

# Self-determination and undergraduate student success: A view from high-performing students in a South African university<sup>1</sup>

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## ABSTRACT

*Using self-determination as a theoretical perspective, the study sought to understand the motivating factors behind high-performing students' success. High-performing students who are on track for cum laude and summa cum laude were identified as the cohort for the study. A sample of 10 of these identified students was purposively selected from the School of Education at a South African university. Data were generated using individual and focus group interviews. The findings suggest that these students were motivated by both intrinsic and extrinsic factors. The students were intrinsically motivated when their needs for competence, autonomy and relatedness were met. The findings further suggest that three levels of extrinsic motivation (introjected, identified and integrated regulation) influenced students' success. The study challenges a deficit discourse as it enabled us to understand the factors that enabled high-performing students to thrive despite social and economic hardships. These views from high-performing students' are useful to inform strategies and interventions for understanding and improving undergraduate student success.*

**Keywords:** self-determination theory, student success, extrinsic and intrinsic motivation

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## INTRODUCTION

The United Nations Sustainable Development Goal 4 emphasises a need for inclusive and equitable quality education and the promotion of lifelong learning opportunities for all (UNESCO, 2024). This emphasis is especially significant for a country like South Africa, where education has been identified as a means to reduce poverty and create opportunities for equitable improvements for previously disadvantaged population groups. By ensuring student success for previously marginalised groups of people (Chiramba & Ndofirepi, 2023), universities can, therefore, be instrumental in reducing inequality in South Africa. Research in the South African higher education context, however, pinpoints that many students from previously disadvantaged backgrounds may gain access to university education but struggle to gain success (Kilfoil et al., 2019; Makhanya, 2024). For example, data from the Post-School Education and Training Monitor indicate low graduation rates of mainly black African students (DHET, 2024). Similarly, in a report by Essop (2017), the dropout rate of black and coloured undergraduate students was higher across all qualifications. Besides race, numerous researchers (DeFreitas & Rinn, 2013; Pike & Kuh, 2005; Ives & Castillo-Montoya, 2020; O'Shea et al., 2024) indicate that first-generation students - the first in their families to attend university - experience greater challenges in their studies. Also, students from impoverished backgrounds experience challenges, such as crime-ridden neighbourhoods, single-parent households and parents who cannot invest time and interest in their education (McKenzie, 2019). This results in low student throughput rates, and it is necessary to explore the factors that impact student success in South African universities.

In light of the above, universities in South Africa have attempted to enhance student success by focusing on providing remedial academic support to students who are categorised as 'at-risk' of not progressing in their studies. These initiatives take a reactive stance by highlighting students' weaknesses or obstacles to their success rather than their strengths. For example, the study of Johnson et al. (2022) at Qatar University focuses on help-seeking behaviour and support interventions for at-risk students. Similarly, Mayet's (2016) study reports on support for at-risk students who lack the requisite academic skills needed for success in a South African university. Numerous other studies have also investigated student success through a similar student deficit discourse and a need for support and intervention (Dix et al., 2020; Sanders et al., 2018; Tower et al., 2015). However, what is often overlooked is that many of these students from disadvantaged backgrounds attain success, thus research in South Africa needs to focus on examining the experiences of high academic performers and what makes them persevere and excel (Nnadozie & Khumalo, 2023).

In the South African context, recent research suggests that whilst this cohort of high-performing students is not a homogenous group within the student body, their self-determined intention and actions they take to succeed in university is a common thread (Nnadozie & Khumalo, 2023). In essence, the success of these students is driven by their self-determination and motivation, and the actions they take to achieve their goals bind these diverse individuals together in their high academic achievements. To be identified as *cum laude* or *summa cum laude* trajectory in the school of education, a student must be performing at the level that implies they: (i) will complete their degree within the minimum time and without supplementary examinations. (ii) Obtain a minimum of 75% in the school experience module. (iii) Obtain a

credit-weighted average of at least 75% and above in all other modules required. Hence, we sought to explore in this study:

What are the factors that motivate high high-performing students' success?

While experiencing many challenges, including social and economic, it is remarkable that the students persevered in their learning and thrived. It would be interesting to examine what contributed to the conscious self-regulatory and self-directed decisions that they make in their determination to attain high performance and success (Assor & Kaplan, 2001).

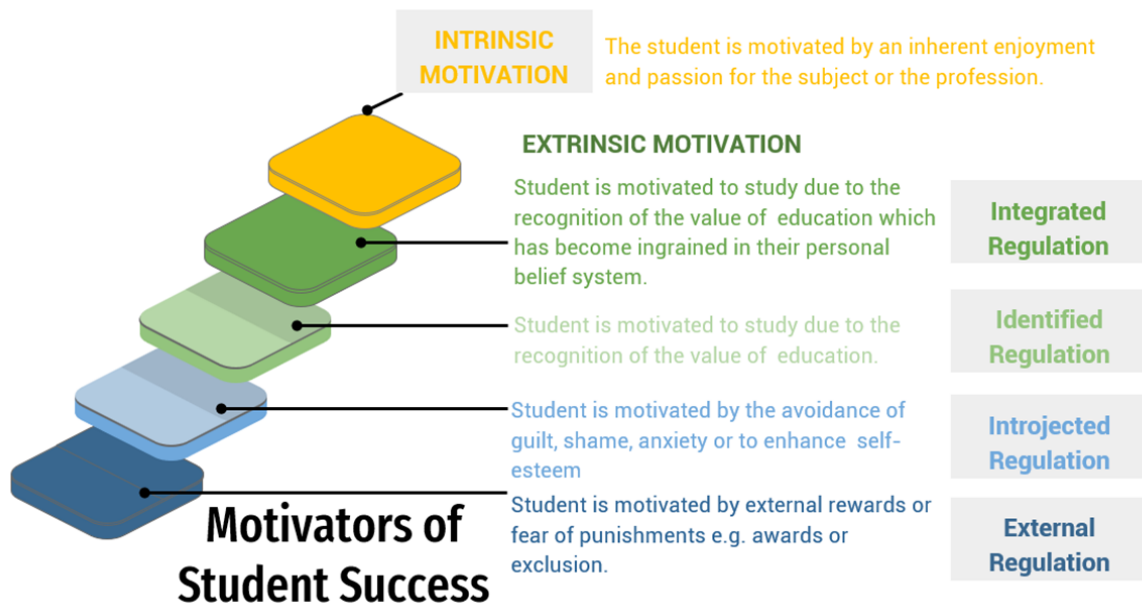
In the first section of this article, we focus on self-determination theory as a framework for understanding student motivation. We then describe the research methodology, explaining how high-performing students were selected and the data generation and analysis processes. Following this, the research findings are drawn from the analysis of participants' narratives against the backdrop of intrinsic and extrinsic motivation. The final section then reflects on the implications and recommendations of the study.

### **Motivation and self-determination**

Student success must begin with the individual student and highlight how they navigate their learning in higher education. Hence, student motivation is pivotal in effectively navigating and managing their learning journeys. The concept of motivation is multifaceted; however, researchers agree that motivation is goal-directed behaviour which energises a person to successfully execute a task (Vinoy & Kumar, 2019). In educational settings, motivation is not something teachers provide to their students; rather, it is something that a teacher may draw out based on individual students' unique needs (Castle & Buckler, 2021). The motivational theory that forms a framework for this article assumes that humans, by nature, tend to grow and master the challenges they experience (Guay, 2022). Self-determination theory (SDT) is a motivational theory that places emphasis on the type of motivation we experience rather than the intensity or quantity of the motivation (Bandu et al., 2024; Ryan & Deci, 2017).

SDT highlights two main types of motivation, namely intrinsic and extrinsic motivation. According to Ryan and Deci (2017), intrinsic motivation involves students engaging in an activity with willingness, volition and choice while experiencing enjoyment and interest and deriving a higher purpose from the task. Research pinpoints that intrinsic motivation leads to positive states where students experience deep task immersion and peak performance (Castle & Buckler, 2021; Robert et al., 2016). Studies have also shown that intrinsically motivated students possess enhanced persistence, productivity and performance (Augustyniak et al., 2016; Grant, 2008). SDT also stipulates that for students to achieve success and ultimately self-actualise, their basic needs to feel competence, autonomy, and relatedness must be met (Bandhu et al., 2024; Deci, Ryan & Guay, 2013). Castle and Buckler (2021) explain that students feel competent when they achieve success in their tasks and are able to understand their personal strengths and limitations, while they refer to autonomy as a degree of choice and ownership that students feel towards their learning. In addition, the latter-mentioned authors claim that the basic need for relatedness is met when students form relationships with their peers and teachers in the process of learning. According to researchers (Deci, Ryan & Guay, 2013; Chiu, 2021; Hsu et al., 2019), when these three needs are met, students develop intrinsic motivation and achieve successful outcomes in their studies.

Figure 1:  
Motivators of student success



Adapted from Ryan and Deci (2020)

In contrast to intrinsic motivation above, Ryan and Deci (2017, 2020) elaborate that extrinsic motivation is when individuals perform well at tasks for some outer reward or due to fear of punishment. Extrinsic motivation may involve students' feelings of pressure where a task, such as studying for a module, is regarded as a responsibility or obligation. However, SDT implies that extrinsic motivation may also be experienced as volitional when students internalise extrinsic motivation and begin to see the value of the activity, which may result in similar results as intrinsic motivation (Bandhu et al., 2024). Extrinsic motivation comprises four types, which enable students to experience increasing levels of autonomy (Castle & Buckler, 2021). For extrinsic motivation to produce the same effects as intrinsic motivation, the student needs to progress through four stages consisting of increasing levels of autonomy, ranging from external regulation, introjected regulation, identified regulation, and finally, integrated regulation (Ryan & Deci, 2000). Extrinsic motivation, therefore, when internalised by students, has the potential to also achieve similar results as intrinsic motivation, as illustrated by Figure 1 above.

SDT highlights that motivation is closely linked to self-regulation, where students actively manage their learning by setting goals and monitoring their progress to achieve success (Kumar & Kapoor, 2024). As illustrated in the diagram, the movement from external regulation to intrinsic motivation represents progressively higher levels of self-regulation. According to Ryan and Deci (1982; 2020), at the bottom, external regulation requires minimal self-regulation as students respond primarily to external rewards or punishments. The authors explain that moving upward through the levels, introjected regulation requires increased self-regulatory capacity as students begin to internalise external pressures, while identified regulation requires even greater self-regulation as students recognise and value their

academic goals. They further claim that at the higher levels shown in the diagram, integrated regulation represents substantial self-regulation where educational values become fully incorporated into students' personal belief systems. Finally, the authors state intrinsic motivation is at the highest level of self-regulation, where students are driven by inherent enjoyment and passion for their subject or profession. The diagram above thus demonstrates that increased self-regulation is directly associated with students' enhanced ability to manage their learning autonomously and achieve sustained academic success.

While existing research establishes that motivation influences academic outcomes, there is limited understanding of how motivational factors, specifically intrinsic and extrinsic factors as demonstrated above, could contribute to the success of students from disadvantaged backgrounds in the South African context. More significantly, how high-performing students retain their motivation despite barriers and socio-economic challenges requires deeper exploration. Understanding these motivational processes is essential as it can reveal how students from historically marginalised communities not only survive but thrive academically, highlighting student strengths rather than focusing solely on deficits.

## RESEARCH METHODS

This paper draws on initial findings from a pilot project in the School of Education at the university that aims to enhance student academic success.

### *Selection of research participants*

Second year, Bachelor of Education students were identified who were on track to graduate *cum laude* or *summa cum laude*. Initially, 200 students were identified across the undergraduate programmes in the school as performing at a weighted average of 75%. Since this research was interested in ascertaining the rich in-depth experiences of the participants, a manageable sample size of 10 participants was selected (Moser & Korstjens, 2018). Purposive sampling was used to ensure participants from divergent background profiles were selected for the study (Cohen et al., 2018). Thus, Table 1 presents the diverse categories of invited students, including their gender, race, home background (rural, urban, township), home language, and source of funding. As a result of the historical background of inequality in South Africa, these students were from historically deprived homes or marginalised communities with some being first-generation students (DeFreitas & Rinn, 2013).

### *Data generation*

Data were generated by two of the researchers and co-authors who are staff in the School of Education, using focus groups and semi-structured interviews developed collaboratively with the other members of the research team. The two focus group sessions, consisting of five participants each, were held online in the second semester of 2022 using the Zoom platform, lasting about 60 minutes per session. The use of focus group interviews offered the researcher opportunities to observe group dynamics where the researchers gained first-hand knowledge of how the participants were able to interact with each other (Mestry & Grobler, 2007). According to Morgan and Spanish (2017), focus group sessions enable the researcher to answer in-depth questions relating to complex human behaviour. Hence, this method is suitable as the researchers can observe the participants relate their experiences in a relaxed atmosphere. To probe further and ensure that triangulation data were also generated using

individual interviews. Semi-structured interview questions were planned to complement data generated from the focus group interviews and to enhance the research rigour. These interviews comprised a democratic dialogue between the researchers and individual research participants. Since the researchers intended to collect descriptive data regarding the personal feelings of the research participants (McGowan, 2018), this was well aligned with the research goals. Following this, data were analysed using thematic analysis, where themes were derived from repeated patterns in the data set (Kiger & Varpio, 2020). This required the researchers to read and reread the transcriptions in order to identify critical ideas (Jnanathapaswi, 2021). The colour-coded data were reduced into smaller chunks and aligned to the research questions (Braun & Clark, 2006).

*Table 1:*  
*Participants' demographic profile*

Khumalo et al., 2023

PARTICIPANTS' DEMOGRAPHIC PROFILE					
<b>1. Race</b>	<b>African</b>	<b>Indian</b>	<b>Coloured</b>	<b>White</b>	<b>Total</b>
	7	2	1	0	10
<b>2. Funding</b>	<b>NS FAS</b>	<b>Funza-Lushaka</b>	<b>Other</b>	<b>Non-Funding</b>	<b>Total</b>
	8	1	1	0	10
<b>3. English Proficiency</b>		<b>High</b>	<b>Medium</b>	<b>Low</b>	<b>Total</b>
		4	3	3	10
<b>4. Home Background</b>		<b>Urban</b>	<b>Township</b>	<b>Rural</b>	<b>Total</b>
		3	2	5	10
<b>5. Age Range</b>			<b>17-24</b>	<b>25-26</b>	<b>Total</b>
			9	1	10
<b>6. Gender</b>			<b>Male</b>	<b>Female</b>	<b>Total</b>
			4	6	10

*Ethical considerations*

Ethical considerations guide the behaviour of researchers and outline rules and regulations to protect the research participants (Kivunja & Kuyini, 2017). Aligned with the university requirements, ethical clearance was received from the Humanities and Social Sciences Research Ethics Committee (HSSREC) before data generation. Participants were asked to sign consent forms, which outlined the purpose of the research. Their participation was purely voluntary, and they could leave the study at any time without any consequences. Anonymity and confidentiality were assured for all research participants.

**FINDINGS AND DISCUSSION**

The following section presents the findings as selected transcriptions from student narratives from the focus group discussions and individual interviews. Two salient themes were identified that aligned with intrinsic and extrinsic motivators of student success.

- (i) *Intrinsic motivators of student success: Competency, autonomy and relatedness*

Self-determination theory emphasises that for optimal learning environments and for students to be intrinsically motivated, their competency, autonomy and relatedness needs should be met. Firstly, these potential *cum laude* and *summa cum laude* students demonstrated that they felt motivated when their competency needs were met in their studies. Participant 1 noted her improved knowledge and skills.

I want to improve my skills more and more just to do better than yesterday, just knowing and going into the unknown so that I add more knowledge to what I already know so it is just one step at a time. (P.1)

According to Guay (2022), competence is not the aptitude that a student has achieved but the perception that the student has of their abilities. In this case, Participant 1 felt motivated because she perceived herself as capable of mastering and improving her current knowledge. This perception of her mastery gave her the courage to venture into the unknown and take on greater challenges. She knew the tasks were challenging, but she went on to improve her knowledge through a methodical process of following one step at a time. To feel competent, students should, therefore, be able to perceive their personal strengths and limitations (Castle & Buckler, 2021).

In addition, participant 8 felt motivated when he completed tasks, he was skilled at. He stated:

So, I'd say focus more on what you are good at (tasks) you enjoy so that you get more time for other modules like technology and everything where you may struggle. (P.8)

Participant 8 demonstrated self-knowledge as he was aware of what his stronger subjects were, and he was able to complete these tasks first. These tasks in his areas of strength were also more enjoyable to complete. Once these tasks were completed quickly, he found that he had more time to focus on areas that he struggled with.

Participant 7 claimed that feeling competent in her studies enhanced her self-esteem, which acted as a motivator for more success.

What helped me is working hard, trying my best in every assignment, I always try to be a high performing student, so I think that motivated me. .... Self-esteem makes me feel better about myself and more confident with myself. (P.7)

In this instant Participant 7 noted how the feelings of competence led to greater self-esteem and, therefore, greater intrinsic motivation to succeed. According to research (Castle & Buckler, 2021), achieving competence affords students greater self-esteem, which in turn leads to greater confidence in meeting new challenges, which further reinforces their perception of competence. In keeping with SDT, the students above demonstrated an ability to self-regulate and were aware of their competencies (Ryan & Deci, 2020). Their ability to consistently adjust to the barriers they experienced was an enabler for their success.

Secondly, students in this study felt like they were the initiators of their learning and were acting from a space of choice and willingness where their need for autonomy was met (Deci et al., 2013). Students could remain focused on their studies despite discouraging words from those around them. Participant 2, for example, explained how their peers felt that there was no need to achieve very well as eventually, everyone would receive a degree irrespective of their results.

Some, would just come to you..... when you are performing well, and then they come to tell you, Hey, everyone is going to get the degree. (P.2)

This was further supported by Participant 7, who noted independence and choice to succeed, where the people around her made little impact on motivating her to achieve her personal goals.

I'm not doing things for people, I'm doing this for my personal fulfilment and everything. (P.7)

She also demonstrated her ability to take responsibility for her learning and goals without pinning the blame on others.

For me, I wouldn't say there are any external features. It's just me wanting to do well and okay. Being on top of my potential, like I'm just trying to, I'd say be the person I've always wanted to be. I don't have any support and I don't have anyone who checks up on me - and I don't blame anyone. (P.7)

A high degree of autonomy would also be demonstrated when a person displays a clear understanding of factors which motivate their behaviour. In this case, Participant 8 stated how he saw himself as a role model to people similar to himself, which provided a clear direction in keeping him fixed on his goals.

what motivated me is that I want to be a role model to some of the people in my family, for them to be part of my journey to see from me all that I am doing. (P.8)

The above findings correspond with Ryan and Deci (2000), who emphasise that autonomous behaviour enables individuals to remain on task and focused on their choices and interest despite outward influences. This is because autonomy enables students to take ownership of their learning despite being discouraged by others. However, this autonomy must be viewed within the broader contexts of marginalised backgrounds, where students' autonomy may be a response to limited support systems rather than pure volition. This raises the possibility that what appears as self-determination could, in part, be shaped by necessity rather than genuine choice, implying that students from disadvantaged backgrounds may need additional scaffolding to develop authentic autonomy.

Thirdly, successful students demonstrated intrinsic motivation when their needs for relatedness were met. According to Ryan and Deci (2020), relatedness is also an intrinsic motivator as it results in feelings of connectedness and belonging in society. Despite interactions with diverse groups of people, high-performing students indicated the importance of sharing and learning from others. Participant 1 stated

our campuses have different students of all races [Indian, White, Black African and Coloured racial backgrounds] ... I interact with all the races that is students from the different racial backgrounds to share ideas and learn from them... I see my interactions as something good to enhance my success. (P.1)

The reflections of the above participant indicate how these interactions enhanced her success because interactions with diverse groups enable a more comprehensive understanding of the subject matter and create an environment where difference is valued. Participant 3 also

indicated how situations were created for students to work in groups and learn from each other.

It also increases your memory because you are speaking about it, it helps you to remember it and helps to recall all we have discussed in the classroom. It helps us to have better relationships with our peers and make connections with them. .... I think it's a better way to learn. It also increases your memory because since you are speaking [about] that and it just helps you remember it, and it will help with the subject in the classroom. So when we are talking to each other in the classroom we can always recall the conversations we have had about this subject with our peers and just become better at conversations and making connections. (P.3)

This indicated that the benefits of the relational activities extended beyond the lecture room, where students could self-actualise by sharing their knowledge and purpose to assist others. Additionally, this sharing not only enhanced human and social connections but also allowed students to improve their learning by recalling facts easily. High-performing students also highlighted the importance of being mentored. Participant 5 mentioned

What motivated me is that during my first year, I had a mentor and my mentor was helpful to me because she motivated me to do the best even now she still gives words of encouragement to do the best academically. (P.5)

I've made it this far only because I've been standing on shoulders of giants. So basically, you stand on the shoulders of giants, and no matter how short you are, if you are standing on the shoulders of giants, you'd get to see the view. The same view they are getting (P.5)

Being mentored and building relations with a more knowledgeable person enabled Participant 5 to gain more comprehensive knowledge, resulting in her success.

The above reflections supported Ryan and Deci's (2020) theory of relatedness as a fundamental aspect of human motivation in SDT, which highlights the importance of human connection. Meaningful interactions across racial and cultural divides, through collaborative learning, and within mentoring relationships contributed to students' sense of belonging, academic confidence, and deeper engagement with learning in the above reflections. These connections not only satisfied the need for relatedness but also enhanced retention, communication, and identity affirmation. Students thrived when they felt seen, supported, and intellectually stimulated by peers and mentors alike. It is, however, essential to note that not all students may have equal opportunities to form such connections due to linguistic, financial, cultural, or infrastructural barriers.

From the data that were presented in this theme, it is evident that the participants were intrinsically motivated when their psychological needs for competence, autonomy and relatedness were fulfilled. The above findings challenge deficit approaches by focusing on the habits and experiences of high-performing students (Johnson et al., 2022).

(ii) *Extrinsic motivation: Introjected, identified and integrated regulation*

Extrinsic motivation has the potential to produce the same effects as intrinsic motivation because the individual begins to internalise experiences due to increasing levels of self-regulation (Ryan & Deci, 1985). External regulation demands the least amount of self-

regulation, where students are motivated to succeed with the promise of external rewards or fear of punishments. This was not apparent in these initial data findings. The absence of external regulation among this cohort of high-performing students aligns with research suggesting that students who achieve sustained academic success typically progress beyond basic reward-punishment motivation (Deci & Ryan, 2000). Hence, this group of high-performing students may have greater self-regulation, relying less on immediate external rewards or punishments. Data displayed evidence of introjected, identified and integrated regulation, which resulted in students consistent success. Although theoretically distinct levels of extrinsic motivation, we must highlight that these may blur in the actual lived experiences of these students. We therefore see in the findings below that these levels are often entangled with contextual factors, making rigid categorisation difficult, revealing the complicated nature of SDT in disadvantaged contexts.

Introjected regulation is a kind of motivation which is not fully integrated into an individual's belief system and exists because the individual wants to avoid feelings of guilt, shame, or anxiety (Ryan and Deci, 2020). In this study, Participant 9 indicated how she was motivated because she was given an opportunity that was denied to many others similar to her. She reflected:

I know how hard it is to get this opportunity because it was not just handed to me. They were a lot of sacrifices, I know how hard I had to work for it, it made me appreciate and value a lot more. Now I work ten times harder to maintain it. My mother encouraged me to work hard, I guess to an extent because I come from a single parent household. Seeing my mom work so hard and do her best to provide me with these opportunities. My mother encouraged me to work hard. (P.9)

In the case of Participant 9, gaining a rare opportunity served as a form of internal pressure that made her feel responsible to work hard and do her best in her studies. In this scenario, the motivation to study hard is driven by a perceived internal pressure or societal expectation to gain an opportunity aligning with the theory of SDT (Ryan et al., 1991). The motivators for Participant 9 were, therefore, not deeply ingrained in her belief system but from a desire to meet actual or perceived external expectations due to the opportunities bestowed upon her. Seeing that Participant 9 also came from a home managed by a single mother who worked exceptionally hard, the avoidance of guilt could have also been a possible introjected motivator. Her account thus reveals how her obligation and gratitude were internalised as a form of motivation leading to her success. While this does not reflect an alignment with her value system, it did contribute to her success. Participants also explained that living in challenging communities and experiencing fear due to hardships like crime served as a motivator. Participant 3 stated

I personally think its fear. I grew up in a very challenging community. The environment I come from is full of high crime rates, we are disadvantaged yet we are given a chance to prove ourselves, I tried to do more things though I had limits. (P.3)

This response demonstrates how challenging circumstances can become powerful motivators for academic achievement. The participant's fear of remaining in her disadvantaged environment drove her to work harder academically and seize educational opportunities to prove herself despite limitations. From an SDT perspective, this represents introjected

regulation — external motivation stemming from the desire to avoid negative outcomes associated with remaining in her current situation. While this fear-based motivation contributed to her academic success, research cautions that relying primarily on avoidance motivators may lead to emotional exhaustion or burnout over time (Vansteenkiste & Ryan, 2013), particularly without adequate institutional and emotional support systems. Participants also displayed elements of identified regulation when reflecting on what motivated them to succeed. Ryan and Deci (2020) outline that identified regulation demands a greater level of internalisation and regulation than introjected regulation. Here, individuals are motivated by conscious values that align with their belief system. Some of the high-performing students in this study indicated the absence of role models in their communities, which served as a motivator to succeed. Participants 5 and 7 mentioned

I grew up in a place with so many people, that I don't look up to. People that I don't want to be like. In anything I do, I try not to be like those people. Oh, for instance. Not in a bad way, but I try not to turn out to be whatever is exposed to me. (P.5)

I come from a township school where there are basically no people who you can look up to there. (P.7)

Coming from a township school, the high school attended by Participants 5 and 7 were likely poorly resourced, with very few role models to look up to. Having no one to emulate created an inner desire to be successful. This could be due to their belief that education is something of value that could change their lives positively. It is clear that these participants valued education as a means for progress and freedom from the limitations of their current environment. According to Deci et al. (1991), this internalisation of values may serve as a powerful motivator for student success; however, it is worth noting that it could have also emerged in response to their marginalised context, not just individual reflection.

Participants also displayed elements of integrated regulation when reflecting on what motivated their success. According to Ryan and Deci (2020), integrated regulation is the highest level of extrinsic motivation, where people not only identify the value of an activity like studying hard but are able to deeply assimilate this value into their sense of self. In other words, participants internalise the belief that studying and achieving success are congruent with other core interests and values. Integrated regulation was identified in statements from first-generation students. Participant 8 explained

I am the first person in my family to pass matric and I am also the first person in my entire family to go to university. To be able to graduate that is what motivated me. Even during my high school I had many challenges but I was able to pray to God and able to believe in myself although I was encountering challenges. I had courage to fight to be a better person I am today. All the way, I always prepare for my work. I work very hard and everything that I get is from my courage. The support that I got from other people.... thank you. For me being the first person to be in a university in my family is just motivating me to work very hard even if some of my modules are very hard to do and some of the tasks are very hard but what motivates me is that I want to be a role model to some of the people in my family. For me being the first person to be in the university in my family is just motivation to work very hard, even if some of my modules are very hard. (P.8)

Comments by Participant 8 aligned with research on first-generation university students experiencing greater difficulty with their academic subjects (DeFreitas & Rinn, 2013). He, however, displayed perseverance in realising his goals. Participant 8 displayed extrinsic motivation as integrated regulation, because he was driven by a need to succeed academically and fulfil his potential despite experiencing difficulty with the work. The motivation displayed by Participant 8 aligns with his personal belief system that values education as a means to break generational trends and improve the circumstances of his family. It is evident that Participant 8 internalised the value of education and integrated this with his personal value system and sense of self.

Integrated motivation was also demonstrated when participants were motivated by a willingness to uplift the impoverished areas from where they came. Participant 4 commented I need to represent my rural area, where there are few people who manage to go to university. I have prospered because that is what is pushing me. (P.4).

In the case of Participant 4, his motivation to succeed in his studies was aligned with being a positive representative of his community and a desire to make a positive impact. Participant 4 also seemingly internalised the importance of education as he synthesised this with his personal values and sense of self, which motivated his success.

From the data that were presented, extrinsic motivators in the form of introjected regulation, identified regulation, and integrated regulation seemed to have been responsible for the success of high-performing students in this study. Yet, this can be challenged as these students from disadvantaged contexts may have no other viable option but to succeed. The desire to be 'the first' or 'represent the rural area' for example, may also reflect a burden of responsibility that could have negative consequences. Hence, the clear theoretical levels offered by SDT **may not always neatly categorise the lived realities of disadvantaged students**, and motivation in a disadvantaged context seems to be much more complicated.

## CONCLUSION

The research sought to explore the motivators of student success using high-performing students' views of their self-determination. The findings above highlight that high-performing students in the study experienced both intrinsic and extrinsic motivating factors. In theme one (i), we found that students were intrinsically motivated when their needs for competence, autonomy and relatedness were met. When students perceived themselves as competent, they were more likely to take on challenges and persist through difficulties, as seen with participants who recognised and built upon their strengths. Autonomy, or taking ownership of their learning, despite being discouraged by others, emphasised the importance of student agency in academic success. However, we emphasise that within the context of marginalised backgrounds, students' autonomy may be a response to limited support systems rather than pure volition. Relatedness, or feelings of being connected to others, added value to their learning and interactions with diverse people enriched their learning. It is essential to note that not all students may have equal opportunities to form such connections due to linguistic, financial, cultural, or infrastructural barriers. Evidently, in this theme, meeting the psychological needs of competence, autonomy, and relatedness motivated students intrinsically. Thus, universities could design learning opportunities where these three aspects are included to enhance student motivation.

In theme two (ii), students were motivated by three levels of extrinsic motivation; introjected, identified and integrated regulation resulting from varying degrees of internalisation, Introjected regulation, although not fully integrated into an individual's belief system, was evident in participants who took advantage of rare opportunities or worked harder due to the fear of remaining in the same disadvantaged place. Identified regulation, where motivation aligns with personal values, was evident when participants were motivated to overcome community limitations and become role models. Integrated regulation, the deepest form of internalisation, was demonstrated by first-generation students whose educational goals were fully aligned with their self-identity and personal values. These findings in theme two, highlight the role of extrinsic motivators as drivers of high academic achievement, similar to intrinsic motivation. Despite the social and economic challenges that could have resulted in dropout or failure, these students instead thrived and performed due to their extrinsic motivation. We must however emphasise that these findings require critical reflection, as disadvantaged students may find themselves with few alternatives to academic achievement, and the weight of being 'the first' or 'representing their rural area' may impose heavy responsibilities with negative consequences.

The findings expand on the literature of self-determination theory by demonstrating how both intrinsic and extrinsic motivations operate together in students from disadvantaged backgrounds in the South African context. Previous research often places intrinsic and extrinsic motivation as opposing ideas; however our findings reveal that high-performing students are driven by both types of motivation to navigate barriers to learning. The study particularly advances understanding of how extrinsic motivation can be deeply internalised to function similarly to intrinsic motivation, challenging assumptions about student motivation in under-resourced contexts. Crucially, this research highlights that SDT's theoretical categories may not always neatly align with the complex lived realities of students from marginalised contexts, where motivation is often shaped by necessity rather than choice. These findings suggest that universities should move beyond deficit-focused support models to more proactive approaches that seek to understand what drives student success in their lived realities.

While this study provides valuable insights, several limitations should be acknowledged. The sample size of 10 participants, though appropriate for qualitative inquiry, limits generalisability. Additionally, the focus on one School of Education may not be a reflection of other disciplines. We recommend that institutions ensure that learning opportunities satisfy competence, autonomy, and relatedness needs, and programmes should be designed to encourage the development of relationships for academic success. We further recommend that university personnel recognise that students from disadvantaged backgrounds possess unique motivational strengths that can be harnessed for success. Future research should explore motivational factors across diverse academic disciplines and include longitudinal studies to track how motivation evolves throughout students' academic journeys and beyond. Research could also explore the role of cultural and contextual factors in shaping motivation among diverse student populations and examine how motivational patterns vary across academic disciplines and year levels.

This study makes a vital contribution by shifting focus from what disadvantaged students lack to understanding what enables them to succeed. By focusing on the complex motivational landscape of high-performing students from marginalised backgrounds, this research

challenges deficit discourses and provides evidence for proactive approaches to enhancing student success. Understanding motivation within marginalised contexts requires a more nuanced application of SDT, as contextual pressures can blur rigid theoretical boundaries of SDT. In the South African context, where educational equity remains a pressing concern, these findings offer hope and practical pathways for transforming university access into sustained academic success, ultimately contributing to broader social transformation goals.

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