Motivation of students for learning English in Rwandan schools

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Since Rwanda decided that from 2009 English will be the sole medium of instruction from upper level primary school onwards, motivation for learning English has become an especially important issue. Therefore this study investigated motivation for Rwandan primary and secondary school students to learn English. The study was carried out in Nyagatare and Huye districts in October 2015, with participation by 1,237 school students (314 primary, 475 lower secondary and 448 upper secondary), administered a questionnaire containing 34 items on motivation. Factor analysis identified five types underlying motivation: unwillingness-based, intrinsic, anxiety-based, future-oriented, and praise-oriented. Results show that students in Rwanda overall rely mostly on praiseoriented motivation, followed by intrinsic, future-oriented, anxiety-based, and unwillingness-based motivation. Intrinsic and praise-oriented forms of motivation increase with age, although unwillingness-based and future-oriented forms of motivation, both of which can be labelled as extrinsic motivation, decrease with age. The study indicates that praise is a potential explanatory variable for an increase in intrinsic motivation, whereas a decrease in extrinsic motivation can be attributed to high unwillingness-based motivation of primary school students.

Introduction

Only 23 years have passed since the 1994 genocide took place in Rwanda. However, GDP has been growing at a rate of 8% per annum, and GDP per capita improved from \$240 in 2000 to \$700 in 2014 (World Bank, n.d.). Although more than 70% of the population is still engaged in the agricultural sector, the country's economic structure is shifting gradually towards a knowledge-based society. As economic development has been achieved, noticeable progress has been made in the education sector as well.

Two major changes in the educational system have taken place. First, the government introduced a 12-year basic education program in 2010 and access to education has been expanded at all levels. The net enrolment rates for primary and secondary school were 73.3% and 11.0% in 2000, but improved to 96.5% and 31.8% respectively in 2012 (Rwanda Ministry of Education, 2013). Second, there has been a shift in the medium of instruction from French to English. Since 2009, English has become the sole medium of instruction from the upper level of primary. The reason for this change is related to certain economic factors. According to Samuelson and Freedman (2010), "the Rwandan government is justifying the switch to English as a medium of instruction by pointing to the global and regional growth of English as the leading language of science, commerce, and economic development" (p. 192). The economic factor in the shift to English can also be seen in Rwanda's taking part in the East African Community (EAC) in 2007 and in its affiliation with the Commonwealth in 2009.

Transition of medium of instruction

Rwanda is unique in terms of its language-policy path. Unlike other African countries, Rwanda has only one indigenous language, Kinyarwanda, which is understood by 99.4% and spoken by 90% of the population (Samuelson & Freedman, 2010). While Kinyarwanda is exclusively spoken in the household, it has not been used as a medium of instruction beyond primary school. Instead, French maintained its influence, as it was adopted as the official language and medium of instruction starting during the Belgian colonial period in 1890, which ended in 1962 (Samuelson & Freedman, 2010). Even after Rwanda won independence in 1962, French retained its power and was the sole medium of instruction in secondary education, even in the upper years of primary school, until 1979 (King, 2014).

In 1979, Habyarimana, a former president of Rwanda, imposed restrictions on access to French in primary school. Based on this policy, access to secondary schools, where French was the teaching language, was also limited by quotas whereby priority was given to Hutu people during enrolment. Other students, who were mostly Tutsi, studied in Kinyarwanda. This gave people the idea that classification was based on social status; therefore, people who could speak French were thought of as social elites. Rwanda was therefore considered a Francophone country until the Rwandan Patriotic Front (RPF) assumed power after the 1994 genocide. Most members of the RPF grew up in Uganda or Tanzania during their exile period, which are countries in which many people speak English. Therefore, the RPF had little interest in learning French, and soon after they gained control over government, they added English as an official language in 1996. Thus, three languages, Kinyarwanda, French and English, are now official languages. The transition in the medium of instruction is shown below in Table 1.

1940 onwards 1979 onwards 1996 onwards 2009 onwards Lower primary Kinyarwanda Kinyarwanda Kinyarwanda Kinyarwanda Upper primary French Kinyarwanda French English English (partial) French (Hutu) Secondary French French English Kinyarwanda English (partial) (Tutsi)

Table 1: Transition of medium of instruction

Concerns related to the change in the medium of instruction

There have been some expected problems with the change to English. First, at the time of the shift in the medium of instruction in 2009, about 85% of elementary school teachers had only a beginner, elementary, or pre-intermediate level of English, whereas 66% of secondary teachers had the same level (Rwanda Ministry of Education, 2010). Thus, owing to teachers' poor command of English, it is unclear whether students are in a good environment for learning English. Second, a little less than 80% of the population is still engaged in agriculture and therefore, especially in the countryside, there is the question of

whether students think learning English is practical or not. Both primary and secondary students' motivation for learning English is therefore a highly concerning issue. Blommaert (2008) pointed out that the actual language and literacy resources that many students have do not match the criteria for upward globalised mobility. He added that, because their English is not good enough for them to use outside Rwanda, it therefore becomes township English, which one is able to use only in particular social spaces. Referring to this point, Samuelson and Freedman (2010) mentioned that the switch to English could sideline the majority of learners, who do not have a solid grasp of academic literacy in either their first language or English. Therefore, some students might believe that, even though they study English, it may end up as township English and their efforts will be wasted.

Motivation

Many scholars acknowledge the importance of motivation in learning as "it can influence what, when, and how we learn" (Pintrich & Schunk, 2002, p. 6). Whereas motivated students tend to engage in activities that they believe will help them learn, unmotivated students are not able to be systematic in making an effort in learning, as are motivated students. The importance of motivation is often emphasised in the field of language and linguistics. According to Cook (2000), three main factors explain the speed of learners' learning in second language acquisition (SLA): age, personality, and motivation. He also stated that motivation is the most important among these three elements. Masgoret and Gardener (2003) supported this point and claimed that motivation is responsible for achievement in a second language. In addition, Dörnyei (2001) noted that 99% of language learners who show strong motivation were able to achieve a reasonable working knowledge regardless of their language aptitude.

Intrinsic and extrinsic motivation

Particular theories can explain types of motivation in SLA. The most popular theoretical concept of motivation categorises it into intrinsic and extrinsic motivation. This idea appeared after integrative and instrumental theory, and has been widely accepted in research on motivation for academic learning. "Intrinsic motivation refers to motivation to engage in an activity for its own sake" (Pintrich & Schunk, 2002, p. 245), whereas "extrinsic motivation is motivation to do a work or an activity as a means or way to achieve a target" (Mahadi & Jafari, 2012, p. 233). Thus, intrinsically motivated learners take part in activities because they think the activities are enjoyable. By contrast, those who are extrinsically motivated do the activities because they think participation will bring desirable outcomes, for instance, praise from teachers or parents. Desirable outcomes include not only rewards but also avoidance of punishment. If parents are angry at a learner for not studying and then the learner studies in order to avoid being scolded, we can say that the learner's action is extrinsically driven.

In this theory, the two types of motivation are often seen as a binary opposition, and extrinsic motivation is considered negative, while intrinsic motivation is regarded as the most desirable motivation in learning. However, Ida and Inui (2011) pointed out that a

danger lies in defining intrinsic motivation as coming from the idea that learning is fun. The most common definition of intrinsic motivation is that of "self-purposefulness," or the feeling that learning in itself is the objective of studying. However, Ida and Inui (2011) claimed that the spread of the notion that pursuing enjoyment in studying is the ultimate motivation and that other motivations are inferior, may lead to denial of personality if a person thinks they are not suited to studying because they cannot have fun doing it. In addition, the pressure on learners that comes from the idea that they should enjoy studying, can encourage extrinsic motivation, forcing them to seek motivation from outside themselves.

Pintrich and Schunk (2002) stated that intrinsic and extrinsic motivation are time and context dependent. Learners can lose their intrinsic motivation for activities they formerly enjoyed. One reason is that their interests may change with age. Things in which they are interested during childhood may not continue to motivate learners when they become older. In addition, there is an undermining effect of intrinsic motivation. When a reward is given from the outside for doing certain activities that learners have been doing just for enjoyment, learners come to recognise these activities as a means of obtaining reward and their intrinsic motivation can decrease (Ichikawa, 2001).

Self-determination theory

Self-determination theory, introduced by Ryan and Deci in 2000, provides a new perspective on intrinsic and extrinsic motivation as it sees them in the same context, which is different from past theories in which they are seen as a binary opposition. In self-determination theory, motivation level is divided into six stages in terms of its qualitative differences, including four levels of extrinsic motivation (Ida & Inui, 2011). Learners are said to be more motivated if participation in an activity depends heavily on a self-determined factor. The six stages of motivation are categorised as starting from amotivation, in which there is no motivation to engage in an activity, followed by external regulation, introjected regulation, identified regulation, and integrated regulation. These four stages are categorised as extrinsic motivation, but they vary in the degree of levels of autonomy, with integrated regulation significantly more internalised than external regulation. Most internalised motivation is considered intrinsic motivation, in which learning is an objective and not a means for achieving goals.

Self-determination theory has not drawn the same criticism that was directed at the theory of intrinsic and extrinsic motivation, which categorises intrinsic motivation as the opposite of extrinsic motivation. Unlike the earlier theory, self-determination theory is based on the idea that intrinsic motivation is contextual and can change to extrinsic motivation. However, Ida and Inui (2011) pointed out that, although self-determination theory succeeded in breaking away from the dichotomy of intrinsic and extrinsic, there is still some danger in terms of defining intrinsic motivation as self-purposefulness and saying that intrinsic motivation is the most desirable form of motivation.

Motivation studies in Rwanda

Little research has been conducted on students' motivation for learning English in Rwanda. Tabaro (2015) undertook a survey on motivation for learning and using English as a medium of instruction, in which he targeted secondary school students using a focus group interview method. He gathered 24 students from three secondary schools in Kigali city and asked them about the benefit of or motivation for learning English as a second language. His findings revealed that the students were extrinsically oriented and that a reason categorised as intrinsic motivation was limited only to "watching movies," which was supported by only one student. He also asked educational administrators in interviews about Rwandans' motivations for learning and using English. However, his research was limited to the lower secondary level and it did not examine a change in the motivational level.

Objective of the study

The motivation of learners is a key factor in SLA, but educational policies in Rwanda focus mostly on teacher education, owing to their poor English skills. However, it is important to know what motivates students and to observe students' motivation level after the change in medium of instruction. This study therefore investigates the types and transition of motivation for learning English in students at the primary, lower secondary, and upper secondary levels in Rwanda. The research questions are as follows. In addition, two hypotheses used in the field of psychology and also adopted in a study by Carreira (2006), will be tested. Details of the hypotheses are stated in the *Hypotheses* section.

Research questions and hypotheses

- 1. What are the types of motivation for Rwandan students to learn English, with reference to the intrinsic-extrinsic framework?
- 2. How does students' intrinsic and extrinsic motivation change with age?

Hypothesis 1: Intrinsic motivation decreases with age

Many studies show that intrinsic motivation decreases with age. Harter (1981) examined the learning orientation of students among a total of 2,925 students in grades 3–9 and found a decline in intrinsic motivation with age. Gottfried et al. (2001), Otis et al. (2005), and Lepper et al. (2005) also showed a decrease in intrinsic motivation among students aged 9 to 17, 13 to 15, and 8 to 13 years, respectively. In addition, Sakurai and Takano (1985) conducted a questionnaire with 486 Japanese students in grades 2–7 using the scale by Harter. As shown in Harter's study, the curiosity, causality, and enjoyment subscales declined gradually as students moved from grades 2 to 7. Carreira (2006) investigated Japanese elementary school students' motivation for learning English in grades 3 and 6 and found that the intrinsic motivation of grade 3 students is higher than that of grade 6 students. Carreira (2011) also showed a same tendency of decrease in intrinsic motivation with age. As shown in many studies, students in lower grades are intrinsically driven in English activities as compared to students in upper grades. However, there is little

research that tests this theory in the case of countries in Africa, and no single study of Rwanda exists. Therefore, "intrinsic motivation decreases with age" is set as hypothesis 1 in this study.

Hypothesis 2: Extrinsic motivation increases with age

Although many studies have shown that intrinsic motivation decreases with age, as Gillet et al. (2012; 2011) state, the picture regarding extrinsic motivation is less clear because little research has been conducted that examines the transition in the extrinsic motivation of learners. Lepper et al. (2005), for instance, examined the evolution of motivation in terms of intrinsic and extrinsic motivation individually, but did not find any linear effect in extrinsic motivation. However, studies done by Otis et al. (2005) and Corpus et al. (2009) did show a small decrease in extrinsic motivation in students aged 13 to 15 years and in third to fifth grade students respectively, although the decrease is subtle. By contrast, Nikolov (1999) examined Hungarian children between the ages of 6 and 14 and revealed that extrinsic motivation emerges at age 11 or 12 and that the ratio of students who give utilitarian reasons for learning English became higher with age in a comparison of three groups: 6 to 8, 8 to 11, and 11 to 14 years old. Carreira (2006) focused on extrinsic motivation in Japanese elementary students and indicated that, in contrast to the results of Nikolov (1999), third graders have more extrinsic motivation for learning English than do sixth graders, despite the effect size being small.

Thus, studies on extrinsic motivation do not show consistent results, as do those on intrinsic motivation. Gillet et al. (2012; 2011) observed that further research is needed in order to investigate differences in school extrinsic motivation in a context of age. Therefore, following Carreira (2006), as well as the study by Nikolov (1999), hypothesis 2 is set as "extrinsic motivation increases with age."

Method

Participants

The sample for this study consisted of 1,237 students from seven public schools in two districts: Nyagatare and Huye. Nyagatare, located in the northeastern part of Rwanda, shares border with Uganda in the north and Tanzania in the East where English is official language, whereas Huye, located in the southern part of Rwanda, is very close to Burundi where French is official language. It was presumed that there might be differences in importance of motivation that students rely on. The targeted populations are students in primary 4 and 6, and in secondary 3 and 6. The reason that targeted population starts from primary 4 is that primary 4 is the time of the shift in medium of instruction from French to English. They are expected to have some troubles learning in English and therefore to see transition of motivation, it is important to examine from primary 4. All the schools have been in existence for more than 30 years. The researcher sought permission from the district level for the fieldwork operations. Details of respondents for each grade are shown below.

Table 2: Details of participants

	Total	Nyagatare	Huye
P4 (age 9 to 10)	180	100	80
P6 (age 11 to 12)	134	83	51
S3 (age 14 to 15)	475	247	228
S6 (age 17 to 18)	448	206	242
Total	1237	636	601

Sampling procedure

The data was collected during October 5 to 23, 2015. An interpreter, who is a student at Rwanda University and has excellent Kinyarwanda and English skills, followed the field research at every step. Although the questionnaire was in Kinyarwanda, before the participants completed it, the interpreter gave them instructions in Kinyarwanda, to avoid confusion and reduce bias in written language. A few students who are not good at reading Kinyarwanda were given an English version of the questionnaire. The questionnaire was conducted during break time and also beginning of the class. The total administration of the questionnaire lasted between 20 and 30 minutes.

Instruments

A questionnaire was used to examine students' types and transition of motivation for learning English. Many questionnaires have been developed to investigate students' motivation in the SLA context. However, many of these studies are conducted at the secondary or higher education level. As the current research looks at the transition of students' motivation from the primary level, it was necessary to create a questionnaire that contained an intrinsic and extrinsic scale suitable for primary students, and therefore the researcher developed original scales. In order to make a scale suitable to the samples, several scales from previous studies were adopted and developed.

In particular, the *Motivation and Attitudes toward Learning English Scale for Children* (MALESC) by Carreira (2006) was referenced, as this is one of the few studies that examines the primary level. MALESC was created based on the theory of intrinsic and extrinsic motivation; therefore, the scales of the questionnaire the researcher developed also relied on the idea of intrinsic and extrinsic motivation. It consists of 34 questions about motivation using a 5-point scale ranging from strongly disagree = 1 to strongly agree = 5 (see Appendix). A bilingual translator who works for a government agency translated the questionnaire items into Kinyarwanda.

In addition, it also asked personal information about respondents including age, sex, place of birth, mother tongue, family's main occupation, hope on future occupation and experience of living abroad. In order to examine transition of students' age, students whose age did not correspond to the grade age were excluded in the process of analysis.

Interviews

Along with the questionnaire, semi-structured interviews were also conducted with 15 secondary grade 6 students (5 students each for three schools). Interviews were conducted in English and they were recorded and then after transcribed. Interview questions focused on their preferred career path. Sample data-gathering questions included 'What is the reason to choose that career path?', 'What is the reaction from parents?', 'What do you feel about parents' occupation?'.

Results and analysis

Motivational types

The collected data was analysed using the Statistical Package for the Social Sciences (SPSS) computer program. As the present study aimed to investigate the English learning motivation level, factor analysis was used in order to extract the types of motivation of Rwandan students. Factor analysis by the maximum-likelihood method and promax rotation were used for extracting the underlying factors from 34 questionnaire items. Items in which factor loading is less than 0.35 were deleted, and factor analysis (with the maximum-likelihood method) was carried out again. The number of factors was decided based on the results of a scree plot, and five factors with an eigenvalue greater than 1 were selected. The results of promax variation are shown in Table 3. Factor 1 indicates a relatively high value of factor loadings for "Teachers tell them to study" and "Parents tell them to study," and as it implies learners' unwillingness, it is labeled as Unwillingness-based motivation. Factor 2 represents a will to study for fun, and therefore it is named as Intrinsic motivation. The items loading on Factor 3 seem to address feelings reflecting anxiety, and thus can be labeled as Anxiety-based motivation. Items that load on Factor 4 indicate practical reasons, and therefore it is called Future-oriented motivation. Last, a feeling of happiness can be seen from being praised in Factor 5, and thus it is called Praise-oriented motivation.

Motivational transition

Based on motivation loaded from the factor analysis, the general descriptions for motivation level in terms of overall students, region, and grade level are given in Tables 4 to 6, respectively. The numbers in the M (sub) columns show the mean value of subscales calculated by dividing the subscale score by the number of questions that constitute each factor. As shown, regardless of differences in region and grade level, students rely mostly on praise-oriented motivation, followed by intrinsic motivation, future-oriented motivation, anxiety-based motivation, and unwillingness-based motivation in that order. However, at the primary school level, the order of unwillingness-based motivation and anxiety-based motivation is reversed.

Table 3: Factor loadings for 19 questionnaire items

Factor	Item	Factor loading
Factor 1:	17 I study English because teachers tell me to study English hard.	0.68
Unwillingness-based	12 I study English because my parents tell me to study English	0.67
motivation	hard.	
	4 Everyone studies English so I also do it.	0.61
	6 I study English because it is required.	0.61
	2 I study English to pass examinations.	0.46
Factor 2: Intrinsic	20 I enjoy hearing English programs on the radio.	0.74
motivation	31 I enjoy reading English books, articles, newspapers and	0.55
	magazines.	
	10 I always look forward to the day when we have English class.	0.43
	16 Learning English is a hobby for me.	0.35
	9 I would like to have a job in which I use English.	0.33
Factor 3: Anxiety-	22 It makes me feel badly about how my parents will react if I	0.70
based motivation	don't study English.	
	26 My parents would get angry if I were bad at English.	0.54
	21 Teachers would get angry if I were bad at English.	0.38
	29 I get worried when I am doing worse than my classmates in	0.31
	English.	
Factor 4: Future-	3 I am studying English for a future job.	0.61
oriented motivation	13 I am studying English to get a good job.	0.54
	7 Studying English makes it easier to find a job.	0.42
Factor 5: Praise-	32 My parents praise me when I become proficient in English.	0.67
oriented motivation	30 Teachers praise me when I become proficient in English.	0.45

Table 4. Descriptive statistics for five subscales

	Motivation factor	Min	Max	M	M (sub)*	SD
1	Unwillingness-based	5.00	25.00	14.43	2.89	4.81
2	Intrinsic	5.00	25.00	20.33	4.07	3.33
3	Anxiety-based	4.00	20.00	14.04	3.51	3.45
4	Future-oriented	3.00	15.00	12.03	4.01	2.34
5	Praise-oriented	2.00	10.00	8.81	4.40	1.45

^{*} M (sub): mean value of subscales calculated by dividing the subscale score by the number of questions that constitute each factor.

Table 5: Mean and SD of subscales by region

Motivation factor	Nyag	atare	Нι	Huye		
Mouvauon ractor	M	SD	M	SD	t value	
1 Unwillingness-based	15.26	4.42	13.66	5.03	5.642+++	
2 Intrinsic	20.45	3.28	20.22	3.37	1.169	
3 Anxiety-based	14.30	3.41	13.79	3.47	2.520^{++}	
4 Future-oriented	11.88	2.26	12.17	2.41	□ 2.119+	
5 Praise-oriented	8.74	1.54	8.90	1.43	□ 1.766	

Note: + p<.05; ++ p<.01; +++ p<.001

]	P4		P6		S3		S6	
Motivation factor	М	M (sub)	M	M (sub)	M	M (sub)	M	M (sub)	F
1 Unwillingness-based	18.62	3.73	17.82	3.56	13.59	2.72	12.93	2.59	91.756+++
2 Intrinsic	19.22	3.84	19.29	3.86	20.85	4.17	20.48	4.10	13.383+++
3 Anxiety-based	13.89	3.47	13.80	3.45	14.67	3.67	13.51	3.38	8.804+++
4 Future-oriented	12.01	4.00	12.09	4.03	12.07	4.02	11.97	3.99	0.172
5 Praise-oriented	8.40	4.20	8.49	4.25	9.14	4.57	8.73	4.37	14.436+++

Table 6: Mean of scales and subscales by grade level

Note: + p< .05; ++ p< .01; +++ p< .001

Test of hypotheses

In the test of hypotheses, as Carreira (2006) referred to it in her study analysing Japanese elementary students' motivation, the present study also uses the definitions of intrinsic motivation and extrinsic motivation presented by Schmidt et al. (1996), in which intrinsic motivation is said to provide motivation for sufficient rewards from the activity itself, and extrinsic motivation is said to provide motivation to obtain an external reward.

Test of hypothesis 1

Hypothesis 1 states, "Intrinsic motivation decreases with age." However, through the questionnaire it became apparent that this does not apply in the case of Rwanda and that intrinsic motivation, in fact, increases with age. Table 7 shows a statistically significant difference between the group of primary 4 and primary 6, and the group of secondary 3 and secondary 6. Looking at the mean of the subscale score in intrinsic motivation, students of secondary 3 (M = 20.85, SD = 3.02) and secondary 6 (M = 20.48, SD = 3.39) had significantly higher intrinsic motivation as compared to students in primary 4 (M = 19.22, SD = 3.55) and primary 6 (M = 19.29, SD = 3.47) (F(3,983) = 13.383, p < .001). A significant difference between the groups is also seen in the factor scores. Whereas the factor score is \Box 0.299 for primary 4 and \Box 0.383 for primary 6, it is 0.148 for secondary 3 and 0.027 for secondary 6 (p < .001).

Test of hypothesis 2

Hypothesis 2 states, "Extrinsic motivation increases with age." However, it was found that this is not the case for Rwanda and that extrinsic motivation actually decreases with age. Table 7 shows one-way analyses of variance on extrinsic motivation. Extrinsic motivation in this context is defined as motivation to obtain an external reward, and therefore 4 factors besides intrinsic motivation are marked as extrinsic motivation in this analysis. The results show a significant difference between the groups of primary 4 (M = 53.29, SD = 7.34) and 6 (M = 52.76, SD = 7.56), and secondary 3 (M = 49.30, SD=7.66) and 6 (M = 47.02, SD = 7.16) (F (3.983) = 31.181, p < .001).

^{*} M (sub): mean value of subscales calculated by dividing the subscale score by the number of questions that constitute each factor.

47.02

7.16

Grades	Intrinsic n	notivation	Extrinsic motivation		
Grades	M	SD	M	SD	
Primary 4	19.22	3.55	53.29	7.34	
Primary 6	19.29	3.47	52.76	7.56	
Secondary 3	20.85	3.02	49.30	7.66	

3.39

20.48

Table 7: Mean and SD of subscales by each grade level

Discussion

Discussion on hypothesis 1

Secondary 6

Hypothesis 1, which stated that intrinsic motivation decreases with age, was rejected. In contrast to previous studies, the current study shows that intrinsic motivation increases with age. The question is why this trend can be seen in Rwanda. One reason could be a reliance on the influence of praise-oriented motivation. As shown in Table 8, there is a strong positive correlation (.719) between intrinsic motivation and praise-oriented motivation. As learners become older, praise-oriented motivation increases, which might result in a rise in intrinsic motivation. In previous studies (Ichikawa, 2001), praise and avoidance of punishment are usually classified in the same category and are called reward-oriented motivation. However, in the case of Rwanda, praise-oriented motivation does not belong to the same category as avoidance of punishment, which is categorised as an element of anxiety-based motivation in this study.

Table 8: Pearson correlations among factors of motivation

	Motivation factor	tion factor Unwilling- ness-based		Anxiety- based	Future- oriented	Praise- oriented
1	Unwillingness-based	1	118++	.419++	.337++	049
2	Intrinsic	118++	1	.393++	.416++	.719++
3	Anxiety-based	.419++	.393++	1	.323++	.391++
4	Future-oriented	.337++	.416++	.323++	1	.528++
5	Praise-oriented	049	.719++	.391++	.528++	1

Note: p < .05; p < .01; p < .01; p < .01

According to previous research, praise is usually defined as extrinsic motivation. Extrinsic motivation is behaviour driven by external rewards, and praise is one of the elements of these rewards. Reward is positioned as the most external element in extrinsic motivation in self-determination theory. Several studies have demonstrated that praise can undermine intrinsic motivation. According to Henderlong and Lepper (2002), a study by Grusec (1991) showed that praise has a positive correlation with shorter task-persistence as "praise can create excessive pressure to continue performing well, discourage risk taking and reduce perceived autonomy" (Henderlong & Lepper, 2002, p. 776). Another explanation for the detrimental effects of praise is called the over-justification effect, which is the "proposition that a person's intrinsic interest in an activity may be

undermined by inducing him to engage in that activity as an explicit means to some extrinsic goal" (Lepper et al., 1973, p. 130).

However, some past research indicates that praise can increase intrinsic motivation. Cameron and Pierce (1994) conducted a meta-analysis of 96 experimental studies that compared rewarded subjects with non-rewarded subjects, and concluded that reward does not decrease intrinsic motivation overall and that verbal praise produces an increase in intrinsic motivation. According to their study (Cameron & Pierce, 1994), intrinsic motivation can decrease only when individuals receive expected tangible rewards from doing a task. This explanation shares a point in common with the over-justification effect in terms of the decrease in intrinsic motivation with reward. However, their study stated clearly that in this case, the reward is limited to something expected and tangible. In another study that supports this point, Lepper and Greene (1973) tested the over-justification effect. Their study, which targeted nursery school pupils in the United States, classified the pupils showing intrinsic motivation in a certain activity into three conditions: expected-award condition, unexpected-award condition, and no-award condition. Their findings indicated that a decrease in intrinsic motivation is seen in children in the expected award condition and not in either the unexpected or no-award condition.

As a study by Cameron and Pierce (1994) demonstrated, reward can have a positive effect on intrinsic motivation. Corpus et al. (2006) distinguished two types of praise, socialcomparison praise and mastery praise, for children between the fourth and fifth grades and showed their relation to intrinsic motivation. Social-comparison praise means comparing one's performance or abilities against those of others, whereas praise for effort and skill is called mastery praise. Their findings (Corpus et al., 2006) revealed that mastery praise benefits intrinsic motivation, while social-comparison praise curtails it. However, in the classroom setting in Rwanda, praise is more likely to be social-comparison praise, as seen in the words of the principal of School K, who said, "Teachers usually call students on assembly and call those who succeeded and praise them" (Interview, 12 Oct 2015). In addition, one student (Secondary 3 student at School N, 13 Oct 2015) responded, "My teachers always praise my efforts, ability and hard work compared to many classmates, but they do not give me something tangible as a reward; instead, we had a special party together after secondary". Teachers might use mastery praise as well, and therefore further research is needed to determine its relation to an increase or decrease in intrinsic motivation.

Although there might be a need for certain conditions in types of praise, as Henderlong and Lepper (2002) argued, praise is likely to enhance intrinsic motivation. Therefore, while motivation is not examined based on types of praise in the present study (as present research found a strong positive correlation between praise-oriented and intrinsic motivation), it is possible to say that praise has positive effects on intrinsic motivation in the case of Rwanda. In addition, when applying the findings of this study to self-determination theory, as developed by Ryan and Deci (2000a), it can appear similar to what is shown in Table 9. For the external regulation stage, unwillingness-based motivation can be applied. This is a stage in which the motivations of individuals are the least autonomous form of extrinsic motivation, behaviours are performed in order to

satisfy external demands and individuals feel that their behaviours are externally regulated and controlled (Ryan & Deci 2000a). Unwillingness-based motivation is driven by "Parents tell me to study" or "Teachers tell me to study," and no sense of autonomy is evident here; therefore, it fits into the external regulation stage. Introjected regulation is a period in which individuals perform actions in response to a feeling of pressure to avoid guilt or anxiety (Ryan & Deci, 2000a). Anxiety-based motivation can fit into this stage, as it is a motivation derived from uneasiness. Identified regulation follows introjected regulation, and it is the stage in which individuals identify with the personal importance of a behaviour and sometimes relate the behaviour with a life goal such as a future job (Ryan & Deci, 2000a). This matches future-oriented motivation, in which learners find value in English as a useful tool for attaining a future goal. Last, the most autonomous form of extrinsic motivation is called integrated regulation. According to Ryan and Deci (2000a), integration occurs when people internalise regulations and assimilate them into the self, and eventually feel greater autonomy in their actions. Praise can possibly work in integrated regulation. As individuals assimilate their behaviours to the self, there are expansions of cognitive capacities and ego development (Ryan & Deci, 2000b).

In Rwanda, as learners become older, they have more opportunities to speak about their future with their parents. In the current study, when the interviews took place with the 15 secondary 6 students about their hopes regarding a future occupation, all of them said their parents respect their dream (Interviews, 13, 21, 22 Oct, 2015). Even though most of their parents are engaged in farming, the students are not told to take over their parents' job. Parents' approval of their children's studies and their desired future occupation can be considered one type of praise in the case of Rwanda. Therefore, the motivation for learning English can move from identified regulation to integrated regulation as motivation "for a future job" gradually turns into motivation "for their own sake." However, praise itself is not internal, and therefore the source of motivation is left blank in Table 9. Ultimately, motivation "for their own sake" leads students to realise their activities are fully self-determined, which occurs in intrinsic motivation.

Amoti-Extrinsic Intrinsic vation motivation motivation Regulation Non-External Identified Intrinsic Introjected Integrated style regulation regulation regulation regulation regulation regulation Source of Impersonal External Somewhat Somewhat Internal motivation external internal Types of No action Unwilling-Anxiety-based Future-⇒ Praise-Intrinsic motivation ness-based motivation oriented oriented motivation motivation motivation motivation

Table 9: Application of self-determination theory to case of Rwanda

Figure 1 shows the result of path analysis after conducting SEM (Structural Equation Modeling). All the paths are significant at the .05 level or better (Praise←Future: (p<.001), Intrinsic←Future: (p<.05), Intrinsic←Praise: (p<.001)). Intrinsic motivation can be affected more by indirectly through praise-oriented motivation compared to a path

directly from future-oriented motivation. As its indirect effect is .37 (.53×.69) whereas direct effect is .05. This supports Table 9 that praise-oriented motivation can be a potential explanatory variable for an increase in intrinsic motivations.

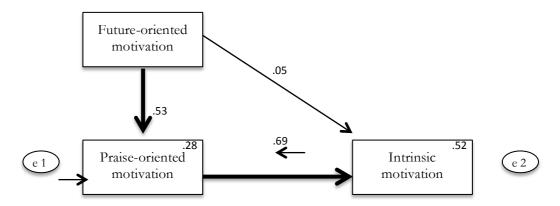


Figure 1: Path analysis showing relations between motivation types

Discussion on hypothesis 2

Hypothesis 2, which stated, "extrinsic motivation increases with age," was also rejected. The study reveals that it decreases with age. This might be attributed to the high unwillingness-based motivation of primary school students. As shown in Table 10, there are significant differences in the subscale score and mean of the subscale value between the groups of primary 4 and 6, and secondary 3 and 6 from results based on a one-way analysis of variance (F(3,983) = 31.381, p < .001, F(3,983) = 17.649, p < .001, respectively).

Table 10: Changes in extrinsic motivation when excluding unwillingness-based motivation

		P4	P6	S3	S6	F
Subscale	Overall	53.29	52.76	49.30	47.02	31.181 +++
Subscale	Excluded	34.45	34.42	35.91	34.15	9.344
Subscale value	Overall	15.52	15.43	14.96	14.29	17.649 +++
Subscale value	Excluded	11.74	11.74	12.27	11.70	10.063

Note: $^{+}$ p< .05; $^{++}$ p< .01; $^{+++}$ p< .001

However, when calculating extrinsic motivation while excluding unwillingness-based motivation, a decrease in extrinsic motivation is not found by grade level. The same phenomenon can be seen with the mean of subscale values, which is calculated as the subscale score divided by the number of questions each factor consists of. Thus, when extrinsic motivation is considered without including unwillingness-based motivation, it increases with age until the third grade of secondary school and then drops at secondary 6. The same phenomenon can be also seen in the means of subscale values. According to the revised model of self-determination theory shown in Table 9, students in primary school

tend to have higher unwillingness-based motivation, which is completely external, but it then shifts to anxiety-based as they move on to secondary school.

Conclusions

The current study investigated the motivation of primary and secondary students in Rwanda for learning English. It examined motivation types and its transition by grade level. Factor analysis identified five factors underlying motivation types: unwillingness-based motivation, intrinsic motivation, anxiety-based motivation, future-oriented motivation, and praise-oriented motivation. Results showed that students in Rwanda overall mostly rely on praise-oriented motivation, followed by intrinsic motivation, future-oriented motivation, anxiety-based motivation, and unwillingness-based motivation.

Concerning grade level, two hypotheses were tested. One is "intrinsic motivation decreases with age." However, the intrinsic motivation of the groups of primary students is less as compared to that of secondary students in both the subscale and factor scores, and therefore the hypothesis was rejected. An increase in praise-oriented motivation with age can be counted as a factor in explaining the phenomenon of an increase in intrinsic motivation, because a strong positive correlation exists between intrinsic motivation and praise-oriented motivation. Although praise can be classified as an external factor in encouraging extrinsic motivation, as Henderlong and Lepper (2002) argued, praise can also be influential in enhancing intrinsic motivation and promoting autonomy. Based on the findings, this study applied self-determination theory to the case of Rwanda and proposed that parents' approval of their children's studies and their desired future occupation can be considered as one type of praise and that such praise helps the children assimilate behaviours to the self and eventually increases intrinsic motivation. Praiseoriented motivation can thus be an explanatory factor for promoting intrinsic motivation in the context of Rwanda. The results of the study suggest that teachers should use different types of praise including both social comparison praise and mastery praise, depending on students and context, to motivate students in learning English. In addition, it is important for teachers to encourage parents to communicate with their children on their preferred career paths.

Another hypothesis by grade analysis is that extrinsic motivation increases with age. Unlike the hypothesis established in relation to intrinsic motivation, this hypothesis is not evidentially proven by past studies. In the case of present study, it is proven to be wrong and extrinsic motivation decreases with age. This reason can be attributed to high unwillingness-based motivation with primary school students. When unwillingness-based motivation is excluded from extrinsic motivation, significant differences cannot be found by grade. The study suggests that there might be a possibility that parents' intervention in children's studies would be effective for addressing students' unwillingness at lower grades and as they become older, it might work on praise-oriented motivation which is considered to increase intrinsic motivation.

The findings of this study are significant in clarifying the motivation types of Rwandan students based on school level, and also in observing the shift in motivation with a

student's age following the country's change in the medium of instruction, as Rwanda is a rare case of a country that changed its medium of instruction from French to English. In addition, the tests of the hypotheses in relation to intrinsic and extrinsic motivation can be meaningful in the field of educational psychology as the study adds another sample to this field. However, since the study is cross-sectional, a longitudinal study could be conducted which may give another perspective to the field.

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Appendix: Questionnaire (English version)

Questionnaire on motivation

 \bigstar There are questions from 1 to 34.

★Please put a circle on <u>ONE OF THE NUMBER</u>S for each question below:

Example: 5 (strongly agree); 4 (agree); 3 (moderate) (2) (disagree); 1 (strongly disagree)

		SA	Α	M	D	SD
1.	I really enjoy learning English.	5	4	3	2	1
2.	I study English to pass examinations.	5	4	3	2	1
3.	I am studying English for a future job.	5	4	3	2	1
4.	Everyone studies English, so I also do it.	5	4	3	2	1
5.	Being able to speak English will add to my social status.	5	4	3	2	1
6.	I study English because it is required.	5	4	3	2	1
7.	Studying English makes it easier to find a job.	5	4	3	2	1
8.	I hope that we have more English lessons.	5	4	3	2	1
9.	I would like to have a job in which I use English.	5	4	3	2	1
10.	I always look forward to the day when we have English class.	5	4	3	2	1
11.	I think people would respect me if I speak good English.	5	4	3	2	1
12.	I study English because my parents tell me to study English hard.	5	4	3	2	1
13.	I am studying English to get a good job.	5	4	3	2	1
14.	I would like to try to use the English which I have learned.	5	4	3	2	1
15.	I study English because I would lose confidence if I am bad at	5	4	3	2	1
	English.					
16.	Learning English is a hobby for me.	5	4	3	2	1
17.	I study English because teachers tell me to study English hard.	5	4	3	2	1
18.	I want to learn English because I would like to emigrate.	5	4	3	2	1
19.	It feels great if I speak better English compared to other students.	5	4	3	2	1
20.	I enjoy hearing English programs on the radio.	5	4	3	2	1
21.	Teachers would get angry if I were bad at English.	5	4	3	2	1
22.	It makes me feel badly about how my parents will react if I don't	5	4	3	2	1
<u></u>	study English.					

23.	Studying English will broaden my view.	5	4	3	2	1
24.	Learning English is a challenge that I enjoy.	5	4	3	2	1
25.	I get nervous when I answer or give a presentation in English class.	5	4	3	2	1
26.	My parents would get angry if I were bad at English.	5	4	3	2	1
27.	It's cool to be able to speak English.	5	4	3	2	1
28.	I am learning English to become more educated.	5	4	3	2	1
29.	I get worried when I am doing worse than my classmates in English.	5	4	3	2	1
30.	Teachers praise me when I become proficient in English.	5	4	3	2	1
31.	I enjoy reading English books, articles, newspapers and magazines.	5	4	3	2	1
32.	My parents praise me when I become proficient in English.	5	4	3	2	1
33.	It makes me feel badly about how my parents will react if I don't	5	4	3	2	1
	study English.					
34.	English is useful in searching information on the Internet.	5	4	3	2	1

\bigstar YOUR PERSONAL DATA

School () Grade () Age () Sex ✓ : male (),	/ temale ()
Your place of birth () Your mother tongue/ language at home ()
Family's main occupation () Your hope on future occupation (()
Experience of living abroad ✓: ye	es ()/ no()	
If you answer yes, Name of t	he country () Number of	years: ()

THIS IS THE END. THANK YOU FOR YOUR COOPERATION.

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