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The role of digital games in the education of self-control and stress in gifted children

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Abstract

This essay examines the pivotal function that games play in satisfying the distinct needs of exceptionally talented children, thereby calling into doubt the concept of inherent advantage. Digital games, serious games, and role-playing games (RPGs) have been identified as efficacious tools for fostering cognitive, socio-emotional, and intrinsic motivational growth, in addition to enhancing self-control and stress reduction. Numerous studies highlight the diverse and adaptable course requirements of exceptionally talented pupils, who require an environment resembling the "ideal gifted environment." An equilibrium is achieved within this ambiance between self-governance, rational standards, internal control, openness to opposing viewpoints, and intellectual instability. Pedagogical techniques facilitate abbreviated instruction, enhanced comprehension, and customized pathways to accommodate various learning modalities. A balanced approach is necessary to address concerns such as screen time management and potential overreliance on gaming, despite the utility of games. By integrating games into a comprehensive educational framework, it is possible to effectively engage, motivate, and support gifted children, thereby facilitating the realization of their exceptional intellectual, social, and emotional capabilities.

Keywords: Gifted children; Games; Stress; Self control

1 Introduction

Due to their extraordinary cognitive abilities and sharp intellect, gifted children present an intricate combination of challenges and opportunities in the realm of education (Saridaki et al., 2009). Teachers and researchers are exploring innovative pedagogical approaches to address the comprehensive needs of these exceptional pupils, acknowledging that their intellectual prowess is frequently accompanied by heightened sensitivity and susceptibility to stress (Papanastasiou et al., 2017). This essay provides a more comprehensive analysis of the diverse aspects of education, focusing on the effective pedagogical applications of games. The objective of this research is to shed light on the potential benefits of games as tools for fostering self- control and reducing tension among gifted children, in addition to enhancing their academic performance (Papoutsi et al., 2022).

Exemplary qualities, including artistic prowess, leadership potential, and creativity, are all included in the definition of giftedness (Papoutsi & Drigas, 2016). Particularly designed to meet the cognitive and emotional needs of these children, who are frequently identified through observational assessments and standardized tests, an educational framework is required (Papoutsi et al., 2022). Although they are intellectual assets due to their exceptional cognitive abilities, a thorough understanding of their specific experiences in the educational environment is necessary due to their heightened sensitivities and sensitivity to stress (Papoutsi & Drigas, 2016).

Gifted young individuals develop self-control as a crucial component of their education. Gifted individuals may find it difficult to restrain their intense emotions and impulses due to their rapid cognitive development (Wasserman, 2001). Critical functions may be served by games that are meticulously integrated into the educational curriculum. Brain

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functions including executive control, working memory, and attentional concentration are stimulated by a variety of games, including traditional board games and digital simulations (Wasserman, 2001)

Moreover, the integration of game elements into educational resources, known as gamification, appears to be a feasibility. By integrating game elements into academic disciplines, gamification creates an immersive and captivating learning environment that consistently captivates bright young minds (Drigas et al., 2016). By navigating obstacles within the game-based teaching framework, this not only encourages active participation but also enables gifted students to cultivate self-control (Drigas et al., 2016). One way in which cooperative games foster a sense of community and potentially alleviate the stress associated with feelings of isolation is by encouraging communication and collaboration (Kokkalia et al., 2016). Games are an effective means of relieving tension because their immersive qualities provide a brief diversion from academic demands (Kokkalia et al., 2016).

The strategic integration of games into formal learning environments necessitates thoughtful consideration as educators and parents navigate the educational terrain in regards to exceptionally gifted children (Mitsea et al., 2022). To guarantee that educators possess the knowledge and abilities necessary to integrate games effectively into the curriculum, professional development is essential. Mutual recognition of the benefits that games can impart to gifted children in terms of self- control and stress management elevates the importance of collaboration between educators and parents (Mitsea et al., 2022).

In conclusion, a comprehensive approach that surpasses conventional academic benchmarks is necessary for the education of accomplished children. In addition to fostering intellectual development, games serve as dynamic instructional instruments that address the unique challenges of self-control and tension encountered by exceptionally talented individuals (Prins et al., 2013). Educators and parents who recognize the comprehensive developmental potential of games as tools for gifted children are required to collaborate in order to intentionally incorporate games into educational frameworks (Roberts & Lovett, 1994). Games are increasingly being recognized as a feasible approach to fostering the growth and welfare of these exceptional students as we further explore innovative pedagogical methods (Prins et al., 2013).

2 Methodology

This essay explores the implementation of important educational activities in primary, preschool and secondary schools. By integrating knowledge from various academic disciplines such as learning theory, pedagogy, game design and cognition, this approach explores new avenues for collaboration, innovation and communication. In addition, the positive effects and consequences of games on self-control and stress in gifted children are highlighted. In addition to experimental and empirical evidence, quantitative and qualitative findings from structured assessment questionnaires, student and instructor interviews, and randomized control experiments are used in this paper. Scientific research shows that games may offer advantages to gifted students enrolled in mainstream schools by enhancing hand-eye coordination, strategic thinking, planning, negotiation and group decision-making (Panzavolta & Lotti, 2013).

3 Literature Review

3.1 Gifted Children

A child who possesses a gifted disposition is characterized by an exceptional and innate cognitive ability or proficiency in a specific domain of knowledge or practice. In numerous countries, the attribution of giftedness is commonly linked to an intelligence quotient (IQ) of 130 or higher. In contrast, contemporary educational practices are progressively employing a range of indicators to discern giftedness, encompassing verbal, mathematical, spatial-visual, acoustic, and interpersonal proficiencies (Bucaille et al., 2022; Leung, 1992; Intagliata & Scharf, 2017)

In addition to their academic prowess, gifted children are recognized for their diverse range of characteristics that set them apart from their peers (Intagliata & Scharf, 2017). A seminal study was undertaken by Terman (1921), which examined more than 1,500 exceptionally talented children (those with IQs above 140). The results of this research indicated that gifted children exhibited enhanced mental and social adjustment, as well as a stronger motivation to succeed, in comparison to their non-gifted peers (Intagliata & Scharf, 2017).

Late in the 20th century, the term "asynchrony" was coined to describe the developmental characteristics of exceptionally gifted children, suggesting that their cognitive, physical, affective, and social aptitudes might progress at

varying rates. This concept underscores the intricacies of giftedness and the imperative for an informed comprehension of the manifold factors that distinguish exceptional children (Bucaille et al., 2022).

Talented children's accelerated progress is facilitated by specialized institutions or programs. These environments facilitate personalized instruction, methodologies, and materials to align with the specific needs of every learner (Bucaille et al., 2022). Although certain instructors may object, empirical evidence indicates that coupling exceptionally talented students together fosters their development (Leung, 1992). It has been shown that this type of classification is not harmful to typical children and increases the likelihood of intellectual development and challenge, especially when coupled with acceleration (Leung, 1992). By addressing the unique challenges that gifted children may encounter in a conventional school setting and maximizing their intellectual development, these educational concerns are of the utmost importance (Leung, 1992).

3.2 Self-Control

Self-control, which refers to the ability to govern one's emotions, impulses, and behaviors with the intention of achieving long-term objectives, sets humans apart from other animal species (Friese et al., 2017). Self-control is primarily governed by the prefrontal cortex, which is significantly larger in humans than in other animals and is responsible for planning, problem-solving, and making decisions (Friese et al., 2017). As opposed to reacting to every impulse as it arises, the abundance of nerve connections in the prefrontal cortex enables individuals to strategize, evaluate alternative behaviors, and, ideally, refrain from doing things they will later come to regret (Friese et al., 2017).

3.3 Stress

Stress serves as a mechanism for navigating and managing with a variety of stressors; it is generally recognized as a typical response to the demands of daily life (Schnurr & Green, 2004). On the contrary, stress can transform into an undesirable phenomenon when it becomes pervasive and disrupts routine activities. Emotional experiences and behavioral patterns are both significantly impacted by the stress that affects the body's systems (Schnurr & Green, 2004). Mind and body are interdependent, as evidenced by the intricate relationship between stress and its consequences. Significantly contributing to the onset and progression of numerous maladies and diseases, stress triggers a cascade of alterations that reverberate throughout the nervous and physical systems. Beyond the mere emergence of symptoms, this intricate interplay between health and stress declines individuals' overall quality of life and well-being (Dragoș & Tănăsescu, 2010).

Anxiety, mood fluctuations, and even more severe conditions such as depression are a few of the cognitive issues that can be induced by stress. Modified thought processes, heightened emotional sensitivity, and diminished cognitive functioning are all indicators of the psychological impact of stress (Dragoș & Tănăsescu, 2010). The development of maladaptive coping mechanisms may result from persistent stress, thereby exacerbating psychological distress. In response to stress, stress hormones such as cortisol and adrenaline are secreted, which stimulate the sympathetic nervous system (Dragoș & Tănăsescu, 2010). As an adaptation for the "fight or flight" response, these physiological alterations are transient in nature. Disturbance of these systems, nevertheless, can lead to enduring physiological irregularities in the presence of chronic stress (Martijena & Molina, 2012). An elevated susceptibility to cardiovascular disease, gastrointestinal disorders, immune system suppression, and various other health complications has been associated with these abnormalities (Martijena & Molina, 2012).

3.4 Self-Control & Gifted Children

Self-control, which is a fundamental element of regulating emotions and behavior, assumes particular significance when applied to gifted children who possess exceptional cognitive abilities (Yu, 2015). This essay explores the complex relationship between giftedness and self-control, utilizing empirical evidence to underscore the challenges, repercussions, and potential interventions associated with fostering self- control in individuals who are gifted.

Cognitively exceptional gifted children may encounter unique challenges when it comes to regulating their intense emotions and impulses (Friese et al., 2017). May experience heightened sensitivities as a result of their accelerated cognitive development, which can make it more difficult to regulate their emotions and behaviors (Zentall & Zentall, 1983). Self-regulation difficulties are worsened by excessive exuberance in multiple domains, which negatively impacts emotional health and social relationships (Yu, 2015).

Scholarly investigations, including the longitudinal study undertaken by Yu (2015), indicate that children with exceptional abilities demonstrate heightened cognitive growth; however, the progression of their self-control abilities may deviate. It becomes evident that tailored therapies are required to enhance self-control in gifted individuals (Friese

et al., 2017). Talented children who engaged in deliberate gaming activities demonstrated a statistically significant improvement in self-control measures, according to a meta-analysis by Barnett & Johnson (2016).

In accordance with the principles of positive psychology (Seligman & Csikszentmihalyi, 2000), incorporating enjoyable and challenging tasks, such as educational games, into the curriculum designed for exceptionally gifted children exhibits potential. Engaging in cognitively stimulating activities has been shown to enhance self-regulation, including self-control (Zentall & Zentall, 1983). Positive psychology principles advocate for the utilization of one's strengths as a means to enhance overall well-being. This suggests that structured games foster an atmosphere that is conducive to the growth and improvement of self-control abilities Seligman & Csikszentmihalyi, 2000). The correlation between self-control and giftedness has significant implications for policymakers, parents, and educators. Tailored interventions informed by empirical research are necessary in order to address the distinct needs of exceptionally talented children (Drigas et al., 2016). For the implementation of game-based therapies to be successful, educators must incorporate research findings and participate in professional development (Drigas et al., 2016).

In brief, the ability of gifted children to exercise self-control is the result of a complex interplay among factors including rapid cognitive advancement, heightened sensitivity, and challenges in regulating emotions and behaviors (Drigas et al., 2016). In light of the need for targeted interventions, research indicates that game-based learning may be a viable alternative (Zentall & Zentall, 1983). The incorporation of positive psychology principles bolsters the contention that engaging in both enjoyable and challenging activities can assist individuals with exceptional abilities in developing self-control. Effectively supporting the optimal development of gifted students requires a comprehensive understanding of self-control, which is substantiated by empirical research, when navigating the academic landscape of gifted education (Drigas et al., 2016).

3.5 Stress Management in Gifted Children

Effective stress management in gifted children necessitates a comprehensive understanding of the manifold pressures they encounter (Dirkes, 1983). Three distinct categories of pressures can be identified within this context: academic pressure, social isolation, and perfectionism (Arakelyan, 2022). Perfectionism, which is frequently observed in exceptionally talented children, consists of setting impractically high standards for one's own performance and experiencing distress when those standards are not met. Desperate pursuit of perfection can lead to persistent tension and negatively impact the overall well-being of exceptionally talented individuals (Arakelyan, 2022). Therapy for perfectionism must be targeted and acknowledge the significance of maintaining a delicate equilibrium between achievement and self- compassion (Dirkes, 1983).

Social isolation is an additional significant source of stress for exceptionally gifted children (Dirkes, 1983). The individual's exceptional cognitive capacity might potentially foster a sense of detachment from those of their time, leading to emotions of isolation and solitude (Baker, 1996). This social isolation may be exacerbated for gifted children by a lack of common ground or shared interests with their peers, thereby increasing their stress levels (Baker, 1996). By fostering social interaction through thoughtfully crafted games, it is possible that individuals can experience a reduction in tension, foster a sense of community, and overcome feelings of isolation (Baker, 1996).

Academic pressure, which is frequently experienced by gifted children, arises from the heightened expectations that are imposed upon them due to their exceptional intellect (Yadusky-Holahan & Holahan, 1983). Constantly striving for academic excellence could potentially result in exhaustion and heightened levels of stress. By integrating gaming elements into the school setting, these pupils are afforded an opportunity to deviate from the demanding academic schedule and participate in recreational pursuits that not only mitigate anxiety but also contribute to their holistic growth (Yadusky-Holahan & Holahan, 1983).

The flawed relationship between elevated intelligence and heightened sensitivity lies at the core of the giftedness-stress dilemma. Although intelligent children may excel academically, their heightened emotional sensitivity renders them more susceptible to experiencing stress (Martijena & Molina, 2012). This paradox pertains to a pedagogical approach that acknowledges the dichotomous characteristics of gifted individuals and caters to their cognitive and affective needs simultaneously (Mitsea et al., 2022). The inherent recreational elements of games significantly contribute to the alleviation of tension among exceptionally talented children. By engaging in games, these students are able to partake in enjoyable and relaxed activities that provide respite from the rigorous requirements of their gifted programs (Mitsea et al., 2022).. This recreational element is essential for regaining equilibrium and preventing exhaustion, which is beneficial to the overall mental health of gifted individuals (Mitsea et al., 2022).

Social interaction facilitated by games is identified as a successful strategy for alleviating the anxiety that is linked to social isolation (Rimlinger, 2016). Cooperative and collaborative activities facilitate the interaction of gifted children with peers who share similar interests, thereby fostering a nurturing social atmosphere. These connections serve to mitigate feelings of isolation and foster the development of critical social competencies, thereby addressing a significant source of stress for ambitious individuals (Rimlinger, 2016).

Game-enabled escapism provides gifted children with a momentary diversion from the pressures of their academic and social environments (Rimlinger, 2016). Participating in immersive gaming environments facilitates disconnection from tangible worldly issues, thereby promoting mental rejuvenation and relaxation. This form of escapism serves as a viable coping mechanism, offering a constructive means of alleviating tension without resorting to detrimental actions (Rimlinger, 2016).

3.6 Childhood Gifted Pedagogy

For gifted programs to foster academic achievement, scholars (Renzulli & Reis, 2000; VanTassel-Baska, 2006) stress the significance of compressed and enriched curricula, tutored learning, accelerated education, extracurricular activities, and independent student decision-making (Papoutsi & Drigas, 2016). Munro (2012) argue that in order to foster meaningful educational experiences for students, teachers must be receptive to their perspectives, consider their preferred learning style, and tailor pedagogical approaches and curriculum goals accordingly. The discipline of teaching, which includes instructional procedures and approaches that promote learning and opportunity, is pedagogy (VanTassel-Baska, 2006).It refers to the interaction process between the instructor and the student, as well as the learning environment (Siraj- Blatchford et al. 2002), according to Wall, Litjens, and Taguma (2015).The application of pedagogy should permeate all aspects of education through the integration of a variety of teaching strategies that foster academic engagement, facilitate global understanding, cultivate inclusive learning environments, and recognize and value the unique qualities of each child (Bailey, 2007; Bhowmik, Banerjee, & Banerje).

3.7 Integrating Games into Educational Frameworks

There are numerous ways in which the integration of games into the classroom environment enhances the learning experience for students in both regular and special education (Chaidi & Drigas, 2022). A comprehensive examination of seven significant domains—integrational engagement, authentic learning, personalized instruction, learning from mistakes, and social interaction—reveals the multifaceted impact that games have on academic outcomes (Chaidi & Drigas, 2022). The benefits of incorporating Serious Games into special education are highlighted in the research of Panzavolta & Lotti (2013). Diverse skills and abilities demonstrate substantial growth, increased motivation, and engagement among students with special needs. This instance underscores the adaptability of games in meeting diverse learning requirements, thereby delivering an engaging and customized educational encounter (Charlier et al., 2016).

Particularly for those who have intellectual disabilities and sensory impairments, digital game-based learning (DGBL) is an emerging alternative. Drigas et al. (2016) state that DGBL enables individuals to study autonomously at their own pace in addition to cultivating cognitive development. It is essential that special education students have this adaptability in order to accommodate their varied learning styles and preferences (Mitsea et al., 2022). Significant in the organization of educational experiences is the sustained engagement demonstrated in computer games (Papanastasiou et al., 2017). Through sustained interest, improved concentration, and overall contentment, the perpetual novelty and difficulty of games sustain learners' attention for extended durations, fostering intrinsic motivation (Papanastasiou et al., 2017). A direct correlation exists between concentration, interest, and learning, as Bourgonjon et al. (2010) say that participants are intrinsically motivated to better their skills.

By emphasizing the fusion of purposeful material with the liberating and daring elements of play, Abt's (1987) concept of "serious games" presents a more nuanced approach. Consistent with the premise that digital games contribute to the development of cognitive, spatial, and motor skills, this strategy goes beyond mere entertainment (Prins et al., 2013). With an emphasis on the positive impacts of games on a variety of facets of human behavior and well-being, McGonigal (2011) contends that play can be effectively employed for socialization and therapy.

Student accommodation for a wide range of needs and limitations demonstrates the inclusive nature of digital games (Rugelj, 2015). These entertaining and alternative platforms facilitate the comprehension of complex subjects that might be challenging for students with visual, aural, physical, and learning disabilities in traditional classroom environments (Papoutsi et al., 2022). Digital games, as stated by Felicia (2009), intrinsically integrate instructional approaches including constructivist, behaviorist, and cognitivist principles. This integration reportedly enhances students' metacognitive capacities and fosters greater independence (Bourgonjon et al., 2010).

Technology emerges as a seismic pedagogical strategy within the context of early gifted education. It is the critical need for innovative interventions to address the underserved population of gifted children aged 0 to 8, according to Barbour and Shaklee (41). Specifically designed to pander to the unique interests of gifted children, technology, and online learning activities in particular, offer them an engaging and demanding setting in which to learn (Saridaki et al., 2008).

Additionally, the integration, reporting, and assessment of educational procedures for gifted students are facilitated by the utilization of internet-based information and communication technology (ICT) (Vlachou & Drigas, 2017). A broad spectrum of concepts are reinforced through the use of online learning activities that cater to the interests of children. By determining a child's level through the use of psychometrically controlled screening activities, appropriate instructional materials can be developed in accordance with their specific needs (Stathopoulou et al., 2020).

In their study, Vlachou & Drigas (2017) ultimately devised a technological synthesis of learning that facilitates collaborative learning environments and permits gifted students to exhibit their aptitudes. Bright children not only improve their abilities through the use of PowerPoint presentations and online collaboration, but they also foster a sense of ease and cooperation. As a result, the integration of games into educational frameworks fundamentally alters the experiences of students in both regular and special education (Westwater & Wolfe, 2000). Games have the capacity to be a formidable tool in the educational setting due to their numerous benefits, which range from increased intrinsic motivation to enhanced learning outcomes for various skills and abilities (Wang & Huang, 2021). Digital games guarantee enjoyable educational experiences that are tailored to the unique learning styles and preferences of each student, thereby contributing to the fulfillment of their inclusive nature (Wang & Huang, 2021).

4 Critical Analysis

An analysis of the role of games in educating gifted children about self-control and tension reveals a multifaceted and effective approach to addressing the unique needs of this demographic (Drigas et al., 2016). The implementation of games, particularly Serious Games and Digital Games Based Learning (DGBL), offers a multitude of advantages with regard to tension reduction and the promotion of self- control (Drigas et al., 2016). As previously mentioned, the existence of Serious Games illustrates an intentional and captivating application of games to achieve educational goals. Learning with special educational requirements is positively impacted by Serious Games in terms of motivation, engagement, and skill development. This finding suggests that employing these activities could be a targeted and effective strategy for enhancing self-regulation and mitigating anxiety in exceptionally gifted children (Papanastasiou et al., 2017).

Likewise, DGBL has surfaced as a prospective methodology, specifically catering to individuals who experience intellectual disabilities and sensory impairments. Charlier et al., (2016) discovered that students can study at their own pace while DGBL improves a variety of cognitive functions. Talented children, who frequently encounter intricate learning requirements, may find the adaptability and customized instruction offered by DGBL to be highly beneficial in fostering self- regulation and reducing the strain linked to rigid educational structures (Saridaki et al., 2008; 2009).

The importance of intrinsic motivation in the educational environment is also acknowledged by the critical analysis, as numerous scholars have noted (Bourgonjon et al., 2010). By introducing the concept of 'flow,' Csikszentmihalyi contributes an additional layer of comprehension to the way in which games induce heightened concentration, engagement, and enjoyment (Bourgonjon et al., 2010). Engaging and intellectually stimulating learning opportunities may be difficult to come by for gifted children. However, games provide a platform that is compatible with their cognitive capacities and fosters intrinsic motivation (Mulrine, 2007). Although there are clear benefits to incorporating games into education, there are challenges that need to be confronted (Dragoş & Tănăsescu, 2010). Important considerations include balancing screen time, selecting appropriate games, and maintaining a balanced blend of gaming and other educational activities. The potential consequences of an excessive dependence on game as the primary instructional medium are unanticipated (Dragoş & Tănăsescu, 2010; Ludovico et al., 2015).

The research additionally examines the impact of role-playing games and play therapy on the socio-emotional development of gifted children. According to Kokkalia et al. (2016) play is a significant method of social interaction and self-expression. RPGs, specifically, offer an exceptional opportunity for intelligent youths to investigate a variety of roles, thereby fostering their creativity and alleviating tension. Playing with imagination is emphasized by Mangione et al. (2015), which is consistent with the premise that role-playing games provide a secure distance for identity exploration, thereby promoting emotional health (Li et al., 2012).

In summary, the critical analysis demonstrates that the strategic integration of games into educational frameworks has the potential to assist exceptionally talented children in cultivating self-control and mitigating stress (Li et al., 2012).

The perspectives and discoveries put forth in this discourse underscore the capacity of games to fulfill the varied needs of this unique demographic (Papoutsi et al., 2018). A nuanced and balanced approach, on the other hand, is necessary to overcome obstacles and guarantee that video games serve as a supplement rather than a replacement for a comprehensive educational experience (Papoutsi et al., 2018).

5 Discussion

The discourse surrounding the efficacy of games in educating gifted children about self-control and tension has revealed a multifaceted landscape wherein serious games, digital games, and role-playing games (RPGs) all hold significant significance (Chaidi & Drigas, 2022). The incorporation of these gaming elements aligns with the recognized particular requirements of gifted children, who, notwithstanding potential misconceptions regarding their advantage, possess distinct needs that, if unfulfilled, can result in a range of complications (Chaidi & Drigas, 2022). Games offer a distinctive medium through which to address the requirements of academically talented children in various aspects—intrinsic motivation, cognitive advancement, socio-emotional welfare, and self-expression—according to the research (Mitsea et al., 2022). Serious games and Digital Games Based Learning (DGBL) have demonstrated potential in enhancing students with special needs' motivation, engagement, and skill development (Drigas et al., 2016). This aligns with the proposition that the engagement and immersion generated by digital games induce a state of "flow," which enhances concentration and enjoyment during the learning process (Drigas et al., 2016).

In addition, the topic encompasses play therapy and role-playing games as strategies for attending to the socio-emotional requirements of gifted children (Westwater & Wolfe, 2000). Play, which has been recognized as a crucial element in fostering self-control and reducing tension, is particularly significant for gifted individuals who may encounter challenges in conventional educational establishments that fail to acknowledge their abilities and comprehensive needs (Roberts & Lovett, 1994). Within this particular context, role-playing games afford a safe haven for the development of one's identity, creativity, and self-expression (Schnurr & Green, 2004). The presented educational framework incorporates the concept of a "ideal gifted environment," which is characterized by the following: self-determination, justified norms, internal self-discipline, receptiveness to side interests, cognizance of greater forces at play, intellectual volatility, and a balanced demand-forgiveness paradigm (Westwater & Wolfe, 2000). This environment aligns with the recommended pedagogical approaches for gifted pupils, which prioritize a curriculum that is both diverse and adaptable, programs that are both condensed and enriched, and individualized learning trajectories (Wang & Huang, 2021). Nonetheless, the critical evaluation brings to light a number of concerns, including the need for a well-rounded strategy towards screen time, appropriate game choices, and the peril of becoming overly dependent on gaming (Vlachou & Drigas, 2017). This highlights the importance of perceiving games as supplementary instruments in a comprehensive educational experience, as opposed to regarding them as independent alternatives (Stathopoulou et al., 2020).

Last but not least, we emphasize the significance of all digital technologies in the educational domain for gifted, which are very productive and successful, and how they facilitate and improve assessment, intervention, and educational procedures via mobile devices that bring educational activities everywhere [41–43], various ICTs applications that are the main supporters of education [44–55], and AI, STEM, Games and ROBOTICS [56-61]that raise educational procedures to new performance levers. Additionally, ICTs are being improved and combined with theories and models for cultivating emotional intelligence, mindfulness, and metacognition [62-70], accelerates and improves more educational practices and results, especially in gifted children.

6 Conclusions

In summary, the analysis of the importance of games in educating gifted children about self-control and tension emphasizes the urgency of recognizing and attending to the unique needs of this demographic. Digital games, role-playing games, and serious games have all demonstrated the potential to enhance the motivation, cognitive functioning, and socio-emotional welfare of exceptionally talented individuals. The educational framework under consideration involves creating an environment that emulates the characteristics of an "ideal gifted environment" and incorporating pedagogical approaches that cater to the unique needs of exceptionally talented pupils. Nonetheless, game integration must be approached with caution, considering the benefits and drawbacks associated with their implementation. The discourse underscores the imperative of incorporating games in an intelligent and well-rounded manner within the broader educational context. By utilizing games, stakeholders and educators can provide talented children with a more motivating, encouraging, and conducive learning environment, thereby enabling them to achieve their utmost capabilities.

Compliance with ethical standards

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Disclosure of conflict of interest

The Authors proclaim no conflict of interest.

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