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MEANINGFUL GAMIFICATION OUTCOMES FOR BUSINESS NEEDS

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Abstract. The objective of this article is to analyze the factors that are important for implementing meaningful gamification in a for-profit organization. The author uses a systematic literature review method to explore gamification outcomes' relevance to corporate culture. The application of gamification has demonstrated a significant positive effect on several key areas, including the enhancement of motivation, the improvement of knowledge retention, and an increase in general enjoyment. Many studies have reported that gamification has positively affected employees or customers, improving their knowledge, attitudes, and loyalty to a brand. Company culture is an important differentiator in a competitive environment, and there are correlations between Company culture values and gamification motivation affordance.

Keywords: *business, gamification, motivation, player types, company culture.*

JEL Classification: M1

INTRODUCTION

The author of the paper aimed to identify the various outcomes of gamification in business by reviewing the literature on the topic. The focus was on literature published in the past decade, as gamification is a relatively new field. The author primarily used the Web of Science and Scopus databases and searched for articles using keywords such as "gamification," "serious gaming," and "disruptive." After reviewing the articles' titles, summaries, and keywords, only those relevant to disruptive innovation in gamification were selected for further review. In today's highly competitive environment, companies need to find innovative ways to motivate both customers and employees, and gamification offers a promising solution.

The objectives of this article are: 1) Indicate the factors that are important for implementing meaningful gamification in organizations; 2) Analyse organization culture relation with gamification.

1. METHODOLOGY

Systematic literature review: Conduct a systematic review of the existing literature on gamification in a business context to identify the various outcomes associated with its use. Use databases such as Scopus and Web of Science and search for relevant articles using keywords such as "gamification," "serious gaming," and "disruptive." Evaluate the articles based on their titles, summaries, and keywords, and select only those that are relevant to disruptive innovation in gamification for further review.

Qualitative analysis: Analyze the selected articles to identify common themes and trends related to the implementation of meaningful gamification in organizations. Conduct a qualitative analysis of the articles to determine the factors that are important for implementing gamification in organizations.

The author develops a theoretical framework to explain the relationship between the factors identified in the literature review and the outcomes of gamification in a business context. Use the findings from the studies to validate the framework and provide insights into the implementation of meaningful gamification in organizations.

2. LITERATURE REVIEW

2.1. Gamification outcomes

Games have emerged as a pervasive form of leisure and a dominant aspect of popular culture, permeating into the daily routines of individuals in a significant manner (Malaby, 2007). Digital computer games, in particular, have captured the interest of generations born after 1980, who have embraced them as a preferred form of entertainment over other activities. In computer games, people find different elements that motivate them to play, such as competition with others, high-score achievements, and more. The term "gamification" was first used in the digital media industry, reflecting the technological advancements of the 1980s and 1990s that gave rise to a new generation of technology enthusiasts known as the Y generation (Rodrigues et al., 2021). The first recorded use of the term was in 2008, but it did not become widely adopted until the latter half of 2010. Despite the continued use of alternative terms, such as "productivity games," "surveillance entertainment," "funware," "playful design," "behavioral games," "game layer," or "applied gaming," "gamification" has established itself as the commonly recognized term (Deterning et al., 2011). A review of the research on the general impact of gamification showed that 73.1 % of articles rated it as having a positive effect, while only 9.7 % rated it as having a negative impact (László et al., 2020).

This conceptualization views gamification as having three key components: 1) the motivational elements built into the design or affordances 2) the psychological outcomes produced, and 3) the subsequent behavioral outcomes (Hamari et al., 2014), as depicted. See Figure 1.

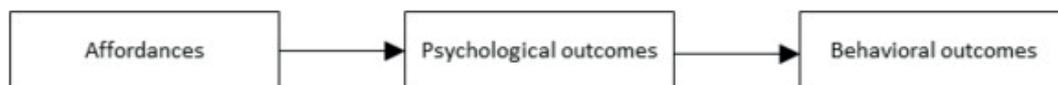


Fig. 1. Conceptualization of gamification (Hamari et al., 2014).

The paper claims that the current state of "gamified" applications creates new and developing phenomena that require innovative concepts and further study. It suggests that understanding "gamefulness" alongside "playfulness" in terms of design objectives, user experiences, and behaviors makes a significant and enduring impact on the study of "gamified" systems. As a result, the term "gameful design," which focuses on creating gameful experiences, has been introduced as a potential replacement for "gamification" (Deterning et al., 2011). Technological advancements have made numerous opportunities for incorporating playful and positive experiences into traditional systems, even if they were not originally designed for that purpose. Some

researchers have suggested that contemporary individuals, particularly "digital natives," may be more receptive to gameful experiences in non-game contexts due to their exposure to games and the influence they have on motivation and engagement in everyday life (Högberg et al., 2019). Additionally, gamification has frequently been used to encourage individuals to make "good" decisions, linking it to the concept of "choice architecture" in behavioral economics. This viewpoint, which embraces behavioral biases in a positive light, constitutes a type of benevolent paternalism with the objective of affecting choices in a way that enhances the well-being of the individual as perceived by the individual themselves (Hamari & Koivisto, 2015).

The Delphi study revealed four key domains of gamification that were deemed to require the most pressing research attention. Firstly, a deeper understanding of the impact of game-design elements such as rewards and leaderboards on user engagement within the game (referred to as "in-game level outcomes"). Secondly, the effects of gamification in an intra-organizational context, specifically exploring its effects on employee perceptions and actions, including motivation, job fulfilment, efficiency, and job retention. (referred to as "intra-organizational level outcomes"). Thirdly, there is a need for more research on the impact of gamification on customer attitudes and behaviors (referred to as "customer level outcomes"). Lastly, research is needed on the transformative impact of gamification on users, such as changes in long-term energy consumption or health-related behavior (referred to as "transformative level outcomes") (Wunderlich et al., 2020). As shown in Figure 2.

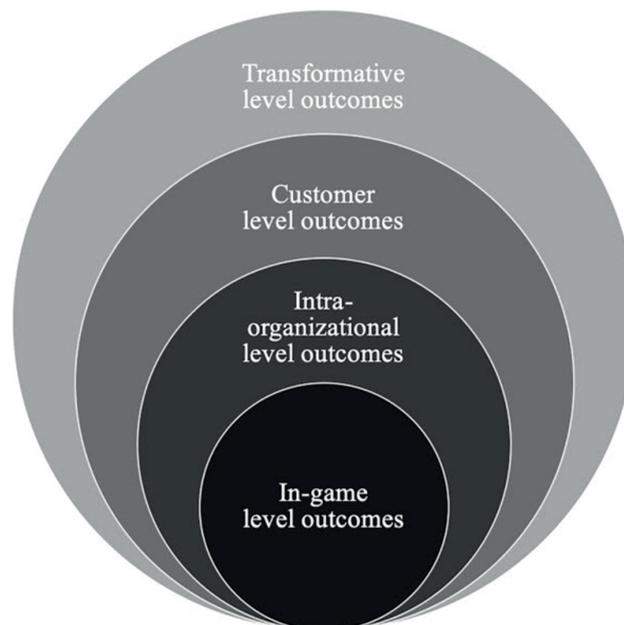


Fig. 2. Impact of gamification (Wunderlich et al., 2020).

According to Juul (2003), games can be defined by six essential features or conditions. These include: (1) a set of rules; (2) quantifiable outcomes with varying results; (3) different outcomes with varying values (positive or negative); (4) Efforts must be exerted to influence the outcome; (5) the outcome is significant to the player; and (6) games may potentially have real-world consequences (Högberg et.al., 2019). When gamification is perceived as user-friendly, it can lead to feelings of efficiency and a smooth user experience, which in turn can result in a positive attitude and

increased likelihood of continued use. The ease of use is widely acknowledged in the technology acceptance literature as a crucial element in technology adoption and refers to an individual's evaluation of the level of effort required to utilize a system. (Hamari & Koivisto, 2015).

To gain a comprehensive insight into how users react to the game design elements in the four layers of gamification and their influence, it is imperative to scrutinize each phase of each layer and analyze the outcomes. As the same users may have different motivations and be impacted differently by game design elements in different layers of a company's gamification experience, it is crucial to consider these factors, as illustrated in Figure 3.

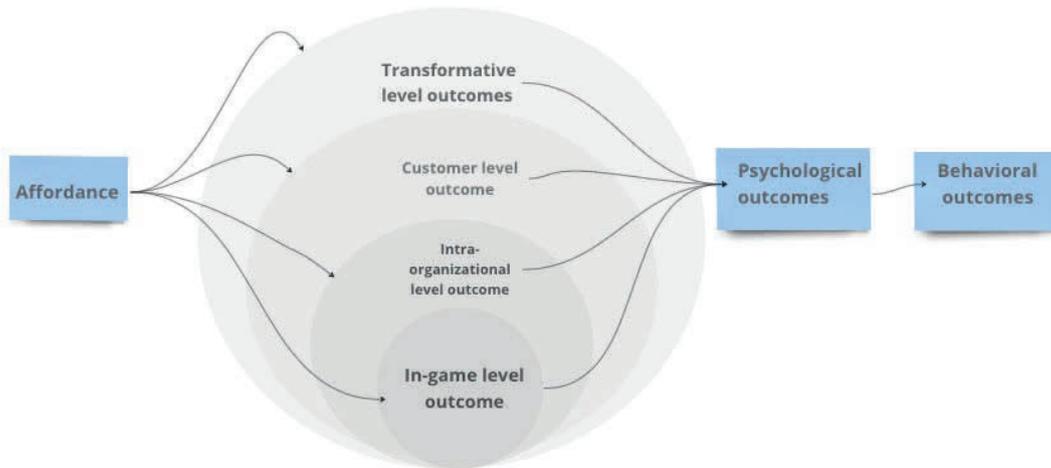


Fig. 3. Impact levels of gamification outcomes

2.2. Meaningful gamification

Gamification is centered on inspiring individuals to undertake actions, possibly in a regulated manner and according to specific guidelines, to attain varying results. Gamification focuses on transforming players' behavior, interaction with their surroundings and co-players, who may also be fellow clients or service providers, towards fostering meaningful engagement and potentially earning rewards. (Xu et al., 2017).

The concepts of gamification are rooted in various motivational theories, including Maslow's hierarchy of needs, intrinsic and extrinsic motivation, goal-setting theory, the flow model, and Self Determination Theory (SDT) (Ulmer et al., 2020).

The authors conclude that the scientific literature has analyzed aspects of play, mechanics, and player types in gamification, however, there remains a requirement for additional research on the influence of these elements across different generations. They propose that more comprehensive studies are necessary to comprehend the impact of gaming elements on player types across multiple generations.

As Nicholson (2015) explains, meaningful gamification involves the use of gameful and playful elements to help a user establish a personal connection and drive long-term engagement with a specific context. Gamification based on rewards may prove to be efficient for achieving short-term objectives and circumstances where the participant lacks intrinsic motivation or personal connections to participate. However, it may ultimately diminish intrinsic motivation and impede sustained engagement over

the long term. If the aim is to bring about long-term change, rewards should be avoided in favor of other game-based elements that align with the principles of meaningful gamification. In today's world, personalization is crucial, so it is important to understand player types in gamification to implement meaningful gamification effectively.

Personalization of gamification helps to engage more with an individual approach. According to Marczewski (Gustavo et al., 2016), user types can be addressed by using specific game design elements that align with their motivations. For instance, individuals driven by purpose and altruism, such as philanthropists, can be involved through design elements such as gathering and trading, presenting gifts, sharing knowledge, and performing administrative tasks. Meanwhile, individuals motivated by a desire for social interaction and connectedness, referred to as socialisers, can be engaged through design elements such as guilds or teams, social networks, social comparison, social competition, and social discovery. Free Spirits, who are motivated by autonomy and the freedom to express themselves, can be engaged through design elements that allow for creation and exploration within the system. The suggested design elements for individuals classified as Free Spirits include exploratory tasks, non-linear gameplay, hidden surprises, unlockable content, creative tools, and customization options. Achievers, who are motivated by competence and the desire to progress within a system, can be engaged through design elements such as challenges, certificates, learning new skills, quests, levels of progression, and epic challenges (or "boss battles"). Individuals motivated by extrinsic rewards, referred to as players, can be engaged through design elements such as points, prizes or rewards, leaderboards, badges or accomplishments, virtual economy, and games of chance or lotteries. Disruptors, who are motivated by triggering change, can be engaged through design elements that allow for testing the system's boundaries and pushing its limits. Disruptors may have negative or positive effects on the system but can also work to improve it. This player type was identified through empirical observation within online systems and is derived from the Self Determination Theory (Gustavo et al., 2016). Successful gamification involves a comprehensive approach to game thinking rather than just adding game elements or mechanics. Bartle's classification of player types for video games, which includes Achievers, Explorers, Socializers, and Killers, is based on a character theory of player styles and recognizes that different individuals may prefer different types. Kim further expanded on Bartle's player types by incorporating social actions such as competing, express, collaborating, and exploring (Bovermann & Bastiaens, 2020).

Gamification has been shown to have a positive impact on factors such as motivation, knowledge, and enjoyment. Multiple research studies have shown that gamification can have a positive effect on the knowledge, attitudes, and brand loyalty of employees or customers. Thus, gamification is established as a validated means of enhancing the functioning of business organizations. Gamification can bring numerous advantages to business processes. Managers may employ gamification to boost employee performance and motivation or to attract more invested customers and elevate brand loyalty. (László et al., 2020). Studies have demonstrated that the addition of game elements can enhance the subjective experience of a task. Participants in gamified conditions in both studies reported more positive emotions, and less motivational conflict and the task was perceived as being less demanding. Positive emotions were also found to act as a mediator for the effect of gamification on disengagement from a task, suggesting that a deficiency of positive emotions can prompt individuals to

withdraw from a cognitive task. Furthermore, while gamification did not exhibit a direct influence on task accuracy, both studies provided evidence of an indirect effect via subjective effort (Bernecker & Ninaus, 2021). Studies on gamification elements have shown that the most frequently discussed elements in the literature are rewards, badges, and points (László et al., 2020).

Gamification has the potential to elevate employee engagement, thus resulting in an increase in revenue. Studies have estimated that a 3-point increase in employee engagement levels could lead to a 5% rise in revenue in the subsequent year, making employee engagement a vital factor for organizations striving to drive growth. (Bhattacharya & Gandhi, 2020). The User-Centered Design (UCD) approach is a widely utilized methodology in game design. It takes into account the end-user's requirements and preferences, recognizes the player's interests, and places a strong emphasis on user involvement in the design process. By emphasizing user input, a well-designed gamification system should accurately identify the specific needs, wants, abilities, and limitations of the individual player, resulting in a change in their behavior (Xu et al., 2017).

Gamification can influence the motivation of both consumers and employees, leading to increased engagement with a company's brand when used appropriately based on player types. Research has shown that employee involvement can lead to increased company revenue, but for this to occur, personalized motivational gaming programs must be developed based on player types. To achieve optimal results, companies should use the most popular gaming design elements that align with the motivations of different player types. Managers should consider player archetypes when designing gamification, motivating players according to company goals, whether long-term or short-term.

2.3. Gamification relation with corporate identity

In the face of growing competitiveness in the business world today, the performance of corporations is contingent upon their ability to effectively manage intangible assets such as corporate identity (CI) (Gambetti et al., 2017).

The concept of CI encompasses the outlining of what an organization represents, the comprehension of its central or distinctive features, and the communication of internal organizational attributes to a broad range of stakeholders while emphasizing the organization's strategic nature through its mission, philosophy, and values. This highlights its uniqueness and sets its direction. Corporate culture, on the other hand, reflects the core values, behaviors, and beliefs of an organization and assists individuals in understanding the functioning of the firm, providing them with norms for behavior within it. The unique characteristics of CI are often rooted in the behavior of employees and senior management, including the attitudes of administrative staff in their daily actions and the identification of staff members with the organization (i.e., their self-definition based on the attributes they believe represent the organization). Through value-based leadership, they provide moral justifications and avenues for identification with corporate goals. (Tourky et al., 2020).

Edgar Schein, in his seminal work "Organizational Culture and Leadership," posits that the primary challenges faced by modern organizations in regard to culture stem from the lack of differentiation between the various levels at which culture manifests itself. As a result, Schein proposes his three-level model, also known as the multilayered organizational culture model, as a means of examining the visibility of a given cultural

phenomenon to the researcher. Artifacts refer to the tangible cultural expressions of an organization, such as spatial distribution, language, technology, style, clothing, manners, and expressions, or, in simpler terms, the observable behavior of its members. Values, on the other hand, are only established through shared experiences within a group. Once accepted, they develop into shared values and, as they are embodied and integrated into daily life, they evolve into assumptions that are taken for granted. Cultural elements within this level encompass cognitive processes, commitments, consensuses, ethics, ideologies, strategies, knowledge, visions, and etc. Values cannot be directly observed, but they can be distilled from what their members explain and how they do justify. Assumptions, according to Argyris terminology, are unconsciously held and taken for granted, much like DNA. In his terminology, assumptions can be considered as the theories in use, implicitly shaping each member's actions, thoughts, interpretations, emotions, and interactions. This deepest level is challenging to modify as it provides ontological security and any changes to it can elicit anxiety and fear. See Figure 4 (Morente et al., 2017).

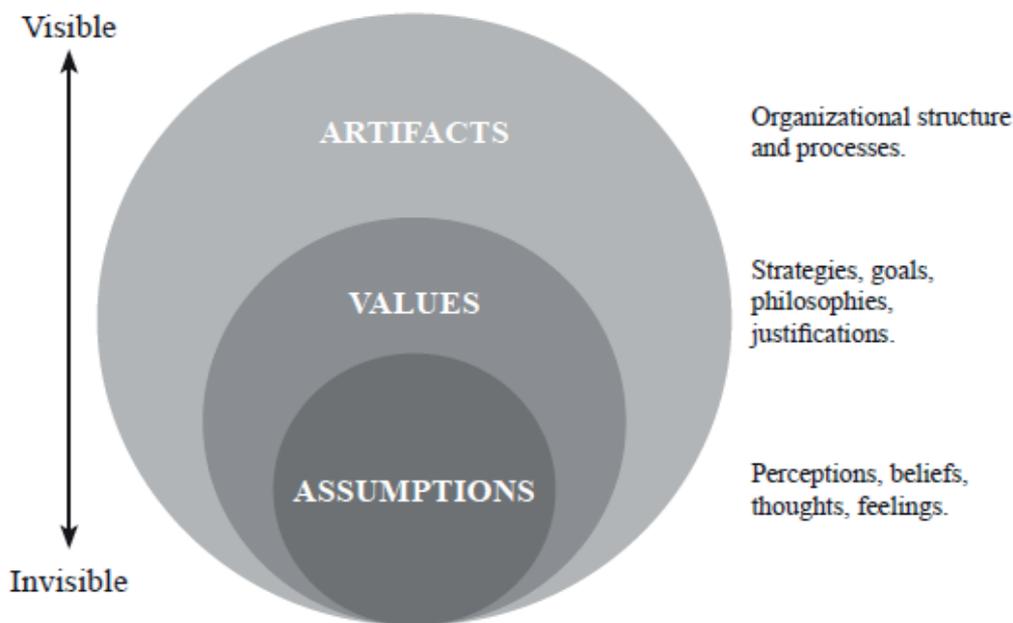


Fig. 4. Multi-Layered Organizational Culture Model (Morente et.al., 2017).

Research reports that rewards may enhance short-term activity, whereas intrinsic motivation plays a vital role in promoting long-term engagement and enjoyment. Studies have demonstrated that extrinsic motivation, such as rewards, has no significant impact on increasing playing behavior. Researchers advocate that a balanced consideration of both intrinsic and extrinsic motivation is necessary to design a meaningful gamification experience (Xu et al., 2017).

Company culture is an essential differentiator in a competitive environment. Aligning gamification mechanics with company values could lead to a closer instillation of values in employees. Gamification enhances player behavior change so that it can be engaged in both short-term and long-term goals (see Figure 5). Further research is needed on the impact of gamification on company culture and values.

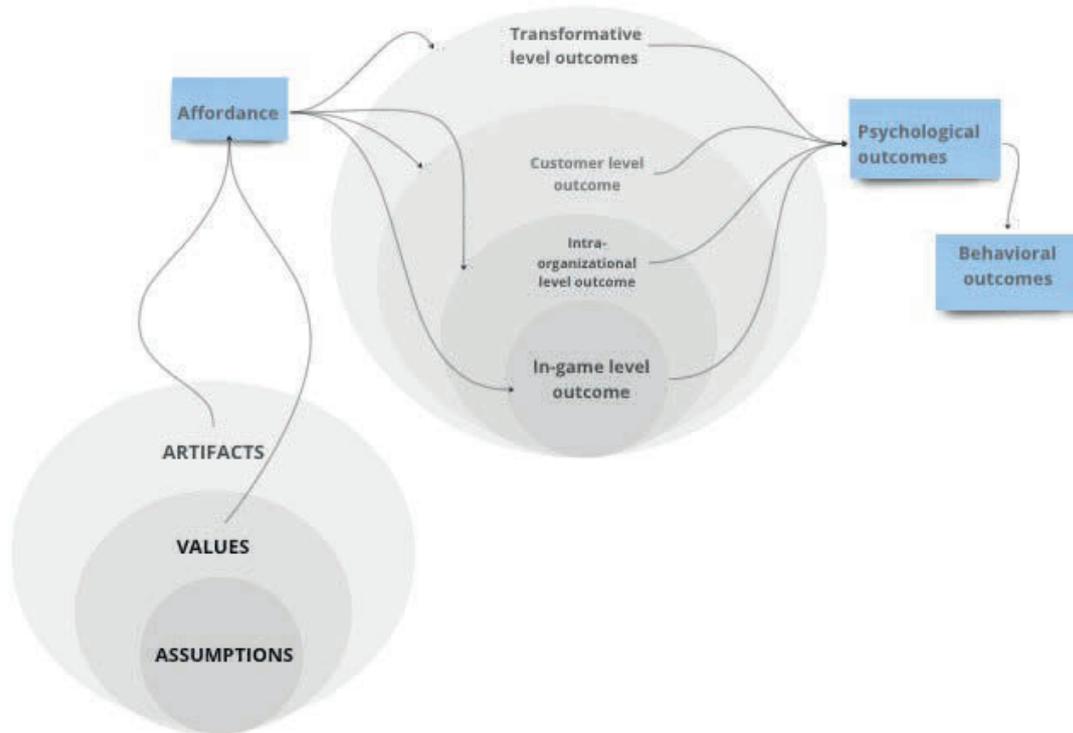


Fig. 5. Company culture relation with gamification.

3. RESULTS

Gamification is a way of inspiring individuals to take action and attain results by using game elements. The concept consists of three key components: design elements, psychological outcomes, and behavioral outcomes. The design should be centered around the user and consider their requirements and preferences using the User-Centered Design approach. Gamification has the potential to increase employee engagement and revenue and has been shown to have a positive impact on motivation, knowledge, and enjoyment. The most common gamification elements are rewards, badges, and points. The effectiveness of gamification depends on factors such as player motivations, game design elements, and implementation context. Rewards and points systems may be effective in some contexts but not in others. Further research is needed to understand the mechanisms behind gamification and determine the best ways to implement it. Gamification can shape corporate culture, according to studies by Tourky et al. (2020) and Morente et al. (2017). Gamification can align employee behavior with organizational values and promote a sense of identification with the company by incorporating values and goals into game mechanics. It can promote a shared understanding of company culture and values, leading to a more cohesive organization.

Gamification can also modify organizational culture by influencing employee attitudes and behaviors, promoting a culture of learning and innovation, enhancing collaboration and teamwork, and promoting continuous improvement. Further research is needed to fully understand the impact of gamification on corporate culture and best practices for integration.

CONCLUSION

To achieve a meaningful outcome of gamification, it is necessary to develop motivational affordance by identifying with the company's culture. There are correlations between Company culture values and artifacts with gamification affordance. To achieve psychological and behavioral outcomes in gamification need to consider company values' impact on implemented motivational affordance. When analyzing the levels of gamification, companies need to take into account the differences between players. The player types must be considered when designing gamification activities, as a different set of game mechanics is relevant to each kind. Simply selecting the most popular gamification mechanics may not result in maximum participant engagement, so it is important to tailor the mechanics to the specific player types.

To create a comprehensive and effective gamification activity that motivates a broader range of participants, it is important to tailor the gamification experience to the specific player types and levels of involvement within the company. Personalization is key to ensuring that the gamification activity resonates with the participants and drives engagement. To more successfully involve players in the company's culture and change their behavior, gamification mechanisms can be applied according to the company's culture and adapted to the appropriate types of players. However, the realm of gamification research is extensive, and this paper only offers a glimpse into the numerous questions that require further exploration in future studies.

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