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# Is There a Connection Between Playing Video Games and a Higher Motivation to Learn?

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#### Abstract

It is plausible that video games might help adolescents stay engaged and focused, but it all depends on that they are using them. Much has been said about video games' ability to motivate people. One popular idea regarding online games is that they have been intrinsically entertaining and so motivating, and that studying video games may help us develop better educational settings. It has been proposed that games may assist people in developing their passion for learning and that adopting game design concepts can aid in learning. Despite such theoretical speculations about video games' possible motivational and academic advantages, it is unclear if the existing work on video games is expressly framed in terms of contemporary theories of motivation. Thus, the ultimate goal of this article is to critically examine video game studies in relation to accomplishment motivation literature. As a result, we begin with an overview of the key theoretical frameworks of accomplishment motivation. Following that, we examine the existing empirical evidence on computer games and education. We end with a short discussion of future approaches and research topics for how motivation may be employed as an academic concept in the study of computer games and studying in academic settings.

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# Introduction

Playing games is an old form of amusement that has grown in popularity as more sophisticated entertainment-oriented technology arise. Visual games are games that make use of information technology and video displays. Video games are becoming more popular in the U.s.. In fact, about 150 million Americans enjoy playing video games [1]–[3]. 42 percent of these people play average of three hours each week on a regular basis. Games are also popular among American kids, with 60% of them playing video games that way [4], [5].

Meaningful context, integrity, motivation, time to express errors, and learner autonomy are the five broad requirements for successful learning. By providing new words in a manner that fosters a real yearning to participate and communicate, Cambridge English education and learning tools leverage the power of relevant manner and authenticity. And, as any teacher will tell you, learners are most effective when they are enthusiastic, allowed to learn despite their errors, and take responsibility for their own learning [6], [7].

Framing is the glue that holds new knowledge together with what we already know. This is why, when we acquire language, we cover themes such as family, hobbies, and vacations rather than acquiring every one of the words as in order they occur in a dictionary, beginning with A and finishing with Z. Without context, new knowledge has nothing else to attach themselves to in your brain and is very hard to recall [8], [9].

Video games provide good context by telling a powerful and entertaining tale. People are hardwired to connect with tales. A powerful story is intriguing because it elicits an emotional reaction, making it memorable [16], [17]. That is why narrative is such an effective marketing, political, commercial, and media tool. When it comes to educating young students, narrative is essential: youngsters depend on episodic memory considerably more than adults, retaining



specific facts and experiences that are connected together in learning [18], [19].

Learner's learning results in and out of the classroom are inextricably linked. Engaged learners are attentive and inquisitive, and they perform better than disengaged or distracted students. Video games are highly excellent at using the plot, obstacles, and rewards inside the game to elicit emotional responses that are directly related to motivation [20]–[22].

Learners are driven to tackle language challenges in our Minecraft game because it secures their advancement in the game. The setting and the individuals they encounter motivate them to continue in their studies [21], [23], [24]. Players may select which sections to focus on, but they cannot avoid it. The language is included into the game's interface.

## **Motivation: A review**

Motivation is the set through which goal-oriented activities are initiated, guided, and maintained. It is what motivates people to take action, whether it is grabbing a sip of water to quench their thirst while sitting to expand their knowledge. The natural, hormonal, social, and cognitive elements that trigger behavior are referred to as motivation. The word "motivation" is widely used in ordinary speech to explain why someone does something. It is the impetus for human behavior [25], [26].

Internal motivation is a process. Motivation, whether defined as an urge or a necessity, is a state inside us that demands a change, either in ourselves or in our surroundings. When we dip into this reservoir of energy, motivation provides the drive and direction required to connect with the world in an adaptable, open-ended, and problem-solving manner [27]–[30].

Psychological desires for liberty, mastery, plus belonging all influence human behavior in similar ways. As do the desires for success, power, closure, purpose, and self-esteem [26], [37]. Some of these wants, as well as all of various intrinsic actions we participate in, will become motivations. Extrinsic motivation will be influenced by our surroundings and social setting. We will then be encouraged to feel certain emotions linked with various end-states by objectives, values, and wants. The greatest method to explain inspiration is to demonstrate how it appears in daily life. Here is a source of potential motivating motive for someone to exercise.

Motivation is defined as enthusiastic and persistent goal-directed action. People try and take action when we are inspired. The satisfying of demands that are either required for survival or vital for health and development influences motivation. Physiological demands for



sustenance, water help the organism sustain life while also providing enjoyment [38]–[41].

People may have several motivations for participating in any given action. Extrinsic motivation occurs when a person is motivated by outside sources such as other people or prizes. Motivation refers to inspiration that comes from within—the drive to improve in a particular activity. Internal motivation tends to drive individuals harder, and the results are more satisfying [42]–[44].

The hierarchy of needs, created by Abraham Maslow in 1943, is one paradigm for understanding the mind. As according Maslow, people are inherently driven to better themselves and progress toward voicing their complete capacity encountering and satisfying various levels of need, ranging from the most basic, such as for food and health, to greater levels for love, belonging, and identity.

Maslow subsequently expanded the idea to include a desire for selftranscendence: people achieve the pinnacle of development and find the most significance in life by paying attention to things other than themselves. Although the theory is true universality has been questioned, many people feel it reflects essential facts about human drive. When these activities result in more favorable psychological experiences, they strengthen the activity through a virtuous circle and enhance the chance of repeat. [45]

When we are motivated by internal reasons, such as wants, cognitions, and emotions, it is typically seen as more immediate and strong than extrinsic. However, since we do not live in a vacuum, these inner events cannot occur without some measure of external impact, whether in the type of consequences, motivations, or other types of pressure emanating from our environment's social context. Our physiological and behavioral requirements propel us, our cognitions guide us, and our emotions provide intensity and vigor to our endeavors. When the antecedent circumstances and internal incentives coincide, they provide a favorable environment for interaction, which drives action behavior [46]–[49].

#### Video games and motivation

Against the background of conceptual and empirical study on accomplishment motivated, we turn towards general computer game research. We established three objectives when examining this preliminary body of material. First, we[50]–[52] wanted to see what broad conceptual claims about the motivating advantages of video games were being made, discussed in the areas of academic education. Second, we wanted to see whether any unique motivational theories led the empirical studies on ambition and video games. Third, we wanted to look at how these research in general quantified motivation.



Finally, we looked at whether there was any indication that video games boosted motivation and learning [53]–[55].

While opposed to playing alone, pupils adopted a mastery mentality that is extremely favorable to learning when playing a math vr headset either competitively or cooperatively with another player. Furthermore, when students played the arithmetic video game alongside another student, their interest and pleasure improved.

In addition, it seems that games give players with opportunity to develop attention management, resolution, and selective attention [61] [62]. Some real-time decision-making games allow youngsters to "allocate their attentional capital more effectively and filter out unnecessary information more effectively. Split-second decisions, problem-solving situations, and the opportunity to utilize experimenting to develop critical abilities are all traits we appreciate in future colleagues, coworkers, relatives, and friends.

Most significantly for the purposes of this piece, games are masters in instilling intrinsic desire. A player may start a new game with no experience as to how to solve puzzles, utilize controls, or traverse the virtual environment into which their protagonist has been forced, yet rapidly get involved in progressing through the stages of proficiency that the plot takes them through [63], [64].

Unlike in college, where pupils may assume they are not clever enough to achieve, a video game promises that they may succeed with hard effort and practice. Video games typically begin with simple hurdles that bring the player to the digital world and game mechanics, providing supplies for solving riddles and obstructions in the form of new persona abilities (e.g., increased tempo, improved weaponry, enlarged intelligence) or availability of new game elements. Each level challenges to do anything that is just out of reach every time, giving the opportunity to feel positive of yourself for accomplishing something which was previously impossible. Furthermore, failure wasn't seen as a cause to give up, but rather as knowledge acquired that might lead to the final achievement that the gaming has made you crave [22], [54].

The Attribution Theory and the Theory of Motivation have both helped to a greater grasp of why games may be a safe medium for learning about the implications via experience [65]–[67]. Computer games may help people improve self-monitoring and coping skills. If the major reason for playing video games is to avoid or run from other activities, there is an increased chance of participating in addiction-related behaviors.

Furthermore, research indicates that behavioral intention has been linked to beneficial outcomes such as performance, focus, perseverance, and well-being across a variety of activities and



circumstances. Prior research, for example, discovered a positive link between soul motivation and engagement (i.e., the ratio of wins to matches played), implying that identity motivation may impact performance among athletes [73]–[75].

Students may assume that they are not clever enough even to succeed in the classroom, but an online gaming promises that they can with hard effort and practice. Video games typically begin with simple challenges that start introducing the player towards the virtual world and gameplay elements, providing reinforcements for solving puzzles and obstructions in the form of new persona abilities (e.g., steadily increasing speed, improved weaponry, improved cognition) or access to new game elements. Each level challenges you to do something is just out of reach every time, giving you the opportunity to feel good of yourself for accomplishing something that would be previously impossible. Furthermore, failure wasn't seen as a cause to give up, but rather as knowledge acquired that might lead to ultimate success [76]– [79]

This quick overview demonstrates that e-sports have spread around the globe, with some games attracting thousands of users (such as Spiderman 2); it is gaining media and public attention. E-sports has evolved into a business that competes with more "conventional" sports. Top players are widespread in several tion, including such Dota 2. However, as compared to more "conventional sports" (team and individual sports), however little known about variables influencing game play, such as time management. Less and less is known about the effect of psychological elements such as fundamental psychological want and need incentive. More understanding about the elements that influence time is spent playing and playing in e-sports is nevertheless fascinating from a performance standpoint, but it may also clarify why e-sports is a rising phenomena and why many individuals choose to invest a lot of time (or not) playing e-sports.

Video games just provide a refuge but are very good coping tools. People usually begin playing games so they are entertaining. They are also a sort of escape. When life difficulties don't go away, the opportunity to escape to that other universe is incomparabl [73], [80]e. While many individuals play appropriately, some use it to cope. That may be beneficial and detrimental.

Many young gamers get hooked to gaming because they experience an amount of emotional hardship at school or at home. Some are tormented at school, while others come from terrible homes. Most gamers have expressed the feeling that no one understands them. As a consequence, they resort to a supportive group of like-minded individuals. We cannot grasp and process these feelings while we are young, and most of the time, we do not have somebody to guide us



through this process. In such cases, gaming may be a lifeline, allowing you to escape scary events that make others feel helpless [81]–[83].

This, however, comes with a cost. If a customer earns too much time on a computer and is unable to obtain the support and direction they need to manage their emotions, they might become addicted to computer games. While gaming might help you deal with stress, relying on it too much can be dangerous. Furthermore, since video games influence our brains, we should be amazed at how quickly we spend playing them and our motives for doing so [84], [85].

One may overcome obstacles and trigger the victory circuit by playing video games. Numerous studies have found that students want challenge and mastery [86]–[88]. There is a great narrative in evolutionary psychology about venturing into the unknown and discovering something new. This motivation was vital for our survival as hunter-gatherers. Humans that journeyed into the woods and came with fresh and valuable resources for their group benefited from evolution.

As a consequence, human brains developed the Triumph circuit, a psychological pattern. Because it is a conceptual model rather than a physical one, this circuit is not as easily assignable to the brains as the learning circuitry. It is, nonetheless, visible in human conduct. The issue with online gaming is that they would have figured out how to break into the Psychological system. They've figured out how to give us a feeling of difficulty and mastery without making us work for it in real life. This was one of the explanations why youngsters like video games [89]–[91].

Games also are more enticing to a certain personality type. Smart or brilliant children are not pushed at school and, as a consequence, get bored easily. These kids resort to online games to feel challenged and engaged. A youngster may also play computer games out of their own speed. In contrast to school, kids do not have to await for other pupils to reach parity to advance [65], [92]–[94]. They can finish stages quickly and win the match without becoming bored. They eventually get hooked to video games because they depend on them to feel intimidated and mastery.

#### Conclusion

Although video games may help with education and understanding, they should be used with caution in academic environments. In particular, educators and practitioners must consider the motives of players to participate. For example, the interplay between each player's motives to participate and the game's qualities may influence both inner and extrinsic motivation. It's fascinating to see how different degrees of effort and tenacity are used by players while playing



instructional video games. It is also critical to examine their behavior and learning procedures through the perspective of motivation theory. Several statements may be made regarding the function of video games in fostering motivation to learn based on existing studies on accomplishment motivation in overall and video games at the moment. First, plenty of the design ideas connected with video games hint to motivating features, which are often supported by accomplishment motivation theory and research, notably studies relating certain instructional techniques to addition to the effect of competence and worth (Perry et al., 2006). Second, the bulk of existing video game research has been framed by value-related motivation theories, especially those connected to self motivation, such as personality theories or flow theory. Third, there is growing evidence that video games meet fundamental psychological requirements, and that satisfying these needs might assist to explain why guys enjoy video games enjoyable and engaging. Fourth, that quality of measures utilized in research investigating the relationship with ambition and video games varies. Finally, although empirical data reveals that video games are usually motivating, there is presently a dearth of study indicating how video games might serve to boost motivation (and transfers) in academic situations.

Finally, we, like many others, believe that video games have the potential to change the educational environment. However, we feel that much more effort is needed before we can fully fulfill video games' promise to boost learning in academic settings.

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