4. Discussion

4.1. Motivation an educationally relevant construct for the Rwandan school context?

4.2. The expectancy-value model adequate to describe motivational experiences in Rwanda?

Here, explain the match between questionnaire design and coding frame.

Despite its relative frequency (i.e., 40.79% of motivation respondents), we did not find learning utility a theoretically useful category. It implies the usefulness of learning for one’s own learning (see sample quotes in table 1). Conceptually speaking, this is non-informative since “learning utility” does not specify why someone wants to learn something in the first place. These deeper reasons may in turn determine the motivational effects of learning utility. A person may want to learn something for reasons related to school utility or for intrinsic reasons (e.g., enjoyment). School utility was positively associated with school grades in at least some school subjects (see table S7) whereas achievement emotions were not related to school grades at all (see table S3 of the supplementary material).

* Also mention that most likely there is a nexus between effort cost and expectancy beliefs.

4.3. Expectancy beliefs as necessary but insufficient condition?

Also refer to the interaction with effort costs.

4.4. Value as a multi-faceted construct?

4.5. Purpose as a driver of motivation?

A coding segment in that category read “I am motivated because I am able to explain it to others that didn't understand” (female S1 student). As we interpreted the segment, the student wanted to understand the exercise so that she can explain it to her peers for social-status purposes.

4.6. Emotions as an important aspect of (a)motivation?

4.7. 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].

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

It suggests that education is what happens in school

4.9. 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, 2004a; Schreier, 2012a).[[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.

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)