



Self-determination theory in teaching practice for higher education level

¹Rahayu, ²Sahril Nur, ³Mardiani, ⁴Muh. Safar Nur

^{1,3,4} Universitas Sawerigading Makassar, Jl. Kande I No. 27, Baraya, Kota Makassar, Sulawesi Selatan, 90153, Indonesia

² Universitas Negeri Makassar, Jl. Bonto Langkasa, Banta-Bantaeng, Kota Makassar, Sulawesi Selatan, 90222, Indonesia

Corresponding author: sahrilfbsumm@unm.ac.id

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ABSTRACT

This study aims to gain a deeper understanding on how self-determination theory is implemented in higher education. This review adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) recommendations. The systematic review begins with an analysis of the identification procedure. Next, the best papers published between 2012 and 2022 were selected to explain how to compare significant aspects and efficient methods. The significance of self-determination theory to the evolution of the teaching profession determined the selection of these papers. The results are divided into three categories, with the following themes emphasizing the examined literature the most. Researchers use their findings to maximize the implementation of SDT in the classroom. The second section consists of data collection. Questionnaires, interviews, pre-and post-tests, and online discussion forums were used for data collection. Finally, the researcher has created a list of several published issues for analysis based on the most recent study themes.

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1. Introduction

We live in an age where access to knowledge, skills, and competencies is highly accessible. Due to the complexity of the modern workforce, workers must be able to quickly adapt to changes and consistently acquire new skills (Blaschke, 2014). Canning (2010) argues that the ability to manage their learning is essential for lifelong learners in the workforce.

Educational systems shift their instructional emphasis from delivering material to fostering learning capabilities. Ananiadou and Claro (2009) say that these skills include the ability to think

creatively, critically, and solve problems. These are skills that students can use in a flexible and adaptable way in different situations and contexts to learn on their own and with others.

The theory of self-determination (SDT) investigates human motivational activities. It proposes that satisfying fundamental psychological needs (i.e., autonomy, competence, and relatedness) underlies the motivational mechanism that affects the activities and behaviors of humans. Being the perceived origin or source of one's behavior is the definition of autonomy. It refers to an educator providing students with options within the classroom. Competence refers to "feeling effective in one's continuing interactions with the social environment and experiencing opportunities to exercise and express one's capacities," which relates to students' perceptions that they can achieve academic success (i.e., Chinese essay writing). Relatedness refers to "feeling related to others," which is the sensation of connection derived from interactions with peers, teachers, or learning resources. Lastly, the relatedness of psychological requirements often refers to group experience and learning together, both of which are important for the VR-assisted Chinese writing course to work well.

Extensive research demonstrates that intrinsic drive negatively correlates with academic success (Taylor et al., 2014). For instance, Van Blankenstein et al. (2019) demonstrated that students taught under conditions that stimulated intrinsic motivation attained better test scores than those taught under conditions that stimulated extrinsic motivation (performing an activity to attain specific goals, (see also Ryan & Deci, 2020).

Motivation is a person's power (energy) that can lead to a willingness to engage in an activity (Fartisia & Laily, 2022). According to Astin (2014), student motivation relates to a student's willingness to participate in the learning process and focuses on the reasons for a student's engagement in academic activities. Moreover, according to Ryan and Deci (2020), motivation is the desire to better oneself through engaging in significant or valuable behaviors for one's development. This remark implies that motivation is the desire to better oneself by engaging in conduct that is deemed vital or meaningful to one's growth by the individual. Sulz et al. (2016) demonstrate that the teacher's motivation is a determining factor in students' assessments of the value and significance of writing.

In the opinion of La Guardia and Patrick (2008), motivation tends toward direction and selectiveness of conduct in response to consequences. Its propensity to keep life objectives realized. Razak et al. (2018) also say that motivation is an inducer or inducers that condition people and then guide them to reach a goal.

Based on the above definition, it is vital to have motivation as an urge or impetus for someone to accomplish something to reach a goal. According to Dornyei and Otto (1998), the motivational learning process is one of the most critical dynamic features. Children must possess two motivational qualities: inner motivation and extrinsic motivation. As claimed by Locke and Schattke (2019), intrinsic motivation is the internal drive that compels students or athletes to engage in an activity. The definition of extrinsic motivation is external encouragement that inspires kids to write. According to Filgona et al. (2020), the importance of motivation in the learning process is due to three factors: (1) Motivation is an internal force that generates action in people. (2). Motivation can assure the continuation of activities. (3) Motivation plays a role in guiding the activities done to achieve goals that have already been set.

According to the SDT, individuals have a natural incentive to internalize and integrate their values or regulate activities that are not of their interest but vital to the social world. The process of

internalization involves the absorption of values or rules. In the meantime, the integration process involves translating externally imposed ideals or regulations into internal regulations. The internalization and integration processes are proactive processes in the social setting. In order to encourage the internalization and incorporation of extrinsically motivated behaviors, social connectivity is crucial. One of the reasons why people engage in undesirable extrinsic motivating behaviors is that they are supported, exemplified, or praised by other relevant individuals. Other relevant individuals may include family members, instructors, peers, and community members. This demonstrates that social connection is vital to the internalization process. This study reveals that the connectivity between teacher and student is essential to creating fun learning so that students can be motivated to be active in teaching practice, especially in higher education.

In addition, exclusion and inclusion criteria were utilized to select five papers from the 87 published between 2012 and 2022. First, recent evidence indicates that SDT is the most common motive. Second, emphasis is placed on teaching approaches and online learning. Third, higher education levels significantly dominated the study's writing skills. Fourth, this research surpasses previous evaluations since it evaluates SDT in situations familiar to individuals. This study examined the educational approaches used in the reviewed studies; data collection; familiar language acquisition contexts; affordances; and current research problems.

Based on the illustration above, the purpose of this review was to systematically review studies that assessed the association between self-determined motivation in teaching practices and higher education levels. The following research issues are intended to be addressed by this review study:

1. What were the social-psychological aspects employed in the papers reviewed?
2. What were the instruments of the research in the papers reviewed?
3. What were the research concerns investigated?

2. Method

Both an automated and a manual search were undertaken to ensure the credibility of the documents. This study employed Prisma, which stands for Preferred Reporting Items for Systematic Reviews and Meta-Analyses, to guide its web search for material. Moher et al. (2015) proposed that PRISMA is a series of evidence-based items designed to assist authors in preparing and reporting different systematic reviews and meta-analyses. As seen in Figure 1, this systematic review,

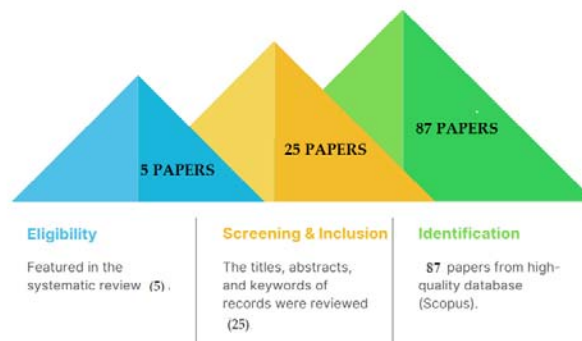


Figure 1. Pyramid of PRISMA

It follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) method, which consists of four processes: identification, screening, eligibility, and inclusion. Researchers have frequently employed PRISMA because of its comprehensiveness and flexibility in other investigations.

According to the PRISMA principles, it begins at the procedure's initiation. The best papers published between 2012 and 2022 were selected to explain how to compare significant aspects and efficient methods. These papers were selected based on the interest of the education community in self-determination theory. This section describes our initial selection criteria for papers based on the self-determination theory utilized in education to assist students in understanding themselves as learners. Once all articles have been identified, the operation begins by excluding items from multiple databases. After the initial review, 87 articles remained; 52 duplicates were eliminated. The titles, abstracts, and keywords of these 52 books were analyzed to determine their usefulness to the theory of self-motivation in education. Twenty papers that did not meet the inclusion and exclusion criteria for the stated purpose of this study were evaluated during this approach. Using inclusion and exclusion criteria, this publication might include five articles. Therefore, five articles are remaining, along with the criteria used to select papers that demonstrate the effectiveness of applying self-determination theory in higher education more convincingly.

2.1 Instrument of data collection

After a quick examination, it became evident that classifying the papers would be beneficial. They cover a broad spectrum of self-determination theory in education-related topics and employ a variety of methodological approaches. The papers were subsequently coded using a classification form to extract data from the selected research. The researchers created this form following the scope of the investigation. Two specialists with experience in SDT or undertaking literary studies assessed the draft form first, followed by a language specialist. It was also updated during the processing of the data.

2.2 Data analysis

The articles were stored in Publish and Perish, a reference application. These articles were chosen by “publish or perish”. Publish or Perish investigates academic citations. It gets unprocessed citations from multiple data sources, analyzes them, and gives citation metrics like the number of publications, total citations, and h-index.

This study employs quantitative research methods, including content analysis, and text analysis, to characterize the observed trends in SDT investigations. Papers are classified using tables, and descriptive statistical approaches are employed to illustrate the results. A comprehensive literature review examined the rising dangers of MALL, including teacher preparation, cheating, and learning disruption. This review also includes information from non-empirical studies that supports the educational claim of earlier studies and is used to build the social psychology implication.

3. Results and discussion

The results have been presented and categorized into three key groups: (1) social-psychological Aspects, (2) research instruments, and (3) research concerns. An illustration accompanied each discovery to help the reader comprehend the facts.

3.1. Social psychological aspect

This section explores the social psychology-related aspects of the studies evaluated. Five articles found through publish and perish indexed in Scopus indicate that the use of SDT and teaching is indeed very influential, as seen from research conducted by Marsik (2021), stating that in order to increase students' motivation in learning, it is essential to give them autonomy, where students are given the authority to choose what courses they like in order to maximize their participation in the course as well as their involvement in the course, which is part of it. According to Brooks and Young (2011), fostering a sense of autonomy and personal agency during the learning process is associated with increased motivation to participate in academic activities and student satisfaction. Even though there are strong theoretical and empirical links between autonomy and motivation, the authors point out that college students don't have many options or chances to act in this way.

In addition, the results of Chen et al.'s (2021) study on the application of SDT theory to the teaching of writing in universities reveal that student self-concept is essential for obtaining student learning satisfaction. Satisfaction is highly correlated with psychological health, and when students' basic psychological needs are met, they can internalize the motivation to learn. According to a second conclusion, teachers prioritize student contentment and psychological growth over achievement. Self-concept in writing is a high-level variable influencing pupils' identification as writers (Ehm et al., 2014). According to Ryan and Deci (2020), education aims to create writers, not develop writing ability.

Another study by Chao et al. (2021) examines SDT for teachers and students, in which students develop their vision and writing style. This is similar to SDT in that the teacher enables students to choose what and how to write autonomously. In addition, teachers are given considerable autonomy over how to implement their lesson plans in the classroom to suit various student learning styles. Linkage is one of them in collaborative learning. VR facilitates increased engagement between teachers and students in Chinese-learning courses. They present their expertise from their point of view and in their writing style.

According to Hamari and Koivisto (2015), acknowledgement is a sort of acceptance that might increase motivation. Meanwhile, Mahmud et al. (2020) state that this study identified recognition by professors and peers, which appears to be one of the most influential variables that motivate students. Additional evidence demonstrates the importance of instructor presence in the learning process. Because it may partially satisfy students' desire for quick feedback, the teacher's presence may encourage a positive learning process. This is also compatible with SDT, which states that feedback leading to feelings of competence can enhance intrinsic motivation, resulting in more engagement throughout learning. When it comes to learning, students who participate in group activities and share experiences and goals have stronger bonds, resulting in increased engagement, happiness, and drive. This study discovered that the end effect of social connectedness was a sense of group membership. When

members of a group feel included, their need for belonging is met. Also, students in the treatment group said that everyone's participation in the competition made them want to be more active, which made them feel more like a group.

On the other hand, Van Blankenstein et al. (2019) state in their research that collaboration is very effective in increasing relatedness in SDT theory, but collaboration itself makes the student's autonomy appear low, where the ability to decide control over something we want is low because they are in groups with multiple people who have their own autonomy, mainly if this number is significant. I need personal control and find it challenging to delegate duties. In addition to the large group size, which hinders collaboration, beneficial social interdependence is hindered by the following: (relying on others to succeed). However, the social aspect of writing together and providing one another with assistance is crucial. If a collaborative writing method is used, the amount of work will be lessened by dividing tasks in a fair and gradual way.

3.2. The analysis of the research instruments

According to the findings, the researcher collected data via questionnaires (n = 2), tests (n = 1), interviews (n = 3), and group discussion forums (1). Using the UTAUT acceptance model, researchers collected data on the usage of SDT in teaching and its impact on learning. Using a pre-and post-survey in his research, Marsik, 2021, argues that students can define their own goals by considering their personalities.

Values, strengths, and interests, identifying the steps required to reach those goals, and taking the initiative to go forward in pursuit of goals that will shape their future. Other researchers, including Chen et al. (2021); Chao et al. (2021); Mahmud et al. (2020), have produced discoveries in teaching writing by employing instruments such as surveys and interviews. According to the findings, to make SDT theory effective in teaching, particularly in writing, it is necessary to comprehend the roles of both teachers and students, who must be able to use SDT in both teaching and learning. Teachers who give students input on how to apply their lesson plans in the classroom to meet the diverse needs of their students' learning should receive training on addressing the variety of student learning. These teachers recognize pupils and allow students to choose the topics of their writing assignments. This has enhanced students' motivation to write in the classroom.

Moreover, the pre-post test and focus group interview conducted by Van Blankenstein et al. (2019) indicated in their study that SDT in collaborative learning has two sides, namely positive and negative, and that the positive side is relatedness because working together fosters a strong sense of attachment. The positive is its robustness, while the negative is its lack of autonomy as it is conducted in groups where a conversation is still prioritized.□

3.3. Research concerns

Several issues were discovered in the examined articles. Several motivating issues in learning are identified, particularly in online education. Despite its significant limitations, the University of Michigan's Center for Research on Learning and Teaching's Foundational Course Initiative seeks to identify the most effective means of maximizing coursework by providing students with options to

support their technical exploration and self-understanding. People working on the course may find this study's helpful content (Marsik, 2021). The researchers found three articles associated with the relatedness theory in SDT. The researchers are interested in examining the motivation of teachers and students in writing within the context of SDT, how students understand the notion of SDT, and how SDT functions in collaborative learning between teachers and students (Chen et al., 2021; Chao et al., 2021; Mahmud et al., 2020). Furthermore, Van Blankenstein et al. (2019) studied the impact of teacher presence in online gamification on sustainable learning and self-determination and identified the driving elements and hurdles that sustain students' involvement in online gamified activities.

The findings fall into three categories, with the following three most frequently featured in the study. Researchers study the application of SDT in teaching that can inspire students to participate in class through autonomy. Students choose what they want to learn or what they prefer to learn, and competence, in which students recognize that competition in learning would motivate them more. This indicates that relevance to SDT theory is attained when there is substantial student participation.

The second section covers research instruments. All the information was gathered via surveys, interviews, examinations, and online discussion boards. Based on the most recent research topics, the researcher has compiled a list of many published issues for examination. The majority of research focuses on the effectiveness of SDT in boosting student motivation, both from teachers and students.

The researcher has compiled a list of articles for review based on the most recent study topic. Most research demonstrates that SDT can increase student engagement in learning. However, SDT theory will function optimally when applied to independent assignments because (Van Blankenstein et al., 2019) assert that students' autonomy is limited while they are in a collaborative setting, but relatedness is strong. The following recommendations are made for future researchers based on these findings. Due to the dearth of published research, this study faces some obstacles. Therefore, it is advised that this essential information be obtained. Second, this study's researchers discovered that most studies used survey research methods and questionnaires, suggesting that various kinds of data could be obtained in the future.

The following are teaching and research recommendations based on these findings. First, some research failed to identify SDTs employed in the classroom. Consequently, it is advocated that this vital information be made public. Second, the researchers found that most studies used survey and experimental research methods. This shows that there are many kinds of data that can be collected.

4. Conclusion

SDT in learning is an essential component that teachers must acquire, along with the application of SDT theory to students to attain learning objectives. Teachers who master SDT will undoubtedly be able to master learning in the classroom by providing students with options to support their technical exploration and self-understanding, namely, autonomy, the ability to provide feedback or recognition to students, and the ability to generate student competence, which is one of the competencies in SDT theory, and the ability to maximize the collaboration space in learning, how SDT can generate student motivation to the greatest extent.

The researcher used Prisma, which stands for Preferred Reporting Items for Systematic Reviews and Meta-Analyses, to locate persistent content on the Internet. A manual and automatic document search was conducted to aid their creation. The top articles published between 2002 and 2022 were chosen to highlight how the essential elements and tools can be compared. 87 Published Works Visit SDT. Twenty-five publications are irrelevant to this study's purpose. Using the categorization form, data for the desired research were collected.

5. References

- Ananiadou, K., & Claro, M. (2009). 21st-century skills and competencies for new millennium learners in OECD countries. *OECD Education Working Papers*, 41, 33. <http://dx.doi.org/10.1787/218525261154>
- Astin, A. W. (2014). Student involvement: A developmental theory for higher education. *College Student Development and Academic Life: Psychological, Intellectual, Social and Moral Issues*, July, 251–263.
- Blaschke, L. M. (2014). Using social media to engage and develop the online learner in self-determined learning. *Research in Learning Technology*, 22(1063519). <https://doi.org/10.3402/rlt.v22.21635>
- Brooks, C. F., & Young, S. L. (2011). Are Choice-Making Opportunities Needed in the Classroom/ ? Using Self- Determination Theory to Consider Student Motivation and Learner Empowerment. *International Journal of Teaching and Learning in Higher Education*, 23(1), 48–59.
- Canning, N. (2010). Playing with heutagogy: Exploring strategies to empower mature learners in higher education. *Journal of Further and Higher Education*, 34(1), 59–71. <https://doi.org/10.1080/03098770903477102>
- Chao, G. C. N., Jong, M. S. Y., & Luk, E. T. H. (2021). Work-in-progress-motivation in virtual reality Chinese language learning in the context of COVID-19. *Proceedings of 2021 7th International Conference of the Immersive Learning Research Network, ILRN 2021*, 21–23. <https://doi.org/10.23919/iLRN52045.2021.9459245>
- Chen, M., Chai, C. S., Jong, M. S. Y., & Chao, G. C. N. (2021). Modeling learners' self-concept in Chinese descriptive writing based on the affordances of a virtual reality-supported environment. *Education and Information Technologies*, 26(5), 6013–6032. <https://doi.org/10.1007/s10639-021-10582-4>
- Dornyei, Z., & Otto, I. (1998). Motivation in action: A process model of L2 motivation. *Working Papers in Applied Linguistics*, 4, 43–69. <http://eprints.nottingham.ac.uk/39/>
- Ehm, J. H., Lindberg, S., & Hasselhorn, M. (2014). Reading, writing, and math self-concept in elementary school children: Influence of dimensional comparison processes. *European Journal of Psychology of Education*, 29(2), 277–294. <https://doi.org/10.1007/s10212-013-0198-x>
- Fartisia, O. N. P., & Laily, N. (2022). Relationship of Motivation To the Level of Confidence in Working on the Final Level Student'S Thesis. *Journal Universitas Muhammadiyah Gresik Engineering, Social Science, and Health International Conference (UMGESHIC)*, 1(2), 979. <https://doi.org/10.30587/umgeshic.v1i2.3520>
- Filgona, J., Sakiyo, J., Gwany, D. M., & Okoronka, A. U. (2020). Motivation in Learning. *Asian Journal of Education and Social Studies*, September, 16–37. <https://doi.org/10.9734/ajess/2020/v10i430273>
- Hamari, J., & Koivisto, J. (2015). "Working out for likes": An empirical study on social influence in exercise gamification. *Computers in Human Behavior*, 50, 333–347. <https://doi.org/10.1016/j.chb.2015.04.018>

- La Guardia, J. G., & Patrick, H. (2008). Self-determination theory as a fundamental theory of close relationships. *Canadian Psychology*, 49(3), 201–209. <https://doi.org/10.1037/a0012760>
- Locke, E. A., & Schattke, K. (2019). Intrinsic and extrinsic motivation: Time for expansion and clarification. *Motivation Science*, 5(4), 277–290. <https://doi.org/10.1037/mot0000116>
- Mahmud, S. N. D., Husnin, H., & Soh, T. M. T. (2020). Teaching presence in online gamified education for sustainability learning. *Sustainability (Switzerland)*, 12(9), 1–17. <https://doi.org/10.3390/su12093801>
- Marsik, F. J. (2021). *Acknowledging Unique Needs/ : Empowering Student Choice in the Creation of Their Pathway Through a First-year Experience Course Acknowledging unique needs/ : Empowering student choice in the creation of their pathway through a first-year experience course A*.
- Moher, D., Shamseer, L., Clarke, M., Ghersi, D., Liberti, A., Petticrew, M., Shekelle, P., & Stewart, L. A. (2015). Preferred reporting items for systematic review and meta-analysis protocols (prisma-p) 2015 statement. *Systematic Reviews*, 4(1), 1–9. <https://doi.org/https://doi.org/10.1186/2046-4053-4-1>
- Razak, A., Sarpan, S., & Ramlan, R. (2018). Effect of Leadership Style , Motivation and Work Discipline on Employee Performance in PT . ABC Makassar. *International Review of Management and Marketing*, 8(6), 67–71. <https://www.econjournals.com/index.php/irmm/article/view/7167>
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61(xxxx), 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Sulz, L., Temple, V., & Gibbons, S. (2016). Measuring Student Motivation in High School Physical Education: Development and Validation of Two Self-Report Questionnaires. *The Physical Educator*, 73(3), 530–554. <https://doi.org/10.18666/tpe-2016-v73-i3-6370>
- Taylor, G., Jungert, T., Mageau, G. A., Schattke, K., Dedic, H., Rosenfield, S., & Koestner, R. (2014). A self-determination theory approach to predicting school achievement over time: The unique role of intrinsic motivation. *Contemporary Educational Psychology*, 39(4), 342–358. <https://doi.org/10.1016/j.cedpsych.2014.08.002>
- Van Blankenstein, F. M., Saab, N., van der Rijst, R. M., Danel, M. S., Bakker-van den Berg, A. S., & van den Broek, P. W. (2019). How do self-efficacy beliefs for academic writing and collaboration and intrinsic motivation for academic writing and research develop during an undergraduate research project? *Educational Studies*, 45(2), 209–225. <https://doi.org/10.1080/03055698.2018.1446326>