

The Effect of Providing Extrinsic and Intrinsic Motivation on Student Learning Difficulties

Darman Manda^{1*}

^{1*} Universitas Negeri Makassar, Indonesia

Article Info

Keywords:

Extrinsic
Motivation;
Intrinsic
Motivation;
Learning
Difficulties;
Junior High
School Students

ABSTRACT

This study aims to understand the combined effect of extrinsic and intrinsic motivation on students' learning difficulties at the junior secondary school level. This research uses a qualitative approach with a case study method. The informants consisted of 10 people, including students with learning difficulties, subject teachers, guidance and counselling (BK) teachers, and parents. Data were collected through in-depth interviews and participant observation in the classroom to see the implementation of motivational strategies in the learning process. Interviews were conducted to obtain informants' perspectives on motivation and learning difficulties. Data were analysed using thematic analysis method and data triangulation to ensure the validity of the findings. The results show that the combination of extrinsic motivation, such as rewards and praise, with intrinsic motivation, such as curiosity and personal interest, can have a significant synergistic effect in reducing students' learning difficulties. This research is expected to contribute to the literature on motivation in educational contexts and provide practical guidance for educators in developing effective motivational strategies to support students with learning difficulties.

Informasi Artikel

Kata Kunci:

Motivasi
Ekstrinsik;
Motivasi
Intrinsik;
Kesulitan
Belajar; Siswa
SMP

ABSTRAK

Penelitian ini bertujuan untuk memahami pengaruh gabungan motivasi ekstrinsik dan intrinsik terhadap kesulitan belajar siswa di tingkat Sekolah Menengah Pertama (SMP). Penelitian ini menggunakan pendekatan kualitatif dengan metode studi kasus. Informan terdiri dari 10 orang, termasuk siswa yang mengalami kesulitan belajar, guru mata pelajaran, guru bimbingan dan konseling (BK), serta orang tua siswa. Data dikumpulkan melalui wawancara mendalam dan observasi partisipan di kelas untuk melihat penerapan strategi motivasi dalam proses pembelajaran. Wawancara dilakukan untuk mendapatkan perspektif informan tentang motivasi dan kesulitan belajar. Analisis data dilakukan menggunakan metode analisis tematik dan triangulasi data untuk memastikan validitas temuan. Hasil penelitian menunjukkan bahwa kombinasi motivasi ekstrinsik, seperti penghargaan dan pujian, dengan motivasi intrinsik, seperti rasa ingin tahu dan minat pribadi, dapat memberikan efek sinergis yang signifikan dalam mengurangi kesulitan belajar siswa. Penelitian ini diharapkan dapat memberikan kontribusi terhadap literatur mengenai motivasi dalam konteks pendidikan serta memberikan panduan praktis bagi pendidik dalam mengembangkan strategi motivasi yang efektif untuk mendukung siswa dengan kesulitan belajar.

Article History

Received: 6 Desember 2023
Accepted: 14 Desember 2023
Published: 20 Desember 2023

DOI:

* Corresponding Author: darmanmanda@unm.ac.id

1. INTRODUCTION

Motivation is one of the main factors that influence students learning success (Filgona, Sakiyo, Gwany, & Okoronka, 2020; Thariq, Kuswandi, Diana, & Shelinawati, 2019). There are two main types of motivation: extrinsic and intrinsic. Extrinsic motivation relates to encouragement from outside the individual, such as reward or threat of punishment, while intrinsic motivation comes from within the individual, such as curiosity and enjoyment in learning (Bhaduri & Kumar, 2011; Filgona et al., 2020; Malone & Lepper, 2021). Learning difficulties are a frequent problem faced by students and can have a negative impact on their academic performance and psychological well-being (Chitiyo & Pietrantonio, 2019; Morales-Rodríguez, Espigares-López, Brown, & Pérez-Mármol, 2020). Understanding the influence of different types of motivation on learning difficulties is crucial to improving the learning process.

Students commonly face challenges in their studies that can have effects on both performance and overall well being (Akkermans, Paradniké, Van der Heijden, & De Vos, 2018; Sverdlik, Hall, McAlpine, & Hubbard, 2018; Zee & Koomen, 2016). These difficulties may stem from emotional, social or environmental factors. Frequently result in decreased motivation and engagement with the learning process. Understanding how forms of motivation influence these challenges is vital, for improving learning experiences and providing tailored assistance to students.

Research on motivation in educational contexts has produced important findings regarding the influence of extrinsic and intrinsic motivation on student achievement. According to (Trevino & DeFreitas, 2014) intrinsic motivation arising from curiosity and enjoyment in learning has a close relationship with increased engagement and long-term academic performance. Intrinsic motivation encourages students to be more active in the learning process, improving their critical thinking skills and creativity. On the other hand, extrinsic motivation derived from external rewards such as prizes or the threat of punishment can improve academic performance in the short term. However, some studies have shown that over-reliance on extrinsic motivation can reduce intrinsic motivation and result in decreased interest in learning when external rewards are no longer provided (Attig & Franke, 2019; John et al., 2023; Oudeyer, Gottlieb, & Lopes, 2016).

Although much research has studied the impact of the two types of motivation separately, little has explored how a combination of extrinsic and intrinsic motivation can work together to overcome learning difficulties. Research by Ryan and Deci (2000) highlights that combining these two types of motivation can create a synergistic effect where external rewards are used to build positive habits in learning which are then supported by intrinsic motivation (Amabile, 1993; M. A. R. Malik, Choi, & Butt, 2019; Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004). However, empirical evidence on the effectiveness of the combination in the context of students' learning difficulties is limited.

Some research suggests that the effect of a combination of extrinsic and intrinsic motivation may vary depending on the specific situation and individual characteristics of students, such as their age, maturity level and learning environment. The main question to focus on in this study is: 'What is the effect of combined extrinsic and intrinsic motivation on students' learning difficulties at junior secondary school level?' The purpose of this study is to investigate and understand the impact of the combination of extrinsic and intrinsic motivation on learning difficulties experienced by students at junior secondary school level. It is hoped that the results of this study will provide a new perspective on effective motivational strategies to support students with learning difficulties and contribute to the literature on motivation in educational contexts.

There is a significant lack of information in the research regarding an in-depth understanding of how a combination of extrinsic and intrinsic motivation can be effectively applied to overcome learning difficulties. While it is recognised that both types of motivation have their own advantages, the lack of research exploring the combined impact of these two types of motivation raises the need for a more detailed and comprehensive study. This research aims to fill this gap by investigating how a combination of extrinsic and intrinsic motivation can be used to reduce learning difficulties among junior high school students, while understanding the factors that influence its effectiveness. It is hoped that the results of this study can make an important contribution to the literature on motivation in education as well as provide practical guidelines for educators in designing more effective motivational strategies.

2. METHOD

This research applied a qualitative case study approach to understand the impact of extrinsic and intrinsic motivation on learning difficulties among students. The study group consisted of students in grades 7-9 in three junior high schools in Makassar City, with informants selected by purposive sampling, involving students who experienced learning difficulties, subject teachers, counselling teachers, and parents. Data were collected through in-depth interviews with students, subject teachers, counselling teachers and parents to understand their perspectives on motivation and learning difficulties. In addition, participant observation was conducted in the classroom to observe the application of motivational strategies in the learning process. The collected data was analysed using thematic analysis and data triangulation methods to ensure the validity of the findings. It is hoped that the results of this study can provide an in-depth understanding of the role of motivation in overcoming student learning difficulties and provide recommendations for educators and educational policy makers.

3. RESULT AND DISCUSSION

A. Learning Difficulties

Learning difficulties have a significant impact on students' academic progress and social relationships. Learning difficulties can cause a drastic decline in academic performance (Cortiella & Horowitz, 2014; Curcio, Ferrara, & De Gennaro, 2006; R. S. Malik, 2018). Students who experience learning difficulties often fall behind in understanding the subject matter, so they lag behind in following the curriculum and achieving learning objectives. In addition, they may also struggle to interact with peers due to a lack of confidence and shame over their shortcomings. This can lead to social isolation and a lack of positive interactions with peers, which is important for their social development. Furthermore, students with learning difficulties often feel afraid and reluctant to participate in the classroom learning process (Hamouda, 2013; Quinlan, Bates, & Angell, 2012). They may become passive and prefer to remain silent, avoiding attention to avoid being recognised for their difficulties. These impacts not only hinder students' academic progress but also interfere with their psychological and emotional well-being, creating a learning environment that does not support their optimal growth.

Learning difficulties can also have a profound psychological impact on students. The fear and embarrassment of not being able to understand a lesson can reduce a student's motivation and interest in learning. When students feel unable to achieve academic expectations, they may experience stress, anxiety and even depression (Chernomas &

Shapiro, 2013; Kumar et al., 2019). This can make learning difficulties worse, forming a vicious cycle that is difficult to break without appropriate intervention.

In addition, learning difficulties can have an impact on students' self-view and overall education. Students may begin to develop negative perceptions of their intellectual abilities, which can affect their self-esteem and confidence. Feelings of hopelessness and inability to succeed in an academic environment can make students lose hope and faith in their future. They may feel that their efforts will not pay off, reducing their motivation to study hard.

In the long term, the impact of untreated learning difficulties can affect students' educational attainment. Students who experience persistent academic failure tend to have higher dropout rates and lower chances of continuing their education to the next level. This can limit their career opportunities and narrow their future life choices. Therefore, it is important to recognise and address learning difficulties early by providing the right motivation and support from teachers, parents and the educational environment.

B. Motivation

Motivation is a strong reason to do something (Copp, 1997; Parfit & Broome, 1997). Motivation can come from anywhere, such as the closest people, motivators, and others. Motivation comes from the Latin word 'movore', which means motion or urge to move, and in English 'motive', which means motive power or reason. However, only oneself can make the decision to take action.

Motivation comes from the Indonesian word 'motive', which means the effort that drives someone to do something (Handayani, 2019; Matondang, 2018). Motive is the basis of the word 'motivation', which can also be defined as a driving force that has been active. Therefore, motivation can be defined as everything that drives or encourages a person's behaviour to meet their needs.

According to the Big Indonesian Dictionary (KBBI), motivation is an impulse that arises in a person consciously or unconsciously to perform an action with a specific purpose (Indonesia, 2018). Meanwhile, in psychology, motivation is an effort that can encourage a person or group of people to do something because they want to achieve their desired goals or get satisfaction from their actions (Kanfer, 1990; Seven, 2020).

The influence of a person's needs and desires on the intensity and direction that drives them to achieve certain goals is called motivation. According to Mc. Donald, quoted by Emda (2018), motivation is a change in energy within a person characterised by affective arising and reaction to achieve goals. It is also a drive from within a person, and this drive functions as a driver. Therefore, motivation as a person's inner or psychological process is strongly influenced by external factors (environment), as well as internal factors (innate), level of education, past experience, desire, or future expectations, and one's level of education.

Meanwhile, (Filgona et al., 2020) describes learning motivation as 'The overall driving force within students that gives rise to learning activities, which ensures the continuity of learning activities and provides direction to learning activities, so that the goals desired by the learning subject can be achieved.

Learning motivation is the drive of students to achieve certain learning goals, such as understanding material or development. With this motivation, students will continue to learn without being forced.

Motivation in education can be defined as the drive to do something, such as learning. This can be achieved by organising the learning environment and learning activities so that the child's potential can be realised. Motivation is divided into two types, namely intrinsic motivation and extrinsic motivation. This study will explain the intrinsic motivation and extrinsic motivation that influence junior high school students in three schools in Makassar city.

1. Extrinsic Motivation

Motivation that is active and functions due to external stimuli is called extrinsic motivation (Locke & Schattke, 2019; Robinson et al., 2012; Vallerand, 2007). For example, someone studies because they know that there is an exam tomorrow morning, and they hope to get a good grade or a prize. Therefore, when seen from the point of view of the purpose of the activity it performs, it is not directly related to the essence of that activity.

The motivation that drives students to learn is referred to as extrinsic motivation. Encouragement from this external source is not directly related to learning activities; for example, students who study hard to get a prize that has been promised by their parents; school rules and regulations; role models from parents and teachers; and so on are some examples of external sources of motivation that can encourage students to learn.

External motivation plays an important role in encouraging junior high school students to achieve certain academic goals and be actively involved in teaching and learning activities. One form of outcome motivation that is often used is the provision of awards or prizes. These types of rewards include certificates, medals, physical gifts or public recognition for academic achievement or participation in school activities. Such rewards provide a positive boost to students, making them feel appreciated and recognised for the effort they have put in. A subject teacher named Mrs. Eni (pseudonym) stated "Students are significantly encouraged when they realise that their efforts will be rewarded with praise. This encourages them to work harder and achieve better results"

Besides rewards, extrinsic motivation can also be provided through appreciation or positive feedback from the teacher. Praise given correctly and sincerely can boost students' self-confidence and encourage their spirit of endeavour. Positive feedback from teachers not only tells students that they are performing well, but also helps them identify areas for improvement. In an interview, a student named Lila (pseudonym) revealed "I feel more motivated when I get praise from my teacher for my work. It makes me even more eager to excel in the future". The implementation of a point or token system is also an effective form of extrinsic motivation among junior high school students.

This system operates by awarding points or tokens for every positive task or behaviour that students successfully perform. The points can then be redeemed for various prizes, such as stationery, books, or the opportunity to participate in activities that they enjoy. A guidance and counselling teacher named Mr. Topan (pseudonym) stated "Giving points helps students realise that every effort they make is appreciated and there is a reward. It is effective in encouraging them to maintain positive behaviour and good study habits".

Pressure or threat of punishment is also a form of extrinsic motivation, although it is often debated in the educational context. The threat of punishment, such as a drop in grades, extra assignments, or loss of certain privileges, can force students to meet certain academic or behavioural standards. However, the use of the threat of punishment should be done with caution as it can create a stressful learning environment and reduce students' intrinsic motivation. One parent named Mrs. Suci (pseudonym) said "I prefer if my child is motivated by praise and rewards rather than the threat of punishment. I believe that a positive approach is more effective in the long run".

With an understanding of the different forms of extrinsic motivation and their impact on junior high school students, educators can design more effective strategies to encourage students to reach their academic potential. The right combination of rewards, praise, point systems, and if necessary the threat of punishment can help create a supportive learning environment and motivate students to continue learning and developing.

2. Intrinsic motivation

According to (Leonard, Serneels, & Brock, 2013) intrinsic motivation is the urge to act that comes from within (internal) a person. After the activity has achieved the expected results of the activity, people who are driven by new intrinsic motivation will feel satisfied. According to Gunarsa (2008), intrinsic motivation is a strong drive or will that comes from within a person. The stronger a person's intrinsic motivation, the more likely a person will take strong action to achieve their goals. Motivation that is active or functioning does not need to be stimulated from an outside source, because the urge to do something already exists in everyone. This is known as intrinsic motivation. One example is someone who enjoys reading does not need to be forced or encouraged to do so; he or she is already avidly reading books to read on their own.

Intrinsic motivation is a drive that comes from within the individual, such as curiosity, interest and enjoyment in learning. One example of intrinsic motivation that is prevalent in junior high school students is their curiosity about the subject matter. When students feel interested in the topic being taught, they tend to participate more actively in class and explore the material further outside of class hours. One teacher named Mr. Rifki (pseudonym) revealed, "When I relate the subject matter to students' daily lives, they become more interested and want to know more. This curiosity encourages them to learn with passion".

In addition to curiosity, students' personal interest in a particular subject is also a strong form of intrinsic motivation. Students who have a special interest in a particular subject, such as science or art, generally show higher engagement and better academic achievement. In an interview, one student named Rio (pseudonym) stated "I really like biology because I am interested in animals and plants. My interest makes me more eager to learn and I often read additional books on the topic at home". This deep interest makes the learning process more enjoyable and satisfying for students. Learners who derive pleasure and satisfaction from the learning process itself also signal a high level of intrinsic motivation.

When students enjoy challenges and feel proud of their achievements, they tend to persevere more in the face of difficulties. According to a guidance and counselling teacher named Mrs. Lili (pseudonym) said that "Students who feel happy when successfully completing difficult tasks are usually more motivated to continue learning. They see learning

as fulfilling and fun". These positive experiences increase intrinsic motivation and encourage students to keep trying.

Autonomy or freedom in choosing how to learn is also an important factor in intrinsic motivation. If students are given the opportunity to choose their own learning methods or topics, they tend to be more enthusiastic and active. One student named Kiki (pseudonym) said "I like it when the teacher gives us projects and we get to choose the topics we want to study. I feel more responsible and motivated to achieve". This freedom gives students control over their learning and increases their engagement and dedication to the task.

With an understanding of the different forms of intrinsic motivation and their impact on junior high school students, educators can design more effective and engaging teaching strategies. Creating a learning environment that supports students' curiosity, personal interest, enjoyment of learning and autonomy can help increase their intrinsic motivation. This approach will not only help students achieve their academic potential, but also shape a positive attitude towards lifelong learning.

4. CONCLUSION

Motivation plays a key role in student learning success, with both extrinsic and intrinsic motivation playing an important role. Incorporating rewards, praise and granting autonomy in the learning process can create a powerful synergistic impact in overcoming learning challenges. Students who feel motivated, whether by external encouragement or personal interest, tend to show higher levels of academic engagement and achievement.

Recommendations for educators are to design teaching strategies that integrate aspects of extrinsic and intrinsic motivation, create learning environments that encourage student curiosity, and provide training to teachers in providing positive feedback. Support from parents also plays an important role in shaping a positive learning environment at home. Further research is needed to deepen the understanding of how this combination of motivations can be effectively applied in various educational contexts. With this approach, it is hoped that students can achieve their academic potential and develop a positive attitude towards lifelong learning.

5. REFERENCES

- Akkermans, J., Paradniké, K., Van Der Heijden, B. I. J. M., & De Vos, A. (2018). The Best Of Both Worlds: The Role Of Career Adaptability And Career Competencies In Students' Well-Being And Performance. *Frontiers In Psychology, 9*, 1678.
- Amabile, T. M. (1993). Motivational Synergy: Toward New Conceptualizations Of Intrinsic And Extrinsic Motivation In The Workplace. *Human Resource Management Review, 3*(3), 185–201.
- Attig, C., & Franke, T. (2019). I Track, Therefore I Walk—Exploring The Motivational Costs Of Wearing Activity Trackers In Actual Users. *International Journal Of Human-Computer Studies, 127*, 211–224.
- Bhaduri, S., & Kumar, H. (2011). Extrinsic And Intrinsic Motivations To Innovate: Tracing The Motivation Of 'Grassroot' Innovators In India. *Mind & Society, 10*, 27–55.
- Chernomas, W. M., & Shapiro, C. (2013). Stress, Depression, And Anxiety Among Undergraduate Nursing Students. *International Journal Of Nursing Education Scholarship, 10*(1), 255–266.

- Chitiyo, J., & Pietrantoni, Z. (2019). The Impact Of Child Maltreatment On The Educational And Psychological Well-Being Of Students. *Journal Of School Counseling*, 17(18), N18.
- Copp, D. (1997). Belief, Reason, And Motivation: Michael Smith's "The Moral Problem". *Ethics*, 108(1), 33–54.
- Cortiella, C., & Horowitz, S. H. (2014). The State Of Learning Disabilities: Facts, Trends And Emerging Issues. *New York: National Center For Learning Disabilities*, 25(3), 2–45.
- Curcio, G., Ferrara, M., & De Gennaro, L. (2006). Sleep Loss, Learning Capacity And Academic Performance. *Sleep Medicine Reviews*, 10(5), 323–337.
- Emda, A. (2018). Kedudukan Motivasi Belajar Siswa Dalam Pembelajaran. *Lantanida Journal*, 5(2), 172–182.
- Filgona, J., Sakiyo, J., Gwany, D. M., & Okoronka, A. U. (2020). Motivation In Learning. *Asian Journal Of Education And Social Studies*, 10(4), 16–37.
- Gunarsa, S. D. (2008). *Psikologi Perkembangan Anak Dan Remaja*. BPK Gunung Mulia.
- Hamouda, A. (2013). An Exploration Of Causes Of Saudi Students' Reluctance To Participate In The English Language Classroom. *International Journal Of English Language Education*, 1(1), 17–34.
- Handayani, R. (2019). Pengaruh Lingkungan Tempat Tinggal Dan Pola Asuh Orangtua Terhadap Motivasi Belajar Siswa Sekolah Dasar. *Jurnal Tunas Bangsa*, 6(1), 15–26.
- Indonesia, T. R. K. B. B. (2018). *Kamus Besar Bahasa Indonesia*.
- John, D., Hussin, N., Zaini, M. K., Ametefe, D. S., Aliu, A. A., & Caliskan, A. (2023). Gamification Equilibrium: The Fulcrum For Balanced Intrinsic Motivation And Extrinsic Rewards In Learning Systems: Immersive Gamification In Muhamad Khairulnizam Zainilearning System. *International Journal Of Serious Games*, 10(3), 83–116.
- Kanfer, R. (1990). Motivation Theory And Industrial And Organizational Psychology. *Handbook Of Industrial And Organizational Psychology*, 1(2), 75–130.
- Kumar, B., Shah, M. A. A., Kumari, R., Kumar, A., Kumar, J., & Tahir, A. (2019). Depression, Anxiety, And Stress Among Final-Year Medical Students. *Cureus*, 11(3).
- Leonard, K. L., Serneels, P., & Brock, J. M. (2013). Intrinsic Motivation. *The Labor Market For Health Workers In Africa: A New Look At The Crisis*, 255–283.
- Locke, E. A., & Schattke, K. (2019). Intrinsic And Extrinsic Motivation: Time For Expansion And Clarification. *Motivation Science*, 5(4), 277.
- Malik, M. A. R., Choi, J. N., & Butt, A. N. (2019). Distinct Effects Of Intrinsic Motivation And Extrinsic Rewards On Radical And Incremental Creativity: The Moderating Role Of Goal Orientations. *Journal Of Organizational Behavior*, 40(9–10), 1013–1026.
- Malik, R. S. (2018). Educational Challenges In 21st Century And Sustainable Development. *Journal Of Sustainable Development Education And Research*, 2(1), 9–20.
- Malone, T. W., & Lepper, M. R. (2021). Making Learning Fun: A Taxonomy Of Intrinsic Motivations For Learning. In *Aptitude, Learning, And Instruction* (Pp. 223–254). Routledge.
- Matondang, A. (2018). Pengaruh Antara Minat Dan Motivasi Dengan Prestasi Belajar. *Bahasa: Jurnal Pendidikan Bahasa Dan Sastra Indonesia*, 2(2), 24–32.
- Morales-Rodríguez, F. M., Espigares-López, I., Brown, T., & Pérez-Mármol, J. M. (2020). The Relationship Between Psychological Well-Being And Psychosocial Factors In University Students. *International Journal Of Environmental Research And Public Health*, 17(13), 4778.

- Oudeyer, P.-Y., Gottlieb, J., & Lopes, M. (2016). Intrinsic Motivation, Curiosity, And Learning: Theory And Applications In Educational Technologies. *Progress In Brain Research*, 229, 257–284.
- Parfit, D., & Broome, J. (1997). Reasons And Motivation. *Proceedings Of The Aristotelian Society, Supplementary Volumes*, 71, 99–146.
- Quinlan, M. M., Bates, B. R., & Angell, M. E. (2012). ‘What Can I Do To Help?’: Postsecondary Students With Learning Disabilities’ Perceptions Of Instructors’ Classroom Accommodations. *Journal Of Research In Special Educational Needs*, 12(4), 224–233.
- Robinson, L. J., Stevens, L. H., Threapleton, C. J. D., Vainiute, J., Mcallister-Williams, R. H., & Gallagher, P. (2012). Effects Of Intrinsic And Extrinsic Motivation On Attention And Memory. *Acta Psychologica*, 141(2), 243–249.
- Seven, M. A. (2020). Motivation In Language Learning And Teaching. *African Educational Research Journal*, 8, 62–71.
- Sverdlik, A., Hall, N. C., Mcalpine, L., & Hubbard, K. (2018). The Phd Experience: A Review Of The Factors Influencing Doctoral Students’ Completion, Achievement, And Well-Being. *International Journal Of Doctoral Studies*, 13, 361–388.
- Thaariq, Z. Z. A., Kuswandi, D., Diana, R. C., & Shelinawati, U. (2019). Factors That Influence Outstanding Student (Mawapres) In Learning Motivation. *JPP (Jurnal Pendidikan Dan Pembelajaran)*, 26(2), 60–64.
- Trevino, N. N., & Defreitas, S. C. (2014). The Relationship Between Intrinsic Motivation And Academic Achievement For First Generation Latino College Students. *Social Psychology Of Education*, 17, 293–306.
- Vallerand, R. J. (2007). Intrinsic And Extrinsic Motivation In Sport And Physical Activity: A Review And A Look At The Future. *Handbook Of Sport Psychology*, 59–83.
- Vansteenkiste, M., Simons, J., Lens, W., Sheldon, K. M., & Deci, E. L. (2004). Motivating Learning, Performance, And Persistence: The Synergistic Effects Of Intrinsic Goal Contents And Autonomy-Supportive Contexts. *Journal Of Personality And Social Psychology*, 87(2), 246.
- Zee, M., & Koomen, H. M. Y. (2016). Teacher Self-Efficacy And Its Effects On Classroom Processes, Student Academic Adjustment, And Teacher Well-Being: A Synthesis Of 40 Years Of Research. *Review Of Educational Research*, 86(4), 981–1015.