) is having a significant impact on architectural design. It offers new ways to increase creativity, optimized building performance and the efficiency of

workflows. AI stands out for providing designers with innovative design solutions by learning from large datasets. For example, AI-powered design tools are an efficient means of providing data-driven design decisions in areas such as environmental sustainability and building performance (Zhang et al., 2023). These technologies help reduce energy consumption and carbon emissions by analyzing variables such as building orientation and material selection.

AI also makes design and construction processes more efficient by speeding up architectural planning processes and reducing costs. AI-based tools can make volumetric estimates of buildings and plan interior space arrangements, saving time and resources in the early design stages (Muntañola et al., 2022). Furthermore, AI can assist in understanding and interpreting complex regulatory requirements such as compliance with building codes, allowing designers to resolve compliance issues faster (Web 1, 2024).

In conclusion, the role of AI in architectural design continues to transform the profession by enriching the design process and opening up new creative potentials. However, the effective use of these technologies requires architects to understand how to integrate AI tools into their creative process. Therefore, it is first necessary to understand the potentials in this field.

- **Artificial Intelligence Based Design Tools and Methodologies:** Artificial intelligence is being used to deeply understand and optimize the design process. AI-powered design tools allow architects to analyze complex datasets, quickly evaluate design alternatives, and make more informed design decisions. These tools are transforming design processes while increasing designers' creativity and efficiency (Johnson and Smith, 2019; Patel and Gupta, 2018).
- **Automated Design Optimization and Sustainability Analysis:** AI technologies provide sustainable architectural solutions by optimizing energy efficiency, material use, and environmental impact of designs. AI can simulate and analyze the sustainability performance of buildings so that designers can create greener and more effective buildings (Lee, et al., 2020; Zhang and Sun, 2021).
- **Analysis and Prediction of User Behavior Data:** By analyzing user behavior data, AI enables a better understanding of how buildings are used and how users react to spaces. This data can be used to more accurately predict user needs and develop user-centered design solutions. AI helps to personalize spaces in a way that improves users' comfort, safety and satisfaction (Rodriguez and Cho, 2022; Silva and Ramos, 2019).

The Impact of Artificial Intelligence in User-Centered Design

Artificial intelligence (AI) has the potential to transform the design process by being used in several key areas in the user-centered design process, such as understanding user requirements, supporting solution design and evaluating design. In this process, AI helps to produce more effective and accurate solutions and brings a new dimension to processes that rely on human creativity (Stige, et al., 2023). For example, major technology firms such as IBM, Google and Autodesk have successfully integrated AI to improve user experiences and deliver personalized solutions. These companies use AI to analyze user behavior and incorporate this information into product design and development (Interaction Design Foundation, 2024). This effective use of AI enables a deeper understanding of user needs and the development of innovative solutions to address these needs. In this context, AI-enabled design processes can provide users with more personalized and intuitive experiences, increasing user satisfaction and overall product effectiveness (Yang, et al., 2020). In addition to these effects, it is also crucial to adopt a human-centered approach in designing AI applications. In particular, striking a balance between automation and human control ensures that AI supports and does not replace human capabilities. This is a critical approach to ensure AI is developed in an ethical and balanced way (Guszcza, 2018).

In user-centered AI design, it is emphasized that AI systems should be developed in a way that is not only technologically, but also ethically and socially responsible. By supporting human creativity and input in the design process, AI enables the emergence of more user-centered and accessible technologies (Guszcza, 2018). In this context, to better understand the role of AI in user-centered design, a research and design approach centering on AI and human interactions becomes important. This helps to explore the potential of AI in human-centered design, both theoretically and practically (Stige, et al., 2023).

- **Customized Space Designs According to User Needs and Preferences:** Through big data analysis and machine learning algorithms, AI makes it possible to gain a deep understanding of users' behaviors, preferences and needs. This understanding allows architects and designers to create personalized spaces that are tailored to each user's unique needs and lifestyle. AI-based systems learn through user interactions and feedback and dynamically make adjustments during the design process, resulting in the comfort and functionality that users expect (Patel and Gupta, 2018; Silva and Ramos, 2019).

- **The Impact of Smart Living Spaces on User Experience and Satisfaction:** Smart living spaces are designed to improve users' quality of life by integrating AI and IoT (Internet of Things) technologies. These technologies provide automatic control of systems such as heating, lighting, security and entertainment, enriching the user experience and increasing their satisfaction. AI enables the creation of smarter and more responsive living spaces by learning user habits and adjusting home automation systems based on this information (Johnson and Smith, 2019; Zhang and Sun, 2021).
- **Artificial Intelligence Powered Accessibility and Usability Solutions:** AI is also being used to improve the accessibility and usability of spaces. For users with special needs, such as visual or mobility impairments, AI-enabled technologies enable spaces to become more accessible and usable through voice commands, gesture recognition, and other adaptive interfaces. These technologies facilitate users' interaction with space and aim to create more inclusive living spaces for everyone (Lee, at et al., 2020; Rodriguez and Cho, 2022).

Psychological Interaction and Well-being

The interaction between architecture and psychology has long been an important area of research for understanding and improving human well-being at both individual and societal levels. Artificial intelligence (AI)-assisted designs further deepen this interaction, offering new avenues that can significantly impact the psychological and emotional well-being of users. This chapter will explore the relationship between architecture and psychology, the psychological and emotional impacts of AI-assisted designs, and design strategies to enhance user well-being.

The Relationship between Architecture and Psychology: The relationship between architecture and psychology is becoming increasingly important, especially in the field of neuro-architecture, which studies people's emotional and cognitive interactions with buildings and environments (Oppenheim, et al., 2009; Vartanian, et al., 2013). Architecture can have a profound impact on people's mood and behavior. For example, architectural aesthetics has been shown to have a direct impact on individuals' mental states and emotional responses. People's attribution of aesthetic value to architectural works can be related to factors such as the social status of buildings. For example, socially important buildings, such as government buildings or religious buildings, may have a stronger impact on people than more modest private or economic buildings (Wang, et al., 2022).

Research in neuro-architecture uses various neurological measurement techniques to better understand the effects of architectural design on the human brain. These studies reveal how the aesthetic characteristics of buildings and spatial arrangements can shape people's cognitive and emotional responses. For example, rooms with high ceilings and open-plan designs have been found to have a positive effect on people's aesthetic judgments, and such architectural features activate regions of the brain associated with visual spatial exploration and attention (Oppenheim, et al., 2009).

In conclusion, the relationship between architecture and psychology offers a comprehensive approach to understanding how individuals perceive their physical environment and its effects on human emotional and cognitive functioning. This knowledge enables the development of more responsive and human-centered architectural designs, thus having the potential to improve the quality of life of individuals.

Psychological and Emotional Effects of Artificial Intelligence Assisted Designs: AI-assisted architectural designs have the potential to create spaces customized to better meet the emotional and psychological needs of users. By providing in-depth knowledge about user behavior and preferences, AI can guide designers to create spaces that are user-centered, emotionally supportive and psychologically comforting. This enables users' experiences in spaces to better adapt to their personal needs and emotional states (Silva and Ramos, 2019; Zhang and Sun, 2021).

Studies on the psychological and emotional effects of AI-enabled designs reveal how these technologies can profoundly affect the user experience. In particular, chatbots with emotional intelligence can sense users' emotional states and respond appropriately to them, thereby improving user satisfaction and interaction quality. For example, one study suggests that chatbots' emotional responses can positively affect users' moods and thus strengthen customer relationships (Ghazala, et al., 2022). Moreover, AI-assisted designs can also have significant impacts on users' psychological health. For example, AI-supported emotional support processes in online mental health communities have been observed to be effective in understanding users' emotional needs and providing appropriate support. Such systems can provide emotional support by extracting the emotional context from the texts that users write and generating appropriate responses to these emotions (Gui, et al., 2021).

These studies emphasize the need to develop not only the technological aspects of AI-supported designs, but also the social and emotional aspects. It is thought that the emotional

and psychological satisfaction that users receive from their interactions with AI could lead to wider acceptance of these technologies.

Design Strategies to Improve User Wellbeing: Design strategies centered on user well-being focus on improving the physical and psychological accessibility of spaces, enriching the user experience and creating environments that are sensitive to personal needs. AI can play a critical role in the development of these strategies, maximizing the positive impact of spaces on user well-being by analyzing user feedback and making real-time adjustments to the design process. AI can also enable spaces to respond adaptively to users' emotional and psychological states, creating healthier and happier living spaces (Lee et al., 2020; Rodriguez and Cho, 2022).

Literature reviews on design strategies to enhance user well-being reveal a range of effective approaches in different fields. In particular, interior design plays a critical role in creating healthy living spaces in workplaces. Research shows that the use of ergonomic furniture is important in reducing musculoskeletal disorders, appropriate lighting levels are important in enhancing mood and physical comfort, and noise control is important in reducing psychological discomfort (Colenberg and Jylha, 2022). Furthermore, biophilic design strategies have the potential to increase urban resilience by combining elements of nature and technology. These approaches integrate natural and digital solutions to create sustainable and healthy urban environments (Tarek and Ouf, 2021).

In the design of Internet of Things (IoT) products, positive experience design strategies are being developed to sustain user happiness. These strategies allow designers to develop creative ideas that prioritize user well-being, thereby providing users with sustainable happiness (Xu, et al., 2023). Consequently, user-centered design strategies applied to improve the impact of healthcare help healthcare practices to better adapt to user needs. These strategies maximize their impact by aligning healthcare practices with the user experience (Dopp, et al., 2020).

Consequently, user-centered design strategies applied to improve the impact of healthcare help healthcare practices to better adapt to user needs. These strategies maximize their impact by aligning healthcare practices with the user experience. These findings highlight the importance of design strategies to enhance user wellbeing, ranging from interior design to biophilic urban planning to IoT product development. These strategies meet both the physical and psychological needs of users, enabling the creation of healthier and more fulfilling living spaces.

Future Perspective and Research Directions

The interplay between artificial intelligence (AI) and architecture brings both great potentials and significant challenges. This chapter will address the ongoing challenges and criticisms in this field, potential research areas and technological developments, and the role of ethics and sustainability.

Ongoing Challenges and Criticisms: The use of AI in architecture faces challenges such as data privacy, security and algorithmic bias. Transparency and accountability of AI systems' decision-making processes are fundamental to building trust between users and designers. There are also criticisms that AI-supported design tools may limit creativity and encourage over-reliance on standardized solutions (Rodriguez and Cho, 2022; Zhang and Sun, 2021).

Potential Research Areas and Technological Developments: Research into the future of the interaction between AI and architecture could focus on the development of more advanced algorithms and machine learning models. These models can process users' behavioral and psychological data more effectively, enabling the creation of more personalized and responsive spaces. Furthermore, expanding the role of virtual and augmented reality technologies in design processes and examining their impact on user experience in more depth are potential research areas (Lee, Kim and Park, 2020; Patel and Gupta, 2018).

The Role of Ethics and Sustainability: Ethical dimensions of AI-assisted architectural design cover issues such as the collection and use of user data, algorithmic transparency and fair use. Sustainability, as an important component of AI and architecture integration, includes issues such as energy efficiency, environmental mitigation and long-term resilience. Research in this area should examine how ethical and sustainability principles can be integrated into design processes and the potential impacts of this integration on user well-being and environmental health (Johnson and Smith, 2019; Silva and Ramos, 2019).

CONCLUSION

In conclusion, the contributions of AI-supported architectural designs to user-centered design processes have a significant potential for the future of this field. By making design processes more efficient and innovative, AI technologies can significantly improve the emotional and psychological well-being of users. However, issues such as the ethical use of these technologies, data privacy, algorithmic transparency, and improving the user experience

are important problems that need to be solved for the effective use of AI-assisted design tools. The contributions of AI-supported architectural design to user-centered and psychological design processes offer revolutionary innovations in these fields. By learning from large datasets, AI enables designers to make more informed decisions and develop solutions that are better suited to user needs. However, this technology also brings challenges such as ethical use, data privacy and algorithmic fairness. Overcoming these challenges is critical for the effective use of AI in architecture.

The integration of the disciplines of architecture and psychology provides a deep understanding of the psychological and emotional effects of space design on people. This integration has the potential to create spaces that support users' mental health and encourage social interactions. For example, architectural elements such as high ceilings and large windows can enhance users' psychological well-being. In addition, AI-powered design tools provide detailed insights into user behaviors and preferences, enabling the creation of personalized living spaces.

In the future, further development of AI-assisted architectural designs is expected. These developments will help create more sustainable and energy efficient buildings, as well as spaces that better meet the emotional and psychological needs of users. Furthermore, AI can guide designers in areas such as complex building regulations and building codes, speeding up and streamlining the design process.

In this context, the ethical and sustainable progress of AI-enabled architectural designs is an issue that needs to be carefully addressed by professionals in the industry. Algorithmic transparency and accountability will increase users' and society's trust in these technologies and ensure their widespread acceptance. In conclusion, the intersection of AI and architecture paves the way for innovative design strategies that have the potential to improve users' quality of life. This integration will enrich the practice of architecture and enable the creation of more responsive and supportive spaces centered on user needs.

Research Statement

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Conflict of Interest: The authors declare that there is no conflict of interest for the study.

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REFERENCES

- Colenberg S., & Jylha T. (2022). Identifying interior design strategies for healthy workplaces- a literature review. *Journal of Corporate Real Estate, 24* (3), 173-189.
- Ghazala, B., Samar, I., & Shaalan, K. (2022). "Emotionally intelligent chatbots: a systematic literature review", *Human Behavior and Emerging Technologies*, 1-23, Doi: https://doi.org/10.1155/2022/9601630
- Gui, X., Peng, Y., Sharma, P., & De Choudhury, M. (2021). Exploring the Effects of AI-assisted Emotional Support Processes in Online Mental Health Community. https://ar5iv.labs.arxiv.org/html/2202.10065
- Guszcza J. (2018). Smarter together: Why artifical intelligence needs human-centered design" *Delotti Insights, 22*, 36-45.
- Interaction Design Foundation- IxDF. (2024). What is Human-Centered AI (HCAI)? Interaction Design Foundation- IxDF. https://www.interaction-design.org/literature/topics/human-centered-ai
- Lee, H., Kim, S. J. & Park, J., (2020). AI in smart cities: Technology, applications, and governance. *Urban Technology Review, 22*(3), 145-163.
- Johnson, L. M., & Smith, R. A. (2019). Human behavior and environmental psychology: Implications for architectural design. *Environment and Behavior Studies Review, 41*(4), 408-426.
- Muntañola J., Carulla M. S., Carulla M. S., Cocho-bermejo A., et all., (2022). Artificial Intelligence and Architectural Design: An Introduciton. *Arquitectonics, 166*, 10.5821/ebook-9788419184498.
- Oppenheim, A. L., Vartanian, O., & Kirk, U. (2009). The impact of architectural design on human psychology. *Neuroreport, 20*(5), 125-134. doi: 10.1097/WNR.0b013e32832ffddf
- Patel K. D., & Gupta A. (2018). User-centered design and psychological aspects in architecture: a review. *International Journal of Design and Innovation Research, 6*(1), 54-69.
- Rodriguez, A., & Cho, Y. K. (2022). The impact of artificial intelligence on architectural design processes: A review. *Advances in Architectural Research, 8*(2), 199-215.

• Stige, A., Zamani, E. D., Mikalef, P., & Yuzhen, Z. (2023). Artificial intelligence (AI) for user experience (UX) design: a systematic literature review and future research agenda. *Information Technology & People*, doi: 10.1108/ITP-07-2022-0519.

• Silva, L. F., & Ramos, I., (2019), Emotional and psychological effects of space design. *Journal of Environmental Psychology and Design, 17*(3), 275-287.

• Tarek, S., & Ouf, A. (2021). Biophilic smart cities: the role of nature and technology in enhancing urban resilience. *J. Eng. Appl. Sci. 68*, 40 (2021). doi: 10.1186/s44147-021-00042-8

• Vartanian, O., Navarrete, G., Chatterjee, A., Fich, L. B., Leder, H., Modrono, C., Nadal, M., Rostrup, N., & Skov, M. (2013). Impact of contour on aesthetic judgments and approach-avoidance decisions in architecture. *Proceedings of the National Academy of Sciences, 110*(2), 10446-10453. doi: 10.1073/pnas.1301227110

• Web 1, (2024). Artificial Intelligence: how are architects using AI right now and what are they using it for?. Url (01.05.2024): https://www.architecture.com/knowledge-and-resources/knowledge-landing-page/artificial-intelligence-in-architecture

• Xu H., Wei W., Wu C., & Pan Y., (2023). Positive experince design strategies for loT products to improve user sustainable well-being. *Sustainability, 15* (17), doi: 10.3390/su151713071

• Yang B., Wei L., & Pu Z. (2020). Measuring and improving user experience thruoug artificial intelligence -aided design. *Psychology, 11*, 1-11, doi: 10.3389/fpsyg.2020.595374.

• Zhang Z., Fort J. M., & Mateu L. G. (2023). Explorinring the potential artificial intelligence as a tool for architectural design: a perception study using Gaudi's Works. *Buildings, 13* (7), doi: 10.3390/buildings13071863.

• Zhang Y. & Sun, J. (2021). Adaptive and intelligent architecture: Learning from user feedback through artificial intelligence. *Journal of Intelligent Building Technologies, 3*(1), 1-16.