# Chapter 3
# Review of Literature on Student Motivation in Game-Based Learning Platforms

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## ABSTRACT

*This review examines how game-based learning (GBL) can boost motivation, a key factor in learning success. GBL leverages the fun and engaging aspects of games to create interactive scenarios and challenges. This approach keeps learners interested, encourages exploration, and improves learning outcomes. The review explores the psychology behind this and identifies factors influencing GBL's effectiveness. By analyzing research and case studies, it highlights the potential of GBL to motivate students and improve education.*

## INTRODUCTION

Increasing student motivation is a constant struggle, and integrating game-based learning (GBL) technologies into educational settings has proven to be a potent solution. The complicated interaction between GBL technologies and learners' motivations is critically examined in this research review, which also illuminates the psychological mechanisms at work and pinpoints key elements influencing its effectiveness. The cornerstone of effective education, learner motivation, has a direct impact on students' engagement, persistence, and overall learning results. The dual perspective

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of intrinsic and extrinsic motivation in the context of GBL is first investigated in this research. A key element of effective GBL implementations is intrinsic motivation, which is motivated by the natural delight and satisfaction obtained from the learning experience (Ryan & Deci, 2000). This intrinsic motivation can be stimulated by GBL environments that are in line with learners' interests and offer chances for autonomy and mastery (Vallerand et al., 1992). The extrinsic component of GBL uses gamification approaches to deliver prizes and recognition, improving learners' motivation to engage fully with the learning content while complementing intrinsic motivators (Deterding et al., 2011). The importance of involvement and immersion in boosting learners' motivation through GBL is one of this review's main themes. According to Gee (2003), games are recognized for producing immersive experiences that actively involve players in obtaining particular objectives. GBL technologies take advantage of this quality by providing interactive scenarios, challenges for problem-solving, and quick feedback. The engaging and dynamic design of GBL settings captures students' interest, stimulating experimentation, active engagement, and exploration, ultimately boosting motivation. Technology developments and an increasing focus on learner motivation and engagement are driving ongoing changes in the educational landscape. The use of game-based learning (GBL) technology is one promising strategy that has drawn attention recently. In order to create immersive learning experiences that are engaging and motivate learners, GBL makes use of the fascinating aspects of games (Deterding et al., 2011). This review of the literature attempts to explore the complex interaction between GBL technology and learners' motivations and case study analysis, illuminating the psychological underpinnings and key elements influencing its effectiveness.

## LITURATURE REVIEW

### Current Studies

#### Intrinsic and Extrinsic Motivation: A Dual Perspective

Both intrinsic and extrinsic factors play a role in how GBL technologies affect students' motivation. The enjoyment, curiosity, and satisfaction obtained from the learning experience itself serve as the foundation for intrinsic motivation (Ryan & Deci, 2000). This intrinsic motivation can be stimulated by GBL environments that are in line with learners' interests and offer chances for autonomy and mastery (Vallerand et al., 1992). Extrinsic motivation, on the other hand, can be increased through the use of gamification techniques, in which students are rewarded for their participation in the learning process and recognized for their accomplishments (De-