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Abstract

This paper aims to identify the obstructive and promotive factors that affect students' access to school and learning attainment in Zambia. Much of the literature discussing Zambian education identifies only the obstructive factors. When identifying the obstructive factors becomes the primary focus in education policy, efforts are directed towards eliminating these factors without considering the context of the educational process. Consequently, this discourse has lost sight of the fact that eliminating obstructive factors does not guarantee good access to school and learning but merely provides a condition in which students are part of an educational process. This paper presents an explanatory study with in-depth interviews using a semi-structured questionnaire administered to 27 university students. The sample was purposefully selected to balance variation in the respondents in terms of geographical background. The data analysis was aided with the qualitative analysis program NVivo 10 along with the descriptive method. The paper presents empirical insights about multi-faceted factors that affect students' access to school and learning in Zambia. In particular, this study finds that teachers, policy changes, and students' motivation are the key factors in achieving students' academic excellence. By presenting a simultaneous investigation of both sides of the factors related to access to school and learning, this paper contributes by suggesting the importance of a binocular perspective for educational development in Zambia and by providing implications for the new global agenda of post-2015 educational development that shifts the focus from access to quality.

Introduction

Education is considered a basic human right that is vital for personal and societal development in Zambia (Ministry of Education, 1996), but many children remain unable to attend school and obtain quality education. Approximately 320,000 children in Zambia do not attend primary school (UIS, 2016), and approximately half of the students who complete primary education do not acquire basic reading and math skills (Spaull and Taylor, 2015). Zambian education is still very poor compared with other countries and has some of the lowest education indicators on record, ranking

139th out of 187 countries on the UNDP human development index (UNDP, 2015). The question of how all children can attend school and learn in Zambia requires decisive solutions, and there is a need to investigate this issue more deeply.

The previous literature on Zambian education demonstrates that many factors influence both access to school and learning in Zambia. However, these studies are deficient in at least two respects that may mislead policymakers in their efforts to improve education in Zambia. First, these studies discuss the issue by examining only the obstructive perspective that explores the causes of educational failure while neglecting the other side, the promotive perspective, which examines contributors to educational success. When identifying obstructive factors becomes the primary focus for education policy, efforts are directed towards eliminating these obstacles without recognizing issues within the context of the educational process. Consequently, these discourses have lost sight of the fact that eliminating obstacles does not guarantee good access to school and learning but merely provides a minimum condition in which students are in the educational process. This gap calls for a closer examination of another perspective: promotive factors that contribute to students' academic success.

Another limitation of the previous literature is related to the discussion on learning. The previous literature on Zambian education adopts a traditional understanding of learning that is mainly based on learning outcomes such as test scores. This approach is no longer simply accepted in recent discussions and thus does not accurately describe the learning challenges in Zambia. When the set of global educational goals, Education for All, was renewed in and around the target year of 2015, international policy shifted its focus from access to education to the quality of learning. Consequently, discussion of the meaning of learning as well as how to measure learning has been renewed by scholars, and the previous understanding of learning has become questionable.

In this context, this study examines both obstructive and promotive factors that influence both access to school and learning in Zambia based on a sample of 27 university students. These university students represent students who have experienced both sides of these factors during their schooling. Interviewing these students allows for the observation of a subjective perspective on their learning, which one scholar suggests as a methodological solution for the indecisive definition of learning (Alexander, 2015), by ensuring the inter-rater reliability of

education-receivers. By doing so, this study contributes to filling two gaps in the previous literature: first, the lack of a binocular lens on influential factors; second, limitations on the argument for learning due to changes in the definition of learning.

Literature Review

A substantial amount of literature has identified factors that affect education in developing countries, and it seems that the factors that affect access to school and those that affect learning are similar to some extent. However, these factors are not precisely the same; a student who attends school every day is not necessarily obtaining adequate skills and knowledge (Spaull and Taylor, 2015). Thus, these factors need to be reviewed separately. Most qualitative studies that interview students, parents, and teachers tend to focus on the obstructive side by describing the difficulties children face from a demand-side perspective. In contrast, many studies that discuss promotive factors use a quantitative approach with advanced statistics techniques, such as randomized control trials, conducted by foreign aid donors to test the effectiveness of their interventions. For other studies that use basic quantitative methods, such as regression analyses, it is difficult to define obstructive or promotive factors as the influence or causality of these factors on educational outcomes has not been precisely proven. Instead, these studies merely argue for correlations between them.

The literature that explores the factors related to access to school shows various factors that exist at several levels, such as children's background, family characteristics, and school environment. At the child level, factors include poverty (UNESCO, 2015b), orphans or single parents (Case et al, 2004), ethnic and language minorities (Smits et al, 2009), child labour (Guarcello et al, 2015)(Guarcello et al., 2015), nomadic communities (Kratli, 2001) or seasonal migration (Ananga, 2011), and children with disabilities (Filmer, 2008). The family-level factors also relate to poverty that hinders parents' ability to pay school fees and other fees (Bentaouet-Kattan and Burnett, 2004; Hillman and Jenkner, 2004) and parents' educational level (Kabeer and Mahmud, 2009). At the school level, factors include distance to school (Cameron, 2011; Burde and Linden, 2012), school facilities such as sanitation facilities (Adukia, 2014) or security (Mudege et al, 2008), and school admission procedures (Tsujita, 2013).

As promotive factors that have an empirical impact on access, financial or material

support to students, such as providing school uniforms (Duflo *et al.*, 2006; Evans et al, 2009) and school meal programmes (Vermeersch and Kremer, 2004), has been found to be effective in decreasing dropout, reducing absenteeism, and encouraging grade progression. Similarly, financial support to households through conditional cash transfers (Parker et al, 2006) has proven to promote children's schooling. At the school level, closer proximity of a school to children's houses due to school construction projects (Petrosino *et al.*, 2012) and the improvement of the school's surrounding environment, such as electricity (Ben Abdelkarim *et al.*, 2014) and water-related infrastructure (Koolwal and van de Walle, 2010), are also found to be enabling factors, particularly for girls' access to school. Factors related to teachers, such as prioritizing female teachers for girls (Kim et al, 1998) and financial incentives to teachers (Duflo et al, 2015), also promote enrolment and attendance.

With regard to learning, factors are often explored at the student, school and teacher levels. At the student level, obstructive factors are similar to those found for access, such as language (Altinok, 2013), household chores (Jagero, 2010; Reich *et al.*, 2013), being over age (Hungi et al, 2014), and the number of siblings (Liu et al, 2015). At the school level, school type (Zimmer and Toma, 2000), school management (Wößmann, 2003), the outcome assessment system (Bishop, 1995), class size (Hanushek and Wößmann, 2017), and length of the school day (Bellei, 2009; Orkin, 2013) are factors. At the level of teachers, the teaching education level, availability of textbooks (Michaelowa, 2001), pedagogy (Westbrook *et al.*, 2013), teachers' sex (Ammermuller and Dolton, 2006), teaching contract (Bourdon et al, 2010), and, more recently, the use of Information and Communication Technology (ICT) (Cristia *et al.*, 2012; Sprietsma, 2012) are found to be related to the level of students' learning attainment. Among these factors, promising factors to promote learning attainment include an emphasis on teachers and teaching quality, such as financial incentives for teachers (Glewwe and Kremer, 2003), effective pedagogy such as group and pair work, informative feedback, student questioning (Westbrook *et al.*, 2013), the use of ICT (Barrera-Osorio and Linden, 2009), and closer social distance between teachers and students in terms of gender, culture and religious background (Rawal and Kingdon, 2010).

In the case of Zambia, most of the literature adopts only an obstructive perspective and explores the causes that result in low enrolment and low performance. Family poverty is one factor related to access as poor households tend to have their children

work for the family rather than sending them to school (Jensen and Nielsen, 1997). Focusing on girls' education, a study shows that learning attitudes, traditional womanhood culture and stereotyped gender roles are obstructive factors that result in girls' low attendance as well as poor performance (Sayers, 1994; Otsu, 2009). For learning, language is identified as an obstructive factor as students in Zambia generally speak the local language and are not proficient enough in the instructive language, English, to use it to learn any subjects (William, 1998). Another student-level factor is the need to engage in household chores, which is also found to be hindrance for students' ability to achieve academic excellence (Reich *et al.*, 2013). At the school level, one study reveals that teacher absenteeism is a reason for low performance, showing that a 5% increase in the teacher absence rate reduces students' average learning by 4% to 8% (Das et al., 2007). A national survey by the Zambian government that estimates the relationship between cognitive test scores and several factors among the secondary school pupils shows positive associations with the head teacher's age between 36 to 45 years old, textbook availability, homework policies, and school interventions such as lesson study, head teacher in-service meetings and teacher group meetings but negative associations with teachers' absenteeism (Ministry of Education Science Vocational Training and Early Education, 2013).

In relation to the discussion on learning, most studies use cognitive test scores to identify learning factors. However, their arguments have lost ground under the new global debate, in which the definition of learning has been redeliberated. Before 2015, when Education for All was the central educational goal situated under the wider development goals of the Millennium Development Goals, the core global agenda was access to education. However, in the new global debate under the new Sustainable Development Goals, the international focus has shifted from access to education to access and learning. Accordingly, the discussion about what learning is and how to measure it has been newly explored by scholars (Alexander, 2015; Rose, 2015; Tikly, 2015), who have not reached a decisive and agreeable conclusion.

The literature review demonstrates that there are two defects in the previous literature on Zambia: first, the lack of a binocular lens on influential factors; second, limitations on the argument for learning due to changes in the definition of learning, which merits further investigation.

The Zambian Context

Zambia is one of the poorest countries in the world, with 64.4% of the population living below the international $1.9 per day poverty line. The country's population is relatively small, with 16.2 million people living in a landlocked area (World Bank, 2016). The economy relies heavily on the primary sector of industry, with approximately 52.2% of the population engaged in agriculture, forestry, and fisheries, producing row crops and raising cattle, pork, and chickens (Central Statistical Office, 2012b). The country also depends on natural resources for foreign revenue, with copper accounting for 66% of total national exports (World Bank, 2015). Poverty also results in poor health conditions, such as a generalized epidemic of HIV and AIDS with an estimated prevalence rate of 12.9% among adults (ages 15–49) and a life expectancy of 60.1 years old (UNAIDS, 2015; United Nations Population Division, 2015).

Since its independence in 1964, Zambia has maintained political stability, with no major civil strife compared to neighbouring countries in the region. The population comprises approximately 73 ethnic groups, most of which speak Bantu. Prior to the establishment of modern Zambia, some of these native groups lived in independent tribes that each had their own way of life and culture. Traditional culture is still very visible in colourful annual Zambian ceremonies, which celebrate local traditions (Gordon, 2004). The official language of Zambia is English, which is used to conduct official business and is the medium of instruction in schools, although only 1.7% of the population uses English as a first language (Central Statistical Office, 2012a).

Education is considered a priority sector by the government, receiving the largest budgetary allocation at approximately 20% of the total national budget (UNESCO, 2015a). The Ministry of Education has attempted to introduce several policies, such as Educating Our Future (Ministry of Education, 1996) to uphold the principle of an individual's right to educational opportunity, the Re-Entry Policy (1997) to support pregnant girls' return to school, and the Free Primary Education (FPE) Policy (2002) to abolish school fees and uniform policies.

Primary education lasts seven years, from grades 1 to 7 (serving children age 7 - 13), and is free of charge according to the FPE policy, although families may still have to pay 'user fees' (Chalwe, 2015). Secondary education consists of two years of junior secondary schooling in grades 8 and 9 (serving children age 14-15) and three years of senior secondary in grades 10 through 12 (serving children age 16-18). Families

must pay enrolment, tuition and boarding fees (where relevant). In junior secondary school, students can choose either an academic career path or a vocational and technical career path. After senior secondary school, there are vocational programmes lasting 4 to 7 years and university for 3 to 4 years. Nationally, at both the primary and secondary levels, the number of schools has steadily increased from a total of 6,728 in 2004 to 8,801 in 2013 and from 319 in 2004 to 683 in 2013, respectively (Directorate of Planning and Information, 2013).

The rapid expansion of educational provision was largely aided by external aid donors, representing approximately 12% of the total resources of the Ministry of Education and 30% of the discretionary budget between 2005 and 2010 (De Kemp et al, 2011). After the Zambian government joined the Global Partnership for Education in 2008, the Ministry received $60.2 million from the Fast Track Initiative (FTI) Catalytic fund in 2009 and $35.2 million in 2013 (Global Partnership for Education, 2015).

Although education is prioritized and has been the subject of much effort by the Zambian government, appropriate education has not yet been achieved, with approximately 60% of the population failing to complete primary-level education (Central Statistical Office, 2014) and 59,000 pupils of primary school age who are out of school (UNESCO, 2015a). The statistics for primary school enrolment show a steady loss of students as the grade level increases, with only one out of three pupils in grade 1 reaching grade 6 (Lewin and Sabates, 2012). In addition, among students who complete school, half do not acquire basic literacy and numeracy skills (Spaull and Taylor, 2015). The low achievement level is also evident in comparison with other sub-Saharan African countries; Zambia is ranked the lowest of 14 participating countries in the SACMEQ regional mathematics proficiency test (SACMEQ, 2007). These low statistics suggest that obstacles to education remain an urgent problem that merits further investigation.

Methodology

The data used in this study were from interviews with students at the University of Zambia. The University of Zambia is located in the capital city of Lusaka and is the oldest and top national university in the country, with approximately 10,122 students, including 284 master's and 24 doctoral students (Southern African Regional Universities Association, 2007). In this study, context, these students are considered

to have experienced both obstructive and promotive factors and to have succeeded in overcoming obstructive factors and being aided by promotive factors. I do not argue that these obstructive and promotive factors are the only factors that policymakers must address to improve education in Zambia, and I acknowledge that some pupils intentionally stop schooling and learning because they believe that they do not need higher education to obtain a job in the Zambian job market. Instead of delineating a best practice from university students and implying what children ought to be or have in Zambia, this paper draws upon one case group to identify possible factors that enabled this group of students to succeed in the Zambian educational system. For this purpose, I believe that students at the University of Zambia represent one of the most obvious examples of pupils who succeeded in achieving schooling and learning in the Zambian education system.

Another justification for using university student data is data reliability. Most previous studies used data at the primary or secondary student level, and some used data from teachers. However, children's responses are sometimes unreliable due to language problems or fatigue from long questionnaires. I believe that data from university students provide a more realistic and objective story that is closer to the actual circumstances. In addition, students sometimes recognize the real situation only after they become adults and can compare their experience with other, sometimes vastly different, experiences (Bradshaw, 1972).

The data were collected in February 2016. The data collection period spanned a student demonstration due to a delay in a bursary disbursement from the government, although this did not affect the data collection process and I was able to reach the necessary students. I conducted purposeful sampling because I knew that this study required variation in the respondents in terms of geographical background. Thus, I recruited students from various provinces in both urban and rural areas. This study does not intend to generalize factors for all Zambian children; rather, by presenting one case group study, it attempts to open inquiry into new perspectives that can provide a focus for policymakers.

In this study, I identified 27 students and conducted in-depth interviews using a semi-structured questionnaire. All the participants were provided with informed consent that included details concerning the research purpose, the use of digital audio, and the eventual distribution of the data through publication. The respondents were interviewed in physically comfortable environments such as a classroom, office,

or the university's yard. I asked the students to recall their primary school years and to tell me about their difficulties and pleasures in schooling and learning. All interviews were audio-recorded, transferred to the computer and clarified. Data management and analysis were aided using the qualitative analysis program NVivo 10, although the data analysis used a descriptive method due to the small number of 27 observations. Respondents' names were replaced with an ID number to ensure anonymity and data confidentiality.

Characteristics of the sampled students

Table 1 shows that the background information of the interviewed students varied. This finding suggests that the university does not necessarily reflect social inequality in Zambia, where a variety of people can attend university. The 27 students comprised 17 males and 10 females, and their ages ranged from the twenties to fifty, with the majority (62%) in their twenties. Using purposeful selection, I was able to select pupils with various home provinces, representing 7 out of 10 provinces. The three provinces that I could not include in my sample were the Central, North-Western and Northern Provinces. These are scattered geographically and have an average poverty level of approximately 60%, whereas Lusaka and Copperbelt have a lower poverty rate of approximately 30% and Luapula and Western have a higher poverty level of 80% (De La Fuente et al, 2015). Students self-reported the size of their home areas, with 11 from a large city, 4 from a small city, and 12 from rural areas. In term of family income level, 2 students answered that they were rich, 18 were average, and 7 were poor. Among the students who answered that they were poor, 3 were from a single-parent household: Case 2's and Case 4's fathers had passed away when they were young, and Case 9's father was a polygamist; this student was separated from his mother and living uncomfortably with his stepmother. Cases 2 and 26 had both changed schools three times, and Case 4 had changed once.

In addition to basic information, I asked the students to assess their learning attainment level and their satisfaction with their level of schooling. Their responses showed that not all students conceive of themselves as excellent students or as having had a satisfactory school life. On a scale of 1-4, 13 students thought that they were excellent students, 8 answered that they were superior, 5 answered that they were moderate, and 1 answered that she was inferior. In response to satisfaction with schooling, 9 students stated that they were satisfied, 14 students were somewhat

satisfied, 3 were somewhat unsatisfied, and 1 was unsatisfied.

Table 1: Sample Characteristics

Findings

The aim of this research is to document the obstructive and promotive factors experienced by the interviewed students during primary school, so the study is presented in two sections. The next section outlines the obstructive factors that hindered students' schooling and learning, and the subsequent section shows the promotive factors that helped them.

Obstructive factors

The study data show that almost all interviewed students (25 cases) faced a certain level of difficulty in accessing school and learning in primary school. An overview of the obstructive factors shows that they are very similar to those reported in previous studies. Notably, two students (Cases 11 and 27) responded that there were no obstructive factors; both of them attended private schools. Based on the context of the responses, I categorized the factors into two groups, factors obstructing access to school and factors obstructing learning, as shown in Table 2. One factor, household chores, was identified as obstructing both access and learning; therefore, based on the context of the story, I placed this factor into the appropriate group. The results show that there is more variation in the factors obstructing learning than in those obstructing access to school, with 4 types versus 11 types, respectively.

Nearly 40% of the surveyed students (11 students) experienced difficulty going to school every day. Most of these situations occurred in small towns and rural areas. With regard to learning difficulty, all students except for the two fortunate students noted above responded that multiple factors made it difficult for them to learn. It is notable that the interviewed students had attended primary school some years ago; therefore, it is assumed that some of the obstructive factors may already have been removed, particularly those related to access and alleviated by the FEP policy.

Obstructive factors for access to school

Living a long distance from school was one obstructive factor that made it difficult for students to attend school every day. The interviewed students walked

approximately 1.5 to 3 hours to reach school. Because of the long distance, some students were “always tired” or “always late.” Case 26 needed to leave his house at 5:30 am to attend the first class, which started at 7:45 am. Case 9 regretted the long distance, especially in summer, as he did not have a bag and needed to hold his books in his hands; he sweated a lot and “damaged my books.” For Case 8, school was so far that he and his siblings had to stay at another house; on Friday, they returned to their parents’ house for food.

The lack of a uniform was another factor that prevented students from attending school as this was at a time when schools required students to wear uniforms. Case 22 did not always have a uniform and “was not allowed to go to school by [the] teacher without [a] uniform,” so he had to stay home. Case 22’s uniform was torn, and his parents could not afford new one. Because his teacher was “very strict [about the] uniform rule,” he was “sent home” because he was not wearing a uniform.

The third factor hindering schooling was household chores, which was reported by two male students living in a rural area. Case 1’s house had almost 100 cattle, and his father often ordered him to look after them. His parents “did not value education” and had “no interest in education,” so they never paid for necessary school supplies, such as books or pencils. Case 22’s family also had many cattle, and he had to lead them to a grazing area and back. His father would tell him on those days, “No, you are not going to school today.” This work was needed once or twice a week, so he would “never go to school 5 days a week.”

The last obstructive factor reported by a student, Case 13, was the school fee, although this was during the period that had a free tuition policy. Despite the policy of not charging families a fee, he was “chased by school to collect money.”

Obstructive factors for learning

A lack of learning materials was a major factor that hindered good learning in class. Most of the interviewed students shared one textbook with between 3 and 10 others, which made it difficult for them to read their textbooks in detail. Even though there was a library at the school, the books were “old,” “out of date,” and “not really related to subjects,” so no one used them. One typical student said he “relied on information that I got in class,” but “teachers only give us approximately 50% or 70% of the information in the textbook.” They had to “study the rest by themselves,” but there were no materials or “learning aids.”

A large class size was another factor that made it difficult for students to understand what the teacher was teaching. The maximum number in one class among the interviewed students was 170 students, stated by Case 2. In terms of his age, this occurred at the time when the school stopped denying area students education due to the FEP policy. Some students were “sitting on floor,” and some were “standing outside of class.” Because of the enormous class size, the teacher “only concentrated on a few students, and most of them were left out.”

Poor pedagogy was other obstacle to students’ learning as “teachers were not paying attention to what we were understanding or not understanding.” When students asked questions, the teachers did not always respond appropriately (for example, saying “no, time’s up” or “I am busy”). The teachers just “gave [them] work and made [them] do it at home,” so students were “only learning for 2 hours, but the other 2 hours, you were not learning at all.” The cramming teaching style was also problematic as the teacher just “forced [them] to memorize words,” and students “forget everything on the next day.” In Case 12’s class, the teacher put students into groups based on their learning level; because the teacher only paid attention to students in the better groups, he “felt inferior that you are in a certain group, and thought I was never be going to do better than my friends.” Overall, the students felt that teachers “really did not encourage us to study that hard.”

The teachers’ negative attitudes became an obstructive factor for students as the students were disappointed and demotivated to learn. Some teachers were physically “beating” or “hitting” students’ buttocks and shoulders with rulers or sticks, and some were orally “insulting” students. Thus, some students became “negative [towards] themselves” or were “living in fear.” The poor behaviour of teachers, such as “drinking beer during school hours,” “mingling with villagers,” or “sitting outside and chatting,” resulted in students lacking “respect for teachers.”

The language barrier negatively affected the acquisition of learning; one respondent stated that learning in English was “not really effective.” Most of the interviewed students used the local language at home, so they experienced “difficulties in communication” at school. Similar to many of the interviewed students, Case 7 started to use English at primary school, so “listening to what teachers [were] saying was okay, but speaking was very difficult.” When students did not understand certain concepts, the teacher could use the local language to explain, but not all teachers spoke the local language for the school’s region. In Case 17’s local

language class, because the teacher did not speak the Nyanza language, he “did not come to teach us and left us alone.” Case 2 had difficulty understanding subjects and making friends because she did not speak the local language or English, so she changed to a private school and spent 2 years learning English.

Bullying also distracted students from learning and kept students from asking questions in class. Some students laughed at others for their short height, poor clothing, or lack of shoes or for asking easy questions. The teachers were “not very protective” and “did not answer…questions” Case 26 felt that this kind of bullying “really disturbed my learning.”

Household chores were a hindrance for learning as well as a factor that obstructed access to school. These stories were from female students in rural areas. Female students were obliged mainly to cook and clean; because these chores did not take the entire day, they did not prevent them from going to school. However, students who had to work before school were “exhausted,” and their “concentration [went] down,” whereas students who worked after school were “very tired” and “just wanted to get rest.” Thus, learning was difficult for them.

Teacher absences were also an obstacle to learning. In most cases, the issue was not teacher behaviour but that the school did not have enough teachers employed. Case 1’s teacher passed away when he was in grade 3, but because there were no replacement teachers, he just “went to school, played with friends, and came home” for a while. Case 22 had two long periods without a teacher: once in grade 3 when his teacher became mentally ill and the second in grade 6 when his teacher passed away. On both occasions, he did not have a replacement teacher immediately, so a teacher from another class “came and gave us one example and 3 questions, and then was gone”; the next day, the teacher “gave us a book to read,” and another day the teacher “gave us a ball to play.”

The lack of study facilities such as desks and chairs were obstacles to students’ learning in class. Case 7 had to write on her leg when she was taking notes. Attending class when hungry often disturbed students’ learning. Case 3 often felt hungry during school, and for most of the week, Case 12 ate only one meal a day.

Table 2: Obstructive factors in primary school (counts of cases)

Promotive factors

All students interviewed in this study could identify some promotive forces that helped them during primary and secondary school. They identified promotive factors from different contexts, such as family, school, community, and policy-level factors. Similar to the previous section, I grouped the promotive factors into two categories based on the context of the interviewees' story, factors promoting access to school and factors promoting learning, as shown in Table 3. As with the obstructive factors, the number of factors promoting access to school was smaller than that for learning, with 2 factors versus 10 factors, respectively.

Promotive factors for access to school

A factor that enabled children to attend school regularly was support from family members other than parents. Siblings and relatives helped them attend school when parents could not do anything more or did "not value education so much." Case 3, who was from a poor family with a single mother, had nine older siblings; she could go to school every day because "I did not have to do household chores; they did it all for me." Case 13, who was absent for few months because his parent could not pay the school fee, received financial support from his "aunt who worked in another province," which allowed him to return.

Policy changes also increased students' access to school. The change to the uniform rule deriving from the FEP policy in 2002 helped to bring children back to school. Case 22, who could not go to school for 3 months because he did not have uniform, was "one day suddenly allowed to go to school." Due to that policy, students such as Case 7, whose family could not afford to buy a uniform, were able to go to school wearing "normal dresses."

Promotive factors for learning

Having a role model was a key factor that promoted student learning even in difficult situations. Most of the interviewees' stories (19 cases) identified one or two role models who shaped their aspirations, such as a pilot (Case 1), doctor (Case 17), nurse (Case 10), electrician (Case 8), police officer (Case 24), accountant (Case 22), and lawyer (Case 27). These students "envied," "admired," or were "inspired by" these people. The students found these role models in their daily lives, when looking at the sky, visiting the hospital, seeing them working in the compound, or within their family as most of the interviewees did not have TV or the Internet when they were

school age. Case 9 stated, “I wanted to be a veterinary doctor. Our family owned animals, cattle. Therefore, I used to envy those veterinary assistants when they used to come and treat our animals, so I talked to them and knew that you need to go through education, go for training, and I thought that when I am grown up, if I finish my school, I think I will become a doctor.”

Poor role models could also become a promotive factor that accelerated learning efforts. Students who had a bad teacher at their school could be motivated to study hard because they did not want to become that person or wanted to show that person that they could “do better.” In some cases, poor role models were stronger promoters than good role models because they “really affected learning” and “always come to my head.” Case 3 stated that the teacher “was verbally abusive and physically abusive, and she beat us up, she insulted us whenever she felt like… I am going to become a teacher because of that teacher.” She wanted to become a teacher “to prove I can do better.” Similarly, Case 9 stated, “There was an old female teacher who used to give me negative comments, and I still have fear when seeing an old female teacher; thus, I will become a teacher to remove the image from my memory.”

Good friends helped students’ learning in addition to making school enjoyable. The interviewed students enjoyed time with their friends playing football and netball, skipping rope (called WIDA), hitting friends’ backs (called GANE), singing spiritual songs and writing stories. Particularly for learning, friends played an important role by acting as a “counsellor,” “rival,” or “good company.” Case 13, who was from a poor family and found it difficult to become accustomed to school life, was able to “get comfortable” because one friend “helped me wherever I lacked something” and “counselled me whenever I needed.” Case 22 studied hard to “become the best in the Tonga (local language) competition.” Some students found good friends by joining club activities, such as the AIDS club (Case 10) and the history club (Case 17), and improved themselves through friendly rivalry.

Although there were many stories about bad teachers, meeting a good teacher could also become a key factor for students’ success in learning. Students who talked about good teachers perceived “personal attention” and “encouragement” from the teacher. As reported earlier, classes were overcrowded, and teachers could barely focus on individual students; thus, “personal attention” and “encouragement” were very rare for students. Case 15 stated, “There was one teacher who encouraged me, to say I was intelligent. Because of her, I … enjoyed learning.” Case 9 stated, “I

enjoyed a lot when we were with a student teacher who came to school for teaching practice. They were always very close to us and showed us that they were friends."

Participating in community was another factor that motivated pupils to study by providing new information and stimulation that pupils could not obtain at home or school. Case 9, who lived in a rural area, obtained information and "learned the importance of education" through evening gatherings where neighbours sat around the fire and a "quite educated person" sometimes narrated stories. Case 2 gained knowledge about children's rights by attending many workshops through the Children Rights Club. She stated that knowledge gained through the club "contributed to what I am right now" as a university student. Foreigners also became a promotive factor as they taught subjects at schools and led the children to want to learn about different and new things outside of their region or country. Case 9 experienced "big exposure to new culture" through his foreign friends, a German couple who temporarily lived in the same community during an aid project; he was "very encouraged" by them to study hard.

As demonstrated by many studies, particularly those conducted in developed countries, academic recognition also leads students to work hard. Case 10 "unexpectedly" received a prize for her academic work in lower secondary school, which led her to work harder at that time. A strong and hungry spirit led some students to work hard and to "do anything to succeed." Case 2 was born in a very poor family with a single mother who taught her "education was everything." The "motivation that was given at home" led her to study hard and to be successful enough to reach the top university in the country.

Table 3: Promotive factors in primary school (counts of cases)

Discussion

Educational improvement in Zambia is complex. Obstructive factors cause failure of access and learning, and promotive factors encourage success in access and learning. Both obstructive and promotive factors occur at multiple levels, including the student, family, school, teacher, and policy levels. Obstructive factors are slightly more likely to occur at the family level, such as uniform and school fee, and at the school level, such as school distance, books, class size, and classroom facilities, than promotive factors are. In contrast, promotive factors are more likely to occur at the

student level, such as role models, friends and community participation, and at the teacher level, such as good teachers and academic recognition.

The findings show that, as expected, there are different types of obstructive and promotive factors between access and learning, and these factors are not necessarily the same. In terms of the variety of factors, the factors for learning have more variation than do factors for access with regard to both obstructive and promotive factors. Factors for access are found at the school and family levels, whereas factors for learning include the student, family, school and teacher levels. The promotive factors for learning occur only at the student and teacher levels and were not observed at the school and family levels.

Examining an overview of the findings, some factors deserve special attention by educational policymakers in Zambia. First, the limitations on obtaining information at school are a major source of frustration for students. The top three obstructive factors related to information sources are a lack of books, large class sizes, and poor pedagogy. It appears that students wanted to learn more but could not. Even though they were eager to study independently, there was no way for them to do so at that time. Only a few students who were lucky enough to encounter external sources of information, such as educated people or foreigners living in the community, may have relieved this frustration to some extent in terms of being able to increase their knowledge. Things may be different now, as one respondent noted: “Access to information was very limited at that time, but in the modern world, we can expose ourselves to more information by ICT.”

It appears that teachers are the key to better learning and that they can both obstruct and promote. People often blame teachers for poor student outcomes, both in this study and generally in Zambia, as in many other countries. However, Zambian teachers also confront difficulties that they cannot resolve alone, such as resource shortages (Lee and Zuilkowski, 2015), little support (Thomas, Thomas and Lefebvre, 2014), and multi-grade teaching (Kivunja, 2014; Kivunja and Sims, 2015). Future research to explore this issue from the perspective of teachers is needed to fully understand the processes for improving teaching skills and attitudes.

It appears likely that policy changes contributed by removing obstructive factors such as the costs of uniforms and school fees. It is likely that if the government issues appropriate policies in response to relevant problems, many students can return to school. The FEP policy contributed to some extent by eliminating obstructive factors

related to access, but it was not completely successful as there are still students who do not attend school because they cannot pay school fees. In addition, anecdotal evidence suggests that parental understanding regarding education and household chores can create a barrier that prevents children from attending school. It is likely that this will continue to be an issue in Zambia as it works to achieve Universal Primary Education.

Strong motivation appears to be a key force driving learning. Three of the observed promotive factors are related to motivation sources: role models, academic recognition and a hungry spirit. The motivation to learn can be engendered by any of these sources. In this study, many students gained motivation to learn from role models who helped them to believe that they could become rich or admired by others. However, not all students knew how to pursue their role model's achievements; regrettably, most of the respondents gave up on emulating their role model. It is important for students to have realistic ways to achieve their goals and a good learning environment so that they can maintain a strong motivation for learning.

The combination of the following findings may be indicative of the existence of a meritocracy, where school can provide a place whereveryone who makes an effort and has the capacity can succeed in the Zambian education system: (i) the interviewed university students were not only fortunate students from rich families and large cities but also came from poor families and rural areas, and (ii) they faced obstructive factors similar to those that a majority of other students confronted, with most of them dropping out before completing lower secondary; however, (iii) they overcame the obstructive factors and (iv) were aided by promotive factors and completed lower secondary education. The University of Zambia used to be considered an elite university that was only attended by students from elite families. However, current studies suggest that poor and rural students are able to attend the university through their own efforts. Although this study had a small sample size and thus only indicates the possibility of this phenomenon, further investigation could focus on the role of schools in Zambia to fully argue this aspect.

Conclusion

This study examined the factors that relate to access to school and learning in Zambia by using both obstructive and promotive perspectives of selected university students. The findings confirmed that there are multi-faceted obstructive factors that

hinder students' access and learning, as the previous literature has shown. This study also found that several promotive factors have not previously received attention in the literature on Zambia, such as teacher quality, policy changes, and students' motivation. The university students interviewed in this study took advantage of these promotive factors to achieve academic excellence. There is a need for policymakers to elucidate the necessary conditions for good schooling and learning, not only by eliminating obstructive factors but also by increasing promotive factors. Additional investigation is needed to provide details on each factor, the relationship between factors, changes in these factors, and different influences on these factors by particular population groups.

The study also shows that different types of factors affect access and learning. Furthermore, there is a greater variety of both obstructive and promotive factors for learning than for access, with particular emphasis on the student and teacher levels. This finding supports the international concern that the new global agenda has become more challenging than before with empirical evidence that policymakers need to make multi-faceted efforts to improve learning. Although global policymakers have paid considerable attention to teacher quality, another factor identified in this study, student motivation, deserves more attention by policymakers and scholars.

Finally, this study contributes to the global debate about the question of what learning is and how to measure it by showing one approach to the subjective assessment of the learning. The current study used a sample of university students and examined their retrospective and comparative views of their own learning, which serves as a subjective assessment. Not all of the sampled students recalled having excellent learning outcomes in primary school, although they were students at the top university in Zambia. This finding implies that learning outcomes measured in an objective and relative system may not necessarily reflect the actual attainment that students acquire in schools and may not directly determine their success in their further academic careers.

The findings of this study cannot be immediately translated into a simple measure. However, as Alexander (2015) notes, it is important to keep any empirical provenance in the framework of the discussion of learning; this may be useful to help policymakers find more creative and less doctrinal approaches to this discussion. Given the urgent need to understand learning and its measurement, this study serves as one component to move towards a new global education agenda that further

advance educational quality in developing countries.

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Table 1: Sample Characteristics

ID	Gender	Age	Province	School Type	Home Area	Income	Learning Level	Satisfaction Level	Other Info
1	Male	30s	Southern	Public	Rural area	Average	Moderate	Somewhat Satisfied	
2	Female	20s	Copperbelt	Public/Private	Small Town	Average	Inferior	Somewhat Unsatisfied	Transferred school 3 times
3	Female	20s	Lusaka	Public	Large city	Poor	Moderate	Somewhat Satisfied	Single mother
4	Male	20s	Lusaka	Public	Large city	Average	Moderate	Satisfied	Single mother
5	Female	20s	Lusaka	Public	Large city	Average	Superior	Satisfied	
6	Female	40s	Luapula	Private/Public	Rural area	Average	Superior	Satisfied	Transferred school 1 time
7	Female	40s	Muchinga	Public	Rural area	Poor	Superior	Satisfied	
8	Male	50s	Western	Public	Rural area	Average	Superior	Somewhat Satisfied	
9	Male	30s	Western	Public	Small Town	Average	Superior	Somewhat Satisfied	Parents divorced
10	Female	40s	Muchinga	Public	Rural area	Average	Superior	Satisfied	
11	Male	20s	Lusaka	Private	Large city	Average	Superior	Satisfied	
12	Male	20s	Lusaka	Public	Large city	Average	Superior	Somewhat Satisfied	
13	Male	20s	Western	Public	Rural area	Poor	Excellent	Unsatisfied	
14	Male	30s	Lusaka	Public	Large city	Rich	Moderate	Somewhat Satisfied	
15	Female	20s	Eastern	Public	Small Town	Average	Excellent	Satisfied	
16	Male	20s	Copperbelt	Private	Small Town	Average	Excellent	Somewhat Satisfied	
17	Female	20s	Muchinga	Public	Rural area	Average	Excellent	Somewhat Satisfied	
18	Male	30s	Lusaka	Public	Large city	Average	Excellent	Satisfied	
19	Male	20s	Lusaka	Public	Large city	Average	Excellent	Somewhat Satisfied	
20	Female	20s	Lusaka	Public	Large city	Average	Excellent	Somewhat Satisfied	
21	Female	20s	Lusaka	Public	Large city	Average	Moderate	Somewhat Unsatisfied	
22	Male	30s	Southern	Public	Rural area	Poor	Excellent	Somewhat Satisfied	
23	Male	30s	Southern	Public	Rural area	Average	Excellent	Somewhat Satisfied	
24	Male	20s	Eastern	Public	Rural area	Poor	Excellent	Somewhat Satisfied	
25	Male	20s	Western	Public	Rural area	Poor	Excellent	Somewhat Unsatisfied	
26	Male	20s	Lusaka	Public	Rural area	Poor	Excellent	Somewhat Satisfied	Transferred school 3 times
27	Male	20s	Lusaka	Private	Large city	Rich	Excellent	Satisfied	

Table 2: Obstructive factors in primary school (counts of cases)

	Access to school
1	School is far (9)
2	I did not have a uniform (4)
3	I had to do household chores (2)
4	Parents could not pay school fee (1)

	Learning
1	Lack of books (13)
2	Big class size (13)
3	Poor teaching (8)
4	Demotivating teaching (6)
5	Language barrier (4)
6	Bullying (3)
7	Tired from household chores (3)
8	Teacher absent/no replacement (2)
	Lack of study facility at classroom (2)
	Hungry (2)

Table 3: Promotive factors in primary school (counts of cases)

	Access to school
1	Support from family/relatives (3)
2	Policy changes (1)

	Learning
1	Role model (positive)(19)
2	Good friend (10)
3	Good teacher (6)
4	Participated in community activities (3)
5	Academic recognition (1)
	Hungry spirit (1)