

# The Dynamics of Student Engagement through the Lens of Involvement and Self-Determination Theories

Wei Mun Chin<sup>1</sup>, Nor Aniza Ahmad<sup>1</sup>, Ismi Arif Ismail<sup>2</sup>, Siti Noormi Alias<sup>2</sup>

<sup>1</sup>Department of Foundations of Education, Faculty of Educational Studies, Universiti Putra Malaysia, 43400 UPM Serdang, Malaysia, <sup>2</sup>Department of Professional Development and Continuing Education, Faculty of Educational Studies, Universiti Putra Malaysia, 43400 UPM Serdang, Malaysia

Corresponding Author Email: nor\_aniza@upm.edu.my

To Link this Article: <http://dx.doi.org/10.6007/IJARBS/v14-i11/23730> DOI:10.6007/IJARBS/v14-i11/23730

**Published Date:** 25 November 2024

## Abstract

A comprehensive review of the literature reveals significant theoretical gaps in understanding student engagement such as cultural differences and the challenges posed by the growing prevalence of online and blended learning environments. There is a need for better approaches to explore the multifaceted nature of student engagement to inform effective educational practices and foster a supportive learning environment. This paper examines the conceptualization and theoretical frameworks surrounding student engagement by focusing on Theory of Involvement and The Self-Determination Theory. This paper argues for the integration of these theories to provide a more comprehensive understanding of student engagement and the need for future research to consider diverse theoretical perspectives as well as the dynamic nature of student engagement across various settings.

**Keywords:** Student Engagement, Theory of Involvement, Self-Determination Theory, Concept, Motivation

## Introduction

Student engagement encompasses a series of complicated educational efforts to accomplish specific desirable academic outcomes; as it deserves more attention it has become one of the main focuses of educational research. Student engagement is certainly not the end product of education because learning and development is a dynamic lifelong engagement process. Over the past few decades, researchers have drawn interest in what drives student engagement in higher education, and numerous studies have been conducted to understand how student engagement could promote or hamper educational outcomes. Academics agree that student engagement is indeed a multidimensional construct but how to best conceptualize student engagement over time is constantly challenged. Moreover, the study

of student engagement should not merely be determined by the individual self, as the learning environment has a vital role in providing academic support to facilitate student engagement.

### **Conceptualizing Student Engagement**

The significance of student engagement is well recognized by the research community; however, there is no one consensus to define student engagement in literature. Student engagement has been defined as “the amount of physical and psychological energy that the student devotes to the academic experience” (Astin, 1999, p. 518), and functions as a mean and an end for the student to attain the desired academic outcome (Ryan & Deci, 2009). Pike and Kuh (2005) accentuate engagement in a rather simple and straightforward manner “students learn from what they do in college”. Despite some differences in terminology, all definitions refer to a similar concept, “Student engagement represents both the time and energy students invest in educationally purposeful activities and the effort institutions devote to using effective educational practices” (Kuh et al., 2008, p. 542). This definition of student engagement is perhaps one of the most widely used in the contemporary higher education context (Mehdinezhad, 2011).

Student engagement, therefore, can be understood as a multi-faceted dynamic construct that is malleable and fostered through interaction with personal and environmental factors. The long and rich history of student engagement can be traced back to the time from approximately the 1950s to the 1960s (Lester, 2013). The growing interest of scholars in student engagement arises from Ralph Tyler’s research on looking for the relationship between time spent and learning effort (Axelson & Flick, 2011; Kuh, 2009). During these times, the term ‘engagement’ has yet to be defined but a similar area in the academic context of engagement was anecdote in the early work of Yamamoto (1968), *The College Student and His Culture: An Analysis*. Yamamoto’s work marked some normative references that lift to some earlier engagement theories in academic areas such as cultural influence, institution environment, non-academic activities, method of teaching, and peer influence.

On the other hand, thirty-five years later Sandeen (2003) was more interested in the singular perspective, taking any interactions between the student and faculty staff as accountable for student engagement. These stretchable and malleable remarks of engagement soon enrich the development of a variety of educational research from single case studies to small-scale studies. The historic roots of such research keep evolving and to date have developed into a national scale of student engagement study in America, Canada, and Australia, whereby the attention is confined to an annual or yearly survey based on the layout of specific benchmarks (e.g., Kuh, 2009; Krause & Coates, 2008). Notably, Bryson and Hand (2007) are among the earliest researchers who have notified the complex nature of student engagement and suggested multiple approaches to improve the study of student engagement. Subsequently, their ideas were later supported by Krause and Coates (2008) who had similar views on engagement and conceptualized engagement as a multiple-dimensional construct.

These researchers have come to a consensus that it would be more adequate to study engagement in a holistic mean over a single concept. The lingering question for them is, how many dimensions are there? Unsurprisingly, given the nature and complexity of student engagement, to date, the research community has yet to establish an absolute agreement on

how many facets there are in student engagement. Predominantly three types of student engagement perspectives can be found in the literature. Researchers considered the behavioral and emotional aspects (e.g., Wang et al., 2015) to be the only valid dimensions to be included in measuring engagement and proposed a two-dimensional model of engagement (Finn, 1989; Skinner, et al., 2008). The three-dimensional model of engagement is endorsed by other bodies of researchers (e.g., Archambault et al., 2009; Fredricks et al., 2004; Jimerson et al., 2003; Wigfield et al., 2008) that have included the element of cognition besides behavior and emotion into the model for better understanding of engagement.

Reeve (2012) asserted that the components of affective, behavioral, and cognitive are "only an incomplete understanding" of engagement, and argued on the initiative of teacher interaction and questioning regarding a student's constructive contribution to the learning process. Therefore, a four-dimensional model has been depicted to include the distinct elements of academic, psychological (Appleton et al., 2006; Reschly & Christenson, 2006; Horstmanshof & Zimitat, 2007), and 'agentic engagement', i.e., the proactive contributions that are initiated by the learner into the model (Montenegro, 2017; Reeve & Tseng, 2011). Other than these perspectives of student engagement, some alternative appealing viewpoints could also be found in the literature. For instance, Chickering and Gamson's (1989) *Seven Principles for Good Practice in Undergraduate Education*, and Chickering and Kuh's (2005) *Promoting Student Success: Creating Conditions so Every Student Can Learn*, assert the significant role of higher institutions in creating a friendly and an effective academic environment to foster student's engaging behavior. Thus, student engagement was the product of student perceived support from the learning environment (Coates, 2005), active participation, learning experience, and interaction (Chin & Ahmad, 2019).

Literature often characterizes student engagement with positive academic outcomes, but there are some interesting connotations from the body of literature on the debate about the nature of engagement. For instance, Krause (2005) has proposed that for some university students, engagement experience in university is like an ongoing battle and is conflicting with regard to international students who come from diverse cultural backgrounds. This could be very true when a student is unable to blend in or integrate into a culturally different academic setting. Despite the ongoing debate on the variation of multiple dimensions of student engagement, there is a consensus amongst educationists (Astleitner, 2018; Korhonen et al., 2019) on the agreement of the 'meta-construct', which should comprise affective, behavioral, and cognitive dimensions. To frame and support from the measurement perspective of student engagement in higher education, a behavioral, affective, social, and cognitive perspective of student engagement will be discussed thoroughly in the following sections.

### **Behavioral Approaches to Student Engagement**

Astin (1984) is one of the pioneer advocators who has affirmed behavioral engagement. Despite acknowledging the contribution of emotional and other unobservable factors on student engagement, Astin favors the observable characteristic of behavioral perspective in assessing student engagement over other approaches. This perspective of behavioral engagement was later endorsed by educationists (e.g., Kahu et al., 2015; Schaufeli et al., 2002) who had a similar viewpoint and who defined engagement that was centered on observable academic participation and performance. Astin's viewpoint on student engagement is more akin to Skinner's rather than Watson's in behaviorism psychology.

Watson (1913) argued that analyzing behaviors and reactions was the only objective method to gain insights into human actions; he rejected environmental factors, emotions, and cognitive elements. While Skinner (1990) did not deny the significance of behavior, he suggested the inclusion of thinking, feeling, and other private events that were also accountable for explaining human psychology.

This behavioral approach to student engagement was widely conducted in the tertiary educational context, some of the well-known national scale research surveys (e.g., National Survey of Student Engagement and Australasian Survey of Student Engagement) were primarily developed based on this perspective by quantifying quantitative metric to specific benchmark to assess student engagement experience and institutional performance. For instance, the National Survey of Student Engagement encompasses 5 benchmarks to assess the different aspects of engagement: level of academic challenge, active and collaborative learning, student-faculty interaction, enriching educational experience, and supportive campus environment. Each of the benchmarks is compensated with different engagement indicators that are created with a blend of theory and empirical analysis. Furthermore, Kezar and Kinzie (2006) suggest that a review of these benchmarks is inevitable to better conceptualize student engagement. The behavioral perspective attempts to measure engagement by observable and measurable quantifying metrics such as frequency, time, and task, but learning is also related to emotional aspects (Christie et al., 2007).

One of the limitations of the behavioral approach is the disregard for significant contributions of affective elements in student engagement. Another drawback from this perspective is that little attention has been paid to the intangible cognitive component of learning. It is much easier to capture and measure behavioral action over abstract emotion and cognitive components in engagement. A loosen grasp of these significant contributors to student engagement will overlook many valuable insights that help to better understand students' actual engagement. While researchers are prompt to think that the behavioral approach is predominant in engagement, the teacher prioritizes the cognitive, but students were prone to believe primarily in affective reason (Bowden et al., 2021). These differences in perceptions imply that student engagement is incomplete without the emotional and cognitive dimensions.

### **Affective Approaches to Student Engagement**

Emotion is one of the situational conditions that affect students' participation in activities or engagement in academic tasks. Affective engagement could manifest through positive emotions within and outside the campus. The association between emotion and student engagement can be found in literature and the findings suggest the existing link in the sense of attachment, achievement, and life satisfaction (Burgos-Videla et al., 2019). Bandura's (1986) Social Learning Theory posits that learning takes place when people learn from each other and through observation, imitation, and modeling. One of the mandatory conditions for effective modeling is dependent on the amount of attention that is given, and this cannot be done without positive emotion. The affective perspective of student engagement argues that emotional engagement is a necessity for a student to identify academic goals and participate in academic tasks.

Fredericks and colleagues (2004) propose that the affective component of student engagement can be understood through the students' attitudes, values, and interests toward the interactions with the surrounding academic environment. Affective engagement encompasses affective reactions, a sense of school identity, and emotional responses to institution and academic staff. Hence, positive emotion is imperative for a sense of interest and an active involvement in learning and development. The manifestation of affective reactions could be observed through the students' psychological reactions such as boredom and enjoyment of academic tasks (Xie, 2021; Zhao & Yang, 2022). A school identity was associated with belongingness or the sense of being a member of the institution (Jaiswal et al., 2022; Waite et al., 2023). Emotional response is an important affective indicator for students' subjective emotional reaction toward academic staff and institutions. Affective engagement does matter when emotion is a subjective (experience) and expressive (behave in response) component that is an inseparable part of the student's tertiary educational experience.

Also, substantial findings from the literature point out that emotional engagement is found to be associated with behavioral engagement (D'Errico et al., 2018), cognitive engagement (Iqbal et al., 2022) and academic outcome (Sánchez-Álvarez et al., 2020). Unlike primary and secondary students who rely more heavily on teacher and family support to shine and perform. The unique role of social engagement in higher education has become even more important for international students and has profound impacts on their higher education experience. However, this perspective has often been criticized for lacking clarity in distinguishing and defining emotional dimensions consistently. Fredericks et al. (2004) pointed out the vagueness in the definition of terms in this perspective that brought about an overlapping of constructs (e.g., values and motivation), and similar terms being used between dimensions (e.g., academic efforts appear in both behavioral and cognitive measure).

### **Social Approaches to Student Engagement**

Knight (2013) defines social engagement as "social investment in the collegiate experience". Social engagement comprises both academic and non-academic activities as a channel to establish meaningful relationships with individuals and groups. Social engagement is closely related to affective engagement as both are a part of the healthy psychological functioning of students. A relational model suggested by Solomonides and Reid (2009) weighed students' sense of belonging at the center of student engagement, they argued that a sense of belonging is an interrelated but distinguished and more in-depth dimension compared to affective engagement. Despite some scholars who consider social engagement to be somewhat overlapping with the affective dimension, other bodies of literature argue that social engagement is distinctive more in terms of building academic relationships purposes with others through mutual interactions.

Indeed, some scholars pay attention to the benefits of student engagement in the social context whereas other researchers set their interest to explain social engagement. Geyer (2001) explains social engagement as "a subjectively undesirable separation from something outside oneself" (p.390). Tinto's (1975) influential work on student retention explicitly mentioned social and academic integration were the two decisive components that determine whether one could successfully integrate into a higher education academic



environment. The challenge of social and cultural bonding with other people is crucial for learning and development, whereby failing often results in school transfer, academic dropout, social isolation (McIntyre et al., 2018), and deterioration of well-being (Hoffman et al., 2002; McIntyre et al., 2018).

Supposedly, the affective experience could be present solely based on an individual perception and judgment. Academic social experience should have a distinctive sense of shared values, and interests, and a long-lasting continuous purposeful relationship. Corresponding to this, social engagement in higher education is found to be related to classroom interactions, a sense of inclusion is often initiated during classroom setting and manifested even after the academic activities. The absence of social relationships is an impediment sign of social inclusion and academic integration that signifies that the students are unable to build quality relationships with peers and academic staff in their higher education experience. Social engagement is important to all students in their higher education experience as it is related to building healthy relationships and well-being. However, it is noted that social engagement is not the more the merit types of things, at times if students focus too much on socializing, they may fail to catch up on the learning progress.

### **Cognitive Approaches to Student Engagement**

Research communities acknowledged that there were various ways to define cognitive engagement. The work of Schuetz (2008) on college students entailed cognitive engagement as a “state of interest, mindfulness, cognitive effort, and deep processing of new information” (p. 312). Some studies have affirmed that cognitive engagement was related to the degree of students’ perception of the importance of education (Amerstorfer & Freiin von Münster-Kistner, 2021; Mayordomo et al., 2022). Other researchers suggested cognitive engagement fluctuates and depends on the extent of the contextual situation. Rotgans and Schmidt (2011) hypothesized that individual feelings of autonomy have motivating effects that could affect the degree of cognitive engagement. Other academics suggest that cognitive engagement is relevant to the amount of psychological investment in working on a task (Barlow et al., 2020; Khan et al., 2023), while others recommend the duration time of persistence (Halverson & Graham, 2019; Shan, 2021).

Bloom and Krathwohl (2020) suggest cognitive engagement be described as mental skills that are related to attentive willingness and efforts that go beyond the requirements for the completion of academic tasks. The cognitive dimension of engagement illustrated by Fredricks et al. (2004) comprises psychological and cognitive elements. Fredricks and colleagues propose that learning by self-regulation and motivational goals are the two composites of psychological components to denote personal effort in comprehending difficult concepts and mastering academic tasks. Correspondingly, the cognitive component highlights deep and meaningful intellectual processing by applying a variety of learning strategies to organize academic pursuits. As such, the cognitive perspective has much to offer as it features the significance of the thinking process and distinguishes cognition from motivational behavior. Educationists who endorse this perspective argue that students achieve desirable academic outcomes by utilizing learning strategies on given tasks (e.g., Khademi Ashkzari et al., 2018; Yundayani et al., 2021).

They argue that cognitively engaged students will likely receive academic gains by strengthening their perception (e.g., value, belief, and academic aspiration) and cognitive skills (e.g., learning approach, and self-regulatory strategies). Lecture delivery and instructions are also critical factors that determine the students' cognitive engagement. Teaching at higher institutions often involves cognitively challenging content, that stimulates students to cognitively engage and learn about the content by simultaneously feeling the interest and challenge. Empirical studies have indicated that cognitive and behavioral engagements have a more directive impact on academic outcomes than affective engagement. Wistfully however, cognitive and affective engagement are more difficult to measure because of their unobservable nature (Adams et al., 2019; Wiggins et al., 2017). Nonetheless, the literature has pointed out that the inclusion of the cognitive component would certainly help to better understand student engagement.

### **Theorizing Student Engagement**

After establishing the importance of conceptualizing student engagement, it becomes essential to examine specific theories that provide frameworks for understanding how and why students become engaged. Two prominent theories in this domain are Astin's Theory of Involvement (TOI), which emphasizes the role of student behavior and effort, and the Self-Determination Theory (SDT), which highlights the importance of psychological needs and intrinsic motivation in fostering engagement.

### **Theory of Involvement (TOI)**

Astin's (1984) works on student engagement were grounded in a behavioral perspective. Astin's Theory of Involvement (TOI) conceptualizes student engagement with times and efforts that are invested into academically relevant activities. This does not mean that he denies the multifaceted aspect of student engagement but rather that he values behavior over other aspects for the observable and measurable characteristics. Astin (1984) made a rhetorical statement by claiming "It is not much what the individual thinks or feels, but what the individual does" (p. 519). His explanation was quite straightforward, students who are willing to spend more time on campus with other significant academics irrespective of peers, professors, or even faculty staff will likely bring forth academic gains whether it is academic or relevant activities.

Astin (1999) postulates that "student involvement refers to the amount of physical and psychological energy that the student devotes to the academic experience" (p. 518). The degrees of student engagement were expected to be determined by the quantity and quality that are devoted to academic pursuit. The TOI posits that the students' existing characteristics and their interaction with the academic environment are significant contributors to student engagement. Hooper et al. (1993) denote that personal characteristic is a very important factor in developing meaningful learning experiences. The findings from Astin's work indicated that on the subtle psychological level, a sense of attachment to the college will likely increase student engagement and promote retention of students in higher education.

The TOI is one of the most widely known theories for studying student engagement in higher education. Astin proposes an input-environment-output (IEO) model to explain the phenomenon of student engagement. The input-environment-output model consists of three elements, the student's characteristic which is labeled as a "pre-college" characteristic (e.g.,

gender, ethnicity, academic and social experience) is considered as the input element of the model. The environment component of the model refers to the sets of learning experiences at higher institutions (e.g., peer interaction, cultural experience, and co-curricular activities). The outcome element in the model is addressed to the set of post-college student characteristics (e.g., academic grade, cognitive, and emotional development) as the outcome of engagement. The input-environment-output model provided clues for the likelihood of affective and cognitive elements on student willingness and subsequent engagement behaviors.

The TOI postulates that the input component is expected to have a direct and indirect influence on the learning outcome since “pre-college” characteristics have a critical role to play in shaping the students’ interaction with their academic significant others in the academic environment. Thus, this offers a plausible explanation for why Deci and Ryan (1985) posit autonomy or self-determination as important in the Self-Determination Theory framework. When students perceive given choices or have the freedom to make individual decisions, they will be likely to stimulate the motivation to engage. The TOI asserts that student engagement is about being actively involved but the Self-Determination Theory is complementary and suggests that the state of active engagement was self-determined. The TOI contends that student engagement “enhances almost all aspects of the undergraduate student’s cognitive and affective development” (Astin, 1994, p. 398) and, therefore, manifests with behavioral engagement yet it also deliberates by emotion and cognitive involvement.

### **Self-Determination Theory (SDT)**

Academic motivation and student engagement require supportive environments to flourish. The Self-Determination Theory (SDT) encompasses six micro theories, the meta-theory posits that humans possess inherent growth tendencies and this collective quality of a human being endows the motivational foundation of student engagement. The motivational framework of the SDT proposes three universal basic psychological needs, namely, autonomy, competence, and relatedness which are prerequisites for optimal motivation development. Environmental factors such as teacher support and interaction with peers have a vital role in fulfilling these universal needs (Deci & Ryan, 2002; Deci et al., 1991). The SDT is distinctive from other motivational theories by identifying a variety of inner motivational resources that are possessed by all students, and providing suggestions to nurture, vitalize, and occupy these resources for high-quality student engagement (Niemi & Ryan, 2009).

Contrasting with the TOI which weighs heavily on the individual to participate in various curricular and non-curricular activities, the SDT posits that engagement experience and positive academic outcomes can be fostered through supportive environments. Not only has the SDT provided a visible idea of the important role of a supportive environment, but it has also pinpointed that scarcity of a supportive environment could undermine or thwart motivation and student engagement (Reeve et al., 2004; Ryan & Deci, 2000). Multiple studies from the literature have indicated that a positive teacher-student relationship fabricates a supportive environment to support and facilitate motivation and high-quality classroom engagement (e.g., Fredricks, 2014; Jang et al., 2012).

The Basic Psychological Needs Theory (BPNT), is one of the micro theories of the Self-Determination Theory that offers explanations as to why student engagement could at times



be inconsistent when satisfaction needs have not been met. The BPNT argues that the fulfillment of autonomy, competence, and relatedness need satisfaction are essential for student engagement, motivation, and well-being. In correspondence, Deci and Ryan (2000) outline a continuum of self-determination to explain the three types of motivation (intrinsic, extrinsic, and amotivation) in relation to social development and well-being. Intrinsic and extrinsic motivations are powerful sources that shape who we are and how we behave (Deci & Ryan, 2008). Figure 1 below illustrates the self-determination continuum ranging from “non-self-determined” to “self-determined”; at the right end of the spectrum lies the self-determined intrinsic motivation, and in the middle band lies the extrinsic motivation that is typically triggered by external stimulation, whereas on the flip side, amotivation represents a complete absent of motivation to engage in activities.

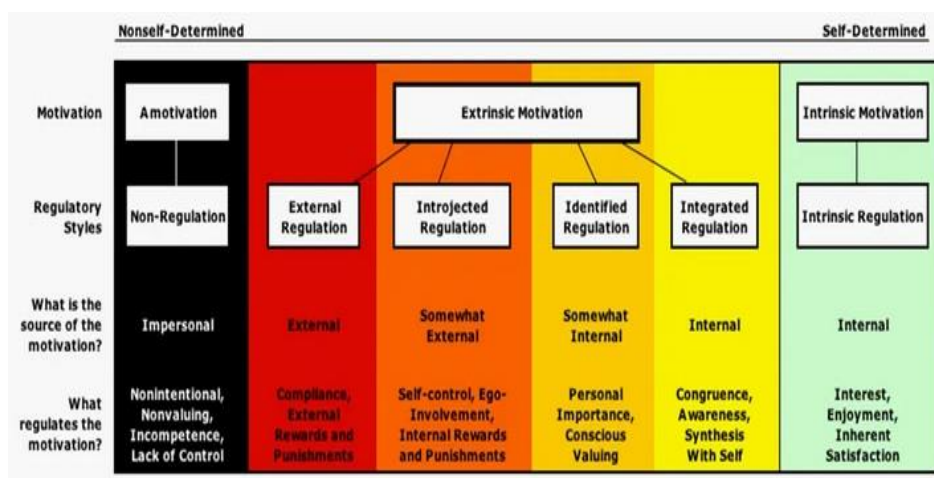


Figure 1: The Self-Determination Continuum (Ryan & Deci, 2000)

An interesting work by Saeed and Zyngier (2012) attempts to link the SDT framework and Schlechty’s (2001) engagement framework (Figure 2) to better understand the impacts of the different types of motivation on different types of student engagement. Each type of motivation corresponds to the respective type of engagement as both constructs have profound impacts on positive educational outcomes. Significantly, Saeed and Zyngier’s (2012) result was similar to Zyngier’s (2011) findings, which proposed that ritual engagement (involvement without internal value but external outcome) is associated with extrinsic motivation whereas intrinsic motivation is connected with authentic engagement (active involvement with clear meaning and value). Saeed and Zyngier’s study implies that motivation and engagement are two closely related constructs that are interrelated.

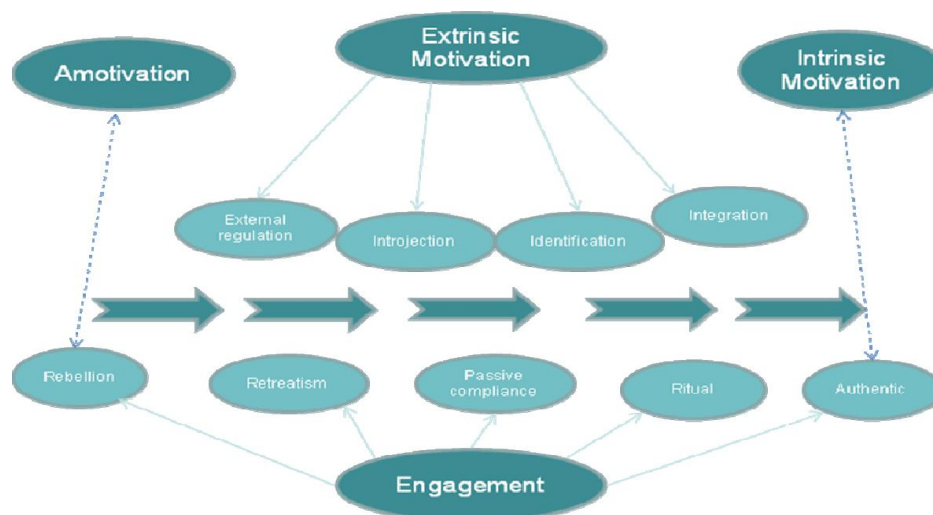


Figure 0: The Relationship between Motivation and Engagement Linking Ryan and Deci' SDT framework and Schlechty's engagement framework (Saeed & Zyngier, 2012)

Over 40 years of development, the SDT has become one of the most well-studied theories that is no longer limited to motivation research but has extended to student engagement studies. Student engagement is never a simple task, as the challenge involves more than just motivating the student. The SDT posits that motivation and engagement can be enhanced through satisfied autonomy, competence, and relatedness needs. Therefore, theories are needed to provide a guideline and directions in the attempt to sort out the contributory factors that have significant impact on student engagement. As such, the Self-determination theory offers both individual and collective justifications for theory and practice in both motivation and engagement.

### Discussion

A comprehensive and systematic study of student engagement should be guided by appropriate theoretical frameworks that are endowed with adequate guidelines and parameters to enrich understanding and improve educational outcomes. This paper focuses of two theories: Astin's (1994) Theory of Involvement (TOI) and Deci and Ryan's (1985) Self-Determination Theory (SDT), both are prominent theories in studying student engagement as well as complementary to one another. It is also important to identify the theoretical gaps within the influential Theory of Involvement and Self-Determination Theory. Although Astin's theory has originated from an earlier time it continues to hold relevance in contemporary studies (e.g., Ali & Hassan, 2018; Berry & Hammer, 2018; Hayman et al., 2022). However, there are several potential gaps in Astin's theory, despite its emphasis on the importance of quantity in engagement; it may not sufficiently address the quality of the engagement. Astin's theory, which was developed primarily in the context of American higher education, may not fully account for the cultural differences and variations in student involvement patterns across different countries and cultural contexts. However, with the excessive growth of online and blended learning environments, there is a gap in how Astin's theory could apply to student engagement in different settings. Similarly, this theory primarily focuses on traditional college students, understanding how the theory applies to non-traditional students, such as online or part-time learners is also one of the limitations of the theory.

The SDT is a macro theory for explaining motivation and engagement but it is not uncommon for a researcher to utilize its micro theories to give a more comprehensive understanding; this leaves an existing gap in exploring the interactions beyond its micro theories. The integration and interaction of the SDT with other student engagement theories have the potential to bridge this theoretical gap and yield a more comprehensive understanding of the interplay among the antecedents of student engagement. While the SDT emphasizes a supportive academic environment to induce motivation and engagement behavior, there is a gap in exploring the roles that are played by significant others, and the types of support from them that impact motivation and student engagement. Moreover, the Self-Determination Theory may not fully account for the influence of different contexts, such as cultural and academic settings. There is also a limitation in understanding how to apply this theory to online and blended learners compared to the traditional in-person classroom environment.

In the context of student engagement, the Theory of Involvement and the SDT complement one another effectively. Both theories emphasize the importance of student engagement in the educational process. The Theory of Involvement underscores the significance of students engaging in various academic and extracurricular activities, while the SDT focuses on the factors that promote and hinder motivation and engagement. Moreover, the SDT places a strong emphasis on fostering a supportive environment to meet students' basic psychological needs and promote motivation. On the other hand, while the Theory of Involvement does not explicitly focus on basic psychological needs and the driving forces of motivation, it acknowledges the significance of autonomous choices and active participation in educational experiences. In this regard, the SDT provides a framework for understanding the underlying motivations, while the Theory of Involvement helps to explain how this motivation can manifest into engagement experiences. Integrating these theories offers a more comprehensive approach to enhancing motivation and student engagement. Summatively, the SDT provides insights into the factors that drive academic motivation, while the Theory of Involvement offers guidance on creating opportunities for students to become more involved and engaged. It is important to highlight that, although many studies have employed the SDT framework as a guideline for student engagement research, Dincer and colleagues (2019) have argued that the role of engagement within the SDT framework is ambiguous within the learner's motivational system. Future research should aim to integrate diverse theoretical perspectives to more comprehensively capture the complexities of student engagement and its implications for educational practice.

### **Conclusion**

Student engagement can serve as a proxy for quality education and an alternative measure of academic performance. It is essential for improving educational practices, fostering student success, and creating a more inclusive and supportive learning environment. The concepts and theories of student engagement should be continually reviewed and refreshed, whether based on existing literature or new research. By developing a solid theoretical foundation around the concept of student engagement, educators and researchers can gain a deeper understanding of the factors that influence it and use this knowledge to enhance teaching methods, policies, and interventions that contribute to meaningful educational experiences.

## References

- Adams, D., Tan, M. H. J., Sumintono, B., & Oh, S. P. (2020). Blended learning engagement in public and private higher education institutions: A differential item functioning analysis of students' backgrounds. *Malaysian Journal of Learning and Instruction, 17*(1), 133-158.
- Ali, M., & Hassan, N. (2018) Defining concepts of student engagement and factors contributing to their engagement in schools. *Creative Education, 9*, 2161-2170. <https://doi.org/10.4236/ce.2018.914157>
- Amerstorfer, C. M., & Freiin von Münster-Kistner, C. (2021). Student perceptions of academic engagement and student-teacher relationships in problem-based learning. *Frontiers in psychology, 12*, 4978. <https://doi.org/10.3389/fpsyg.2021.713057>
- Appleton, J. J., Christenson, S. L., Kim, D., & Reschly, A. L. (2006). Measuring cognitive and psychological engagement: Validation of the Student Engagement Instrument. *Journal of School Psychology, 44*(5), 427-445.
- Archambault, I., Janosz, M., Morizot, J., & Pagani, L. (2009). Adolescent behavioral, affective, and cognitive engagement in school: Relationship to dropout. *Journal of school Health, 79*(9), 408-415.
- Astin, A. W. (1999), originally published July 1984. Student Involvement: A developmental theory for higher education. *Journal of College Student Personnel, 25*, 518-529.
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of college student personnel, 25*(4), 297-308.
- Astin, A. W. (1994). *What matters in college: Four critical years revisited*. Jossey-Bass.
- Astleitner, H. (2018). Multidimensional Engagement in Learning--An Integrated Instructional Design Approach. *Journal of Instructional Research, 7*, 6-32.
- Axelson, R. D., & Flick, A. (2011). Defining student engagement. *Change: The magazine of higher learning, 43*(1), 38-43.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Barlow, A., Brown, S., Lutz, B., Pitterson, N., Hunsu, N., & Adesope, O. (2020). Development of the student course cognitive engagement instrument (SCCEI) for college engineering courses. *International Journal of STEM Education, 7*(1), 1-20.
- Berry, A., & Hammer, E. (2018). The relationship of accreditation and student engagement in a college of business: An internal, multi-year comparison of high impact practices. *The International Journal of Management Education, 16*(1), 43-51.
- Bloom, B. S., & Krathwohl, D. R. (2020). *Taxonomy of educational objectives: The classification of educational goals. Book 1, Cognitive domain*. Longman.
- Bowden, J. L. H., Tickle, L., & Naumann, K. (2021). The four pillars of tertiary student engagement and success: a holistic measurement approach. *Studies in Higher Education, 46*(6), 1207-1224.
- Bryson, C. & Hand, L. (2007). The role of engagement in inspiring teaching and learning. *Innovations in Education & Teaching International, 44*(4), 349-362.
- Burgos-Videla, C., Jorquera-Gutiérrez, R., López-Meneses, E., & Bernal, C. (2022). Life Satisfaction and Academic Engagement in Chileans Undergraduate Students of the University of Atacama. *International Journal of Environmental Research and Public Health, 19*(24), 16877. <https://doi.org/10.3390/ijerph192416877>
- Chickering, A. W., & Gamson, Z. F. (1989). Seven principles for good practice in undergraduate education. *Biochemical Education, 17*(3), 140-141.

- Chickering, A. W., & Kuh, G. D. (2005). *Promoting student success: Creating conditions so every student can learn* (Occasional Paper No. 3). Indiana University Center for Postsecondary Research.
- Chin, W. M., & Ahmad, N. A. (2019). Engage more, achieve less? The relationship between student engagement and academic achievement among juvenile delinquents at Malaysia correctional institutions. *International Journal of Academic Research in Progressive Education and Development*, 8(4), 355–371.
- Christie, A., Jordan, P., Troth, A., & Lawrence, S. (2007). Testing the links between emotional intelligence and motivation. *Journal of Management & Organization*, 13(3), 212–226. <https://doi.org/10.5172/jmo.2007.13.3.212>
- Coates, H. (2005). The value of student engagement for higher education quality assurance. *Quality in Higher Education*. II (1), 25–36.
- D'Errico, F., Paciello, M., De Carolis, B., Vattani, A., Palestra, G., & Anzivino, G. (2018). Cognitive emotions in e-learning processes and their potential relationship with students' academic adjustment. *International Journal of Emotional Education* 10(1), 89–111.
- Deci, E. L., & Ryan, R. M. (2002). *Handbook of self-determination research*: University Rochester Press.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. Springer Science & Business Media. <https://doi.org/10.1007/978-1-4899-2271-7>
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macro theory of human motivation, development, and health. *Canadian Psychology / Psychologie canadienne*, 49(3), 182–185. <https://doi.org/10.1037/a0012801>
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. doi:10.1207/S15327965PLI1104\_01.
- Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational psychologist*, 26(3-4), 325–346.
- Dincer, A., Yeşilyurt, S., Noels, K. A., & Vargas Lascano, D. I. (2019). Self-determination and classroom engagement of EFL learners: A mixed-methods study of the self-system model of motivational development. *SAGE Open*, 9(2), 1–15 <https://doi.org/10.1177/2158244019853913>
- Donoso González, M., Talavera-Velasco, B., & Uceda Gutiérrez, S. (2020). The role of engagement and temporal perspective in the academic performance of postgraduate students. *Physiology & behavior*, 224, 113054. <https://doi.org/10.1016/j.physbeh.2020.113054>
- Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research*, 59, 117–142. <https://doi.org/10.3102/00346543059002117>
- Fredricks, J. A. (2014). *Eight Myths of Student Disengagement: Creating Classrooms of Deep Learning*. Corwin.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59–109. <https://doi.org/10.3102/00346543074001059>
- Geyer, F. (2001). Sociology of alienation. In *International encyclopedia of the social & behavioral sciences*, ed. N.J. Smelser and P.B. Baltes, 388–92. Pergamon.



- Halverson, L. R., & Graham, C. R. (2019). Learner engagement in blended learning environments: A conceptual framework. *Online Learning, 23*(2), 145-178.
- Hayman, R., Wood, M., Wharton, K., & Shotton, L. (2022). Supporting the integration of first-year undergraduate widening participation sport students into university: the role of online programme induction. *SN social sciences, 2*(12), 268.  
<https://doi.org/10.1007/s43545-022-00574-7>
- Hoffman, M., Richmond, J., Morrow, J., & Salomone, K. (2002). Investigating "Sense of Belonging" in First-Year College Students. *Journal of College Student Retention: Research, Theory & Practice 4*(3), 227–256.
- Hooper, S., Temiyakarn, C., & Williams, M. D. (1993). The effect of cooperative learning and learner control on high- and average-ability students. *Educational Technology Research and Development, 41*(2), 5-18.
- Horstmanshof, L., & Zimitat, C. (2007). Future time orientation predicts academic engagement among first-year university students. *British Journal of Educational Psychology, 77*(3), 703-718.
- Iqbal, J., Asghar, M. Z., Ashraf, M. A., & Yi, X. (2022). The impacts of emotional intelligence on students' study habits in blended learning environments: The mediating role of cognitive engagement during COVID-19. *Behavioral sciences (Basel, Switzerland), 12*(1), 14. <https://doi.org/10.3390/bs12010014>
- Jaiswal, A., Magana, A. J., & Ward, M. D. (2022). Characterizing the identity formation and sense of belonging of the students enrolled in a data science learning community. *Education Sciences, 12*(10), 731.
- Jang, H., Kim, E., & Reeve, J. (2012). Longitudinal test of Self-Determination Theory's motivation mediation model in a naturally occurring classroom context. *Journal of Educational Psychology, 104*(4), 1175-1188. <https://doi.org/10.1037/a0028089>
- Jimerson, S. R., Campos, E., & Grief, J. L. (2003). Toward an understanding of definitions and measures of school engagement and related terms. *California School Psychologist, 8*, 7–27.
- Kahu, E., Stephens, C., Leach, L., & Zepke, N. (2015). Linking academic emotions and student engagement: Mature-aged distance students' transition to university. *Journal of Further and Higher Education, 39*(4), 481-497.
- Kezar, A., & J. Kinzie. (2006). Examining the ways institutions create student engagement: The role of mission. *Journal of College Student Development 47*, 149–72.
- Khademi Ashkzari, M., Piryaeei, S., & Kamelifar, L. (2018). Designing a causal model for fostering academic engagement and verification of its effect on educational performance. *International Journal of Psychology, 12*(1), 136-161.
- Khan, H., Gul, R., & Zeb, M. (2023). The effect of students' cognitive and emotional engagement on students' academic success and academic productivity. *Journal of Social Sciences Review, 3*(1), 322-334.
- Knight, E. M. (2013). Aligning the curriculum of the human resources management undergraduate courses at an English-speaking university in the Caribbean with the university's 2012–2017 strategic plan. *Global Business and Economics Research Journal, 2*(8), 61-86.
- Korhonen, V., Mattsson, M., Inkinen, M., & Toom, A. (2019). Understanding the multidimensional nature of student engagement during the first year of higher education. *Frontiers in psychology, 10*, 1056.

- Krause, K. (2005) Understanding and promoting student engagement in university learning communities. Paper presented as keynote address: *Engaged, Inert or Otherwise Occupied? Deconstructing the 21st Century Undergraduate Student* at the James Cook University, Townsville/Cairns, Queensland, Australia, 21–22 September.
- Krause, K. L., & Coates, H. (2008). Students' engagement in first-year university. *Assessment & Evaluation in Higher Education*, 33(5), 493–505. <https://doi.org/10.1080/02602930701698892>
- Kuh, G. D. (2009). The National Survey of Student Engagement: Conceptual and empirical foundations. *New Directions for Institutional Research*, 141, 5–20.
- Kuh, G. D. (2009). What student affairs professionals need to know about student engagement. *Journal of College Student Development*. 50(6), 683-706.
- Kuh, G. D., Cruce, T. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *Journal of Higher Education*, 79(5), 540-563. <https://doi.org/10.1353/jhe.0.0019>
- Lester, D. (2013). A review of the student engagement literature. *Focus on Colleges, Universities, and Schools*, 7(1), 1–8.
- Mayordomo, R. M., Espasa, A., Guasch, T., & Martínez-Melo, M. (2022). Perception of online feedback and its impact on cognitive and emotional engagement with feedback. *Education and Information Technologies*, 27(6), 7947-7971.
- McIntyre, J. C., Worsley, J., Corcoran, R., Woods, P. H., & Bentall., R. P. (2018). Academic and non-academic predictors of student psychological distress: The role of social identity and loneliness. *Journal of Mental Health* 27(3), 230–239.
- Mehdinezhad, V. (2011). First year students' engagement at the university. *International Online Journal of Educational Sciences*, 3(1), 47-66.
- Montenegro, A. (2017). Understanding the concept of agentic engagement for learning. *Colomb. Appl. Linguist. J.*, 19(1), 117-128.
- Nawi, S. M., Yusof, S. M., Kamaludin, P. N. H., & Sain, N. (2021). Exploring Malaysian tertiary students' behavioural, cognitive, emotional and social engagement and disengagement in ODL. *International Journal of Academic Research in Business and Social Sciences*, 11(4), 1296–1311.
- Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education*, 7(2), 133-144. <https://doi.org/10.1177/1477878509104318>
- Niittyalahti, S., Annala, J., & Mäkinen, M. (2023). Student engagement profiles in vocational education and training: a longitudinal study. *Journal of Vocational Education & Training*, 75(2), 372-390.
- Pike, G. R. & Kuh, G. D. (2005). A typology of student engagement for American colleges and universities. *Research in Higher Education*, 46(2), 185-209. <https://doi.org/10.1007/s11162-004-1599-0>
- Reeve, J. (2012). A self-determination theory perspective on student engagement. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (149–172). Springer US.
- Reeve, J., Deci, E., & Ryan, R. (2004). Self-determination theory: A dialectical framework for understanding socio cultural influences on student motivation. In D. M. McInerney & S. VanEtten (Series and Vol. Eds.) *Research on socio cultural influences on motivation and learning: Vol. 4. Big theories revisited* (31-59). Information Age Publishing.

- Reeve, J., & Tseng, C. (2011). Agency as a fourth aspect of students' engagement during learning activities. *Contemporary Educational Psychology*, 36(4), 257-267.
- Reschly, A. L., & Christenson, S. L. (2006). Prediction of dropout among students with mild disabilities: A case for inclusion of student engagement variables. *Remedial and Special Education*, 27, 276–292.
- Rotgans, J. I., & Schmidt, H. G. (2011). Cognitive engagement in the problem-based learning classroom. *Advances in health sciences education: theory and practice*, 16(4), 465–479. <https://doi.org/10.1007/s10459-011-9272-9>
- Ryan, R. M., & Deci, E. L. (2009). Promoting self-determined school engagement: Motivation, learning, and well-being. In K. R. Wentzel & A. Wigfield (Eds.), *Handbook on motivation at school*. (pp. 171-196). Routledge.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Saeed, S., & Zyngier, D. (2012). How motivation influences student engagement: A qualitative case study. *Journal of Education and Learning*, 1(2), 252 - 267.
- Sánchez-Álvarez, N., Berrios Martos, M. P., & Extremera, N. (2020). A meta-analysis of the relationship between emotional intelligence and academic performance in secondary education: A multi-stream comparison. *Frontiers in psychology*, 11, 1517. <https://doi.org/10.3389/fpsyg.2020.01517>
- Sandeen, A. (2003). *Enhancing student engagement on campus*. University Press of America.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness studies*, 3, 71-92.
- Schuetz, P. (2008). A theory-driven model of community college student engagement. *Community College Journal of Research and Practice*, 32(4–6), 305–324.
- Shan, L. İ. (2021). Measuring cognitive engagement: An overview of measurement instruments and techniques. *International Journal of Psychology and Educational Studies*, 8(3), 63-76.
- Skinner, B. F. (1990). Can psychology be a science of mind? *American Psychologist*, 45(11), 1206–1210. <https://doi.org/10.1037/0003-066X.45.11.1206>
- Skinner, E. A., Furrer, C., Marchand, G., & Kindermann, T. (2008). Engagement and disaffection in the classroom: part of a larger motivational dynamic? *Journal of Educational Psychology*, 100(4), 765-781. <https://doi.org/10.1037/a0012840>
- Solomonides, I., & Reid, A. (2009). Understanding the relationships between student identity and engagement with studies. Paper presented at Higher Education Research and Development Society of Australasia conference, July 6–9, in Darwin.
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89–125. <https://doi.org/10.3102/00346543045001089>
- Waite, C., Walsh, L., & Black, R. (2023). Negotiating senses of belonging and identity across education spaces. *The Australian Educational Researcher*, 1-16.
- Wang, M. T., Chow, A., Hofkens, T., & Salmela-Aro, K. (2015). The trajectories of student emotional engagement and school burnout with academic and psychological development: Findings from Finnish adolescents. *Learning and Instruction*, 36, 57-65.
- Watson, J. B. (1913). Psychology as the behaviorist views it. *Psychological Review*, 20, 158–177.

- Wigfield, A., Guthrie, J. T., Perencevich, K. C., Taboada, A., Klauda, S. L., & McRae, A. (2008). Role of reading engagement in mediating the effects of reading comprehension instruction on reading outcomes. *Psychology in the Schools, 45*, 432–445. <https://doi.org/10.1002/pits.20307>.
- Wiggins, B. L., Eddy, S. L., Wener-Fligner, L., Freisem, K., Grunspan, D. Z., Theobald, E. J., Timbrook, J., & Crowe, A. J. (2017). ASPECT: A Survey to Assess Student Perspective of Engagement in an Active-Learning Classroom. *CBE life sciences education, 16*(2), ar32. <https://doi.org/10.1187/cbe.16-08-0244>
- Xiao, Y. (2020). A Study of Sophomore Dilemma Based on Students' Engagement. *Asian Journal of Education and Social Studies, 10*(1), 54-60. <https://doi.org/10.9734/ajess/2020/v10i130261>
- Xie, J. (2021). The effects of boredom on EFL learners' engagement. *Frontiers in psychology, 12*, 743313. <https://doi.org/10.3389/fpsyg.2021.743313>
- Yamamoto, K. (Ed.). (1968). *The college student and his culture: An analysis*. Houghton Mifflin Company.
- Yundayani, A., Abdullah, F., Tandiana, S. T., & Sutrisno, B. (2021). Students' cognitive engagement during emergency remote teaching: Evidence from the Indonesian EFL milieu. *Journal of Language and Linguistic Studies, 17*(1), 17-33.
- Zhao, Y., & Yang, L. (2022). Examining the relationship between perceived teacher support and students' academic engagement in foreign language learning: Enjoyment and boredom as mediators. *Frontiers in Psychology, 13*, 987554. <https://doi.org/10.3389/fpsyg.2022.987554>
- Zyngier, D. (2011). (Re) conceptualising risk: left numb and unengaged and lost in a no-man's-land or what (seems to) work for at-risk students. *International Journal of Inclusive Education, 15*(2) 211-231. <http://dx.doci.org/10.1080/13603110902781427>