4. Discussion

This study was designed to contribute to the international literature on achievement motivation by adopting an exploratory, mixed-method approach to understanding the motivational processes of Rwandan secondary students. We administered open-ended questionnaires to a sample of 153 students to elicit the factors that they perceived to facilitate or undermine their motivation during classroom activities. Within questionnaires, we also asked students to list those subjects they associate with (a)motivation. We combined the listing data with end-of-year school to perform correlational analyses, which allowed us to quantitatively examine whether or not associating a school subject with (a)motivation predicted school grades. In this section, we briefly highlight how the findings from this study compare to the extant literature on achievement motivation within the international context and to the literature on education in Rwanda.

*4.1. Motivation an educationally relevant but multidimensional construct in the Rwandan school context?*

To our knowledge, no systematic investigation into achievement motivation within Rwandan classrooms has been conducted to date. However, our study findings suggest that achievement motivation could indeed constitute a useful framework to look at students’ education even within the Rwandan school context. Our correlational analyses of the listing exercise revealed that motivation was a positive predictor of end-of-year grades in several high-stakes subjects. This implies that Rwandan students that experience motivation are more likely to achieve higher learning outcomes as well—an observation consistent with findings from other regions of the world (Köller et al., 2019; Kriegbaum et al., 2018; Lauermann et al., 2020; Lavrijsen et al., 2021; Lotz et al., 2018; Meyer et al., 2019; Steinmayr et al., 2018, 2019; Wu et al., 2021). This finding may not only be of academic but also of practical relevance. After all, motivationally informed education interventions have been found to be both cost-efficient and impactful, something of interest to resource-constraint nations that struggle with student learning outcomes such as Rwanda.

However, our qualitative study findings do not suggest (a)motivation is a mono-dimensional phenomenon. Our qualitative analyses of students’ statements on the reasons for the experiences of (a)motivation suggest a range of different cognitive-affective factors that may shape achievement motivation within Rwandan classrooms. Using a coding frame derived from the expectancy-value model of achievement motivation, we, too, find that students imply expectancy, value, and cost perceptions as reasons for experiencing motivation during classroom activities (see table 2). We also find evidence that goals that students feel committed seem to shape their motivational experiences in class. Thus, in line with mainstream expectancy-value and goal theory, motivational processes within Rwandan classroom-contexts are best described as a multidimensional phenomenon as well. It is for this reason that our quantitative findings on the motivational effects on school grades are rough estimates at best. However, they warrant additional research into potential link between achievement motivation and educational outcomes such as learning attainment within the Rwandan context. For example, future studies should explore to what extent the different motivational facets associated with Rwandan students’ expectancy, value, and cost beliefs predict school grades. Our discussions next may provide some insights into what motivational factors may be of relevance.

*4.2. Expectancy beliefs as necessary but insufficient prerequisite for motivation?*

As shown in Table 2, student statements coded as reflecting expectancy beliefs were notably prominent in both the motivation and amotivation data. These beliefs were associated with 77.80 percent of the 153 respondents whose motivation and amotivation statements were analysed—significantly more than those associated with value (61.40 percent) and cost (39.20 percent) statements. At face value, these findings highlight the high relevance of expectancy beliefs in explaining the experience of (a)motivation in classroom contexts. This aligns with motivational literature on self-beliefs, which emphasizes the central role of expectancy beliefs—and related constructs—in fostering motivation and learning (Marsh et al., 2019). Additionally, Table 2 reveals that expectancy beliefs were more strongly associated with amotivation data than with motivation data. While 55.68 percent of motivated respondents linked their motivation to expectancy beliefs, a much higher proportion (89.16 percent) of amotivated respondents identified a lack of expectancy beliefs as a reason for their amotivation. In contrast, 88.64 percent of motivation respondents were found to imply value as a reason for their experience of motivation whereas only about .89 percent of amotivation respondents were found to imply the lack of value as a reason for their experience of amotivation in class. According to expectancy-value theory, expectancy beliefs play a foundational role in shaping value beliefs (Eccles & Wigfield, 2002). This suggests that students are unlikely to assign value to tasks for which they do not develop any success expectations. Interpreting our study findings through this lens suggests that, within the Rwandan school context, expectancy beliefs may indeed not be a sufficient condition for experiencing motivation in classroom activities, but they appear to be a necessary condition for not experiencing amotivation. Thus, on its own any educational intervention designed to boost competence beliefs of Rwandan students may not necessarily be effective in increasing motivational levels but could help to tackle amotivation within the studentship.

*4.3. School utility as a driver of motivation?*

Within the motivational literature, the subjective reasons for task engagement can be associated with both value as well as goals. Within the motivation data, we associated around 92.00 percent of respondents with either value or goal statements. This is a significantly larger proportion than the percentage of respondents we associated with expectancy statements. It aligns with our reading of the data that expectancy beliefs may be a necessary condition for no experiencing amotivation, but it may not be a sufficient condition for experiencing motivation in classroom activities. Our findings suggest that students associate the experience of motivation especially with value and/ or goals. We considered goals and utility perceptions as purpose-driven reasons for task engagement. We found that around 79.60 percent of motivation respondents were associated with statements that implied utility value and/ or goals. Within those purpose-driven reasons, school and learning utility were found to be the most common coding categories with about 57.95 percent of motivation respondents. Even though learning utility was a rather generic, and probably a conceptually not helpful coding category, we considered it closely related to school utility. The prevalence of school utility within the data is in line with the Rwanda-specific literature. Based on extended periods of fieldwork at Rwandan schools, Honeyman (2015) concluded that “[Rwandan] students thus had a fairly explicitly instrumental understanding of the purpose of schools. […] What counted for them, crucially, was school’s role in preparing them for examinations, the hurdle they had to pass in their objective of getting a university degree and finding a high-paying job”. Her conclusion also implies that school utility may partly overlap with general utility. This may be particularly true for students in the lower age ranges like the ones we covered in our study. This in turn may also explain general utility was less common within our data. Higher age groups may exhibit higher levels of general utility perceptions.

*4.4. Affective factors relevant for (a)motivation?*

*4.5. Attainment value as an indirect driver of (a)motivation?*

Given the eminence of attainment value within expectancy-value research, it is remarkable that we did not find any evidence of its relevance within our motivation data. Within expectancy-value theory, it refers to the importance students place on performing well within academic challenges because it is closely tied to their sense of identity. The personal importance of a task thus stems from the latter’s relevance for the type of person students aspire to be. In Rwanda, students and their parents hold instrumental value beliefs about school. [HONEYMAN].

*4.6. Effort and emotional costs as the most relevant cost perceptions?*

It suggests that education is what happens in school

*4.7. The validity of the study results*

As explained above and detailed in appendix S3 of the article’s supplementary material, interrater agreement was eventually achieved on all data segments to be coded. Reliability, however, is a necessary but insufficient condition for the credibility of the coding results attained. To establish validity, we took into account its different sources (e.g., Krippendorff, 2004; Schreier, 2012).[[1]](#footnote-1) The discussions on the meaning of ishyaka with both university students as well as some of the study participants revealed that Rwandan students did indeed access the meaning of motivation we wanted to convey through our open-ended questionnaires. We took this as evidence of the face validity of our questionnaire wording. As tables 7 and 8 highlight, relating a school subject especially to the experience of motivation predicted end-of-year school grades in a number of school subjects. We considered this as evidence in favour of the criterion validity of our probing approach. The use of open-ended and self-administered questionnaires encouraged students to list their cognitive-affective experiences in class openly. The administration of both a motivation and amotivation questionnaire across a sample of 153 students should thus help to uncover a broad range of different cognitive-affective factors that may shape (a)motivation. A coding frame derived from the expectancy-value model, which is an eminent representation of the different cognitive-affective reasons of why students engage with activities, and applied by two coders, including a Rwandan one, thus helped to adequately summarize and categorize the themes within the raw data collected. Altogether, we take this as evidence of the content validity of the data analysis strategy. Given the nascent stage of motivational research in Rwanda it was not possible to explore the construct validity of our research insights over and beyond the other sources of validity. However, the partial associations between the different motivational facets reported in table xxx and xx could be taken as evidence of construct validity as well. In sum, due to the reliability and the validity being established, we concluded the coding results as credible.

Limitations

* Additional studies are necessary to explore if designs not shaped by expectancy-value theory find additional motivational facets.

1. Even though qualitative research findings are often evaluated in terms of its credibility and trustworthiness, qualitative content analysis is generally discussed in terms of validity and reliability, nonetheless (e.g., Drisko & Maschi, 2016). [↑](#footnote-ref-1)