Doing a PhD in a Low-Income Country: Motivations and Prospects

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Abstract

The purpose of this article is to analyse the gendered motivations of students to undertake doctoral research in a low-income country (LIC), Mozambique. Most research on PhD student motivation is done in high-income countries where the drivers for doing a PhD are quite different from those of people living in LICs. Drawing on original empirical research in the form of semi-structured interviews with PhD students from Mozambique, and utilizing the concepts of 'altruistic' and 'self-concerned' motivations, this article argues that context is a powerful determinant of motivation. The findings of the research highlight the need for scholarships as a major driver for undertaking a PhD in an LIC. Further, PhD students' motivations, unlike those in high-income countries where the self is at the heart of decisions to do a PhD, include altruistic motives such as the desire to serve one's country, institution, community, and people as well as having a voice in the public sphere. These altruistic motivations are more important than the more self-referential factors such as 'intrinsic interest in the subject' and 'self-fulfillment' that dominate the literature from high-income countries. This implies that donor countries, the common suppliers of scholarships for PhD students in LICs, need to ensure that scholarships are adequate to enabling PhD students from LICs to complete their degrees both in terms of duration of scholarship and in terms of amount. Without this completion rates are likely to be slow and low. The article calls for more research on this issue in LICs.

Keywords: doing a PhD, motivation, low-income country, altruism

1. Introduction

The starting point for the pilot project on which I report in this article was an encounter with a woman in her early 50s, let's call her Anna (not her real name), from Mozambique. Together with this woman I developed a gender mainstreaming research program that was funded by an international donor and involved a number of people from her home country, including herself, undertaking a PhD. As I got to know her, once she had become my PhD student, it gradually became clear that she had had prior existences as a PhD student - not only one, but several. To my astonishment I found that she had also been a PhD student in Russia, in Italy, and in South Africa. She had completed none of these PhDs but she had stayed in the countries in question for several years, three or four, on various kinds of international scholarships. Now she was on her fourth go. All this emerged only very gradually, and she did not finish her fourth PhD either - in this instance though because she died prematurely of covid. I thought about her and what had motivated her to do a PhD, any of them, in the first place, a lot, both during my time as her supervisor and after her untimely death. It also gradually became clear to me that she was not the only person from her country to have started multiple PhDs. How widespread that phenomenon was, was however unclear. This in turn made me think about the reasons why people from low-income countries (LICs) might want to do a PhD at all. At the heart of this article, then, is the overarching research question: what motivates people to do a PhD in low-income countries?

1.1 Context

The context for doing a PhD in LICs is not propitious. Since such contexts vary however, I shall focus on Mozambique as a LIC for the purposes of this article. Mozambique was ranked 185 out of 191 countries in 2022 on the UNDP's Human Development Index, and 136 out of 191 on their Gender Inequality Index (Note 1). According to the World Data Bank, the average monthly income per capita in Mozambique is 40 US dollars (compared to 5,911 US dollars in the USA) (Note 1). According to USAid, 'The Ministry of Education [in Mozambique] reports that less than half of the population finishes primary school, and of those who do finish,

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only 8 percent transition to secondary school. Mozambique's overall literacy rate is 47 percent; female literacy (28 percent) lags far behind that of males (60 percent).' (https://www.usaid.gov/mozambique/education, accessed 2/6/2023). Higher education participation rates were at about 5.3% in 2015 (Langa, 2017: 23) and are not much greater in 2023, meaning that Mozambican higher education is basically an elite system. According to Langa (2017: 29), 'Of the total number of students enrolled in public higher education institutions in 2013, 90.9% were bachelors. 8.9% masters and 0.2% doctoral students'.

Doctoral students thus represent a tiny minority among students and the population at large (see also Ndaipa, 2023). This inevitably goes together with an absence of a developed graduate labour market; PhD students have very limited opportunities regarding availability of suitable jobs. Given that until liberation (1975) there was only one university in Mozambique to which during the colonial era indigenous Mozambicans were effectively denied entry (Nota, 2022: 28-32), the country has seen a significant expansion of its higher education sector since then (Langa, 2017; Ndaipa, 2023). But, as much of the educational focus has been on school teacher training to address the continuing educational deficit among younger populations, there are still few academic staff with PhDs in Mozambique (Ndaipa, 2023: 23). This also means that there are few staff able to supervise PhDs, and, in consequence, the vast majority of PhD candidates in Mozambique have to go abroad to get a PhD, usually on some form of international scholarship or sponsorship. In this Mozambique is not unique; other African countries face similar challenges (Molla and Cuthbert, 2016).

Education in Mozambique is also not free, and as my interview data, discussed below, show, without a scholarship it is virtually impossible to do a PhD in Mozambique. Most PhD students are staff at academic institutions which employ them, often immediately or soon after they have completed their Bachelor degree. This was the case for all my interviewees. If they go on to do any postgraduate training, this usually happens while they are already fully employed as academic staff. Consequently it is not surprising that in Mozambique as in many African countries, the vast majority of academic staff only have a Bachelor or at most a Masters degree. In 2021 at the Universidade Eduardo Mondlane, Mozambique's premier and oldest university, 526 staff had a Bachelor degree, 714 had a Masters degree and 442 a PhD (Ndaipa, 2023: 22). But as Molla and Cuthbert (2016) argue, such flagship institution figures tell us little about the HEIs in the rest of the country where the number of academic staff with postgraduate degree are likely to be much lower. Since academic salaries are low in Mozambique (Nota, 2022: 31), and PhD students are usually academic staff, they commonly take jobs in public universities not because of the salaries they will earn but because of the added connections and benefits this provides as well as the related status. Academic staff augment their income through consultancies for NGOs, for international donor programs, their own businesses, etc. As Stevano (2022: 1848) in a related context suggests, in Mozambique 'the dominant form of employment entails engagement in multiple occupations including wage work, non-wage work, and cash-earning activities'. This affects women disproportionately as they are also expected to take on the majority of any housework and care work within their extended family (Urdang, 1983; Tomm-Bonde et al., 2021). And academic staff usually support both their nuclear and their extended family such that their incomes have to pay for many people beyond their own immediate family in different ways, for example for other family members' education, for healthcare etc. This makes scholarships a must for anybody undertaking a PhD.

This fiscal situation also informs the common professional trajectory of academics in Mozambique. If they do well at undergraduate level, they get taken on as teaching assistants pretty much immediately after their Bachelor degree. They then usually work for a few years before completing a Master's degree which would normally take two years. However, since they usually work full-time while doing their Master's degree, the completion of that degree can be quite delayed, up to several years. These junior academics who by then will have already worked in academe a good number of years, often either take no further degree, or if they do a PhD, they wait for an appropriate PhD position, meaning one that entails a scholarship. This again can take several years, a time during which they usually apply multiple times for scholarships, commonly in Portuguese-speaking countries such as Brazil or Portugal. There they may well be admitted but if this is without a scholarship, they cannot afford to take up the offer of a PhD place. Eventually they may be successful in applying for a PhD scholarship and then, if possible, go to the donor country to pursue this degree.

If they get a scholarship to do the PhD in Mozambique, this scholarship usually covers only the fees but no living expenses. This means that the students do the PhD on top of a full-time job and all their duties and family responsibilities which in turn means that completion is slow (see also Molla and Cuthbert, 2016). These conditions tend not to be discussed in the literature which instead often just concludes, as do Kruse et al. (2017: 11, 14):

Students spent much longer time than originally planned completing their studies.

The mean time for completing a PhD degree [at UEm, Mozambique] was 6.3 years, The mode was 7 years. Those figures do not account for those who have not finished yet. The mean time for completing a MSc degree was 3.4 years.

As a function of all the issues raised above, the average age of a PhD student can be quite high compared to many western countries, typically in their 40s or even older. Women find it much harder than men to do PhDs because they are conventionally expected to do the vast majority of family support and care on top of their jobs. Further, within the prevailing patriarchal structure (Tvedten, 2012) women are routinely expected to ask their husbands for permission to undertake any activity, and many husbands are simply unwilling to allow their wives to study abroad or indeed to educate themselves to a level that may be near to or higher than their own. They may also be against women being supervised by male academics. A female Mozambican PhD student, for example, told me that she was lucky as a PhD student because her supervisors were all female and her husband would not have allowed her to do this degree if the supervisors had been male.

Given this context, the purpose of the underlying project was to understand the gendered motivations of students to undertake doctoral research in a low-income country. In view of the conditions under which PhDs are undertaken in LICs, the motivations of PhD students may well be shaped by some quite different concerns from those usually cited in the mostly western literature on this topic.

1.2 Literature Review

Much of the literature on motivations for doing a PhD comes from high-income countries such as the US, Australia, the UK and other European countries (e.g. Appel & Dahlgren, 2003; Brailsford, 2010; Danowitz, 2016; Guerin et al, 2015; Litalien et al., 2015; Skakni, 2018). The texts commonly centre on one of the following three, or a combination of these: country (e.g. Terentev et al., 2020; Zhang et al., 2021); discipline (e.g. Guerin, 2020; London et al., 2014; Moreno and Kollanus, 2013); or identity category of student (e.g. McGee et al., 2016; Shavers & Moore, 2014). Zhou (2015), for instance, regarding the USA cites four motivations for undertaking a PhD: 'intrinsic interest in research, intrinsic interest in teaching, high utility of a U.S.-earned Ph.D., and high emotional and social cost of quitting'. The 'intrinsic' nature of these motivations, their 'high utility' and the costs of failure involved all centre on the self as the primary locus of motivation. A similar focus prevails when distinctions are made between personal and professional/career-oriented motivations, or between intrinsic and extrinsic factors impacting on motivation. These are then sometimes framed in terms of self-determination theory or SDT (see Deci & Ryan, 2012; Litalien et al., 2015). As Litalien et al. (2015: 2) state: 'A key proposition of SDT is that more internalized regulations (i.e., the person fully endorses the behavior) produce more positive outcomes than less internalized forms of regulations (i.e., the behavior is performed due to internal pressures or external reasons).' (Litalien et al, 2015: 2) And, as the very name of this theory suggests, PhD students' motivation is analysed within neoliberal considerations such as the self as project (Giddens, 1991) and self-improvement, self-advancement, choice, and self-actualization (Di Paolantonio, 2019). This focus on self is very common in high-income earning countries and without doubt, it plays an important role in PhD students' motivation in those countries. But as the very contextual specificity of most of the research (i.e. PhD students in Australia (Guerin et al., 2015); Australasia (Brailsford, 2010); Canada (Skakni, 2015); in Finland (Sakurai et al., 2017); Germany (Danowitz, 2016); Russia (Terentev et al., 2020) etc.)) also makes clear, context as much as self matters, although the former is seldom directly addressed in the literature. This is one of the knowledge gaps the current article deals with explicitly.

Further, in contrast to the above, the motivations of students in LICs to undertake a PhD tend not to be researched. To date we therefore do not understand the drivers for PhD research in LICs. However, understanding those drivers could usefully inform how international donor programs for example might orient themselves to support such research more effectively (Note 3). To facilitate this, the pilot study reported on here sought to understand student motivation at doctoral level within a LIC context where the self is not necessarily the first consideration, where equal opportunities are not a given, and where gender plays a significant role in those opportunities. It is important to understand this motivation not least because the numbers undertaking such studies in LICs remain low. According to the World Bank (Note 4) in Mozambique in 2017 female PhDs aged 25+ accounted for 0,021% of population and male PhDs for 0,057%. In the USA at the same time female PhDs at age 25+ accounted for 1,48% of population (rising to 1,64 by 2019), and male PhDs for 2,25%. It is also important because those who gain doctoral degrees in LICs frequently take on important leadership functions in the public sectors of their countries. The pilot study therefore addressed the following research questions:

- 1) What motivates students to enroll in PhD programs in an LIC?
- 2) How are those motivations impacted by gender?

1.3 Theoretical Framing

Much research on motivations for doing a PhD uses binarist theoretical models such as extrinsic/intrinsic, or career/personal motives (e.g. Ryan & Deci, 1985, 2000; Nukpe, 2012). These vary in terms of their specificities. Brailsford (2010: 16-17), for example, distinguishes between intrinsic motivations found in some research (e.g. Gill & Hoppe, 2009) which centre on 'continuing development' or 'self-fulfilment', etc., and extrinsic motivations such as career advancement as advertised by Australian universities as part of their enticement for new PhD students. Ryan and Deci (2000: 55) argue: 'The most basic distinction is between intrinsic motivation, which refers to doing something because it is inherently interesting or enjoyable, and extrinsic motivation, which refers to doing something because it leads to a separable outcome...' I build on these binarisms here but use the concepts of 'self-concerned' and 'altruistic' to define the motivations that my interviewees attributed to their undertaking of a PhD. I use 'self-concerned' to highlight that their desire to do a PhD was driven partly by considerations for self, not always just for themselves but often for self in relation to other, for example other family members and their needs. But it was also driven by an understanding that improving one's material conditions (and hence those of one's extended family) depended on getting a PhD. In this, the students were neither selfish nor self-centred but realistically assessed the context in which they were doing their PhD. I use the notion of altruism as 'the disinterested and selfless concern for the well-being of others' (Oxford Languages Dictionary, at https://www.google.com/search?client=firefox-b-d&q=definition+of+altruism, accessed 24/7/2023) to denote some of the key motivations for doing a PhD that emerged in the interviews and which centred on providing support for one's country, institution and people. Such motivations are not found in the equivalent literature from high-income countries. Neither of the terms I propose here is commonly used to describe PhD students' motivations for undertaking a PhD but, as already stated, that literature also does not for the most part engage with LIC PhD students' motivations for doing a PhD.

2. Materials and Methodology

For this pilot study I undertook six interviews with six PhD students, four women and two men. This is a very small number but appropriate for a pilot study, and is also reflective of the very small number of PhD students relative to population size in Mozambique. Other studies, too, such as Brailsford (2010) utilize small sample sizes (in that case, 11) to elicit and comment on rich, in-depth data. The participants were purposively selected with the key criterion being that they were doing or had recently done a PhD, either in Mozambique or abroad.

All the interviewees were known to me as they were part of a donor-funded project on gender-mainstreaming that had run since 2017 and for which I was the Swedish coordinator. I had supervised three of them - one to completion and two still in progress at the time of the interviews. And I knew the others through regular online exchanges on a PhD Forum that I had set up to support them in their PhDs. This was important because we had developed a relationship of mutual familiarity in which I enjoyed some trust and I thought that they would therefore answer reasonably freely. I write 'reasonably freely' because I agree with Wendy Hollway and Tony Jefferson's (2002) notion that we are all 'defended subjects', meaning that everybody has views and experiences which they do not necessarily wish to share and they therefore seek to protect or defend themselves against these views and experiences being revealed. For now, I want to point out that Mozambican society is in my experience both very polite and conflict-avoidant (Åkesson, 2021: 933-34). It is a culture in which criticism is not encouraged. As $H_{\odot}g$ (2006: 52) puts it: 'Mozambique has a history of not allowing people to speak out against power, government or leaders.' It is therefore often difficult for people to voice critical views, especially publicly. Hence it was important that I had done work there and with the PhD students for some years so that I had a better understanding of the conditions under which academics in Mozambique work than would have been the case if I had gone to the field without such knowledge and connections.

I first told all the students about the research when we had an online PhD Forum (group meeting). At that meeting one of the PhD students asked if they could see the interview questions in advance so as to prepare themselves. In the interests of transparency and in line with the idea of the co-production of knowledge with research participants (Parsons, 2021) I sent all the interviewees the interview schedule about four weeks in advance. The prospective participants were all familiar with semi-structured interviewing as they were conducting similar interviews as part of their own PhD research. Providing the interview schedule in advance was helpful as the interviews were conducted in English but the PhD students' first language was Portuguese and they did not all feel equally confident speaking in English. Knowing what they would be asked thus alleviated any anxieties related to questions of understanding what was being asked, something that they and I also considered important. Whilst providing questions in advance impacts on how the questions are answered, as answers will not be spontaneous but to some extent premeditated, eliciting answers in other ways also of course impacts on what is said, and produces its own forms of bias. Providing the interviewees with the questions in

advance was useful in helping them with the interview process. Together with the interview schedule I also sent all the students an information sheet about the project and a consent form. All the students readily agreed to participate.

Five of the interviewees were current PhD students at the time of the interviews (May-June 2023) and one had graduated in 2021. Given the general employment situation and typical career structure for academics in Mozambique described above, the average age of the PhD students was 49, with the youngest being 40 and the oldest 61 at the time of the interviews. Four were married, one was divorced and one was widowed. Except for one interviewee who had three children, they all had two children, either in their older teenage years or fully adult. This two-children pattern replicates findings that show that the more highly educated people are, the fewer children they are likely to have (Bongaarts, 2020; Gätmark & Andersson, 2020). All had extended family responsibilities as described in the context section above.

The six PhD students were employed full-time at universities in Mozambique at the time of the interviews and during their PhD studies (see also Kruse et al., 2017), and several had had to sign contracts that they would not move jobs until they had spent the equivalent amount of time they had had for their studies working at the institution that employed them. Four of them had done their Bachelor degree at the university where they were working at the time of the interview, had been employed at that university since then, completed their Master's degree while still in full-time employment there, and continued to be employed there whilst completing their PhD. The other two had worked and done their Masters at another university but pursued their PhD at the same university as the other four. There was thus little in-country educational or professional mobility. As full-time academics, some in middle management positions such as being head of department as well as being PhD students, these interviewees were not 'just' students, that is in junior knowledge production positions, but occupied a hybrid position as student workers, and as people who inhabited both positions of authority as teachers and senior university administrators, and positions of dependence and subordination as PhD students. This was augmented by the fact that Mozambique has an intensely hierarchical patriarchal culture (Tvedten, 2012) where seniority in both age and professional position matters to a significant degree, regulating the kinds of interactions you can have (Nota 2022: 86). Being simultaneously a head of department and a PhD student thus produced a certain amount of status and role conflict. This found its particular inflection in the fact that as a white older woman from a donor country, in three instances their supervisor, and the person responsible for the research program in Sweden, I was in a position of some authority in relation to them, a fact that has to be acknowledged in this research. Without doubt this made it difficult for them to refuse participation in the research but I also found them ready to engage and reflect on their experiences. I would therefore argue that we had a mutually respectful professional and to some degree personal relationship which helped rather than hindered the research process.

Four of the PhD students were registered at a Mozambican university and two were registered abroad. Those who were registered at a Mozambican university had been promised as per the agreement between the donor and their institution that they would be given 80% leave from their current jobs to enable them to do their PhD. However, in reality this did not happen (see Kruse et al., 2017: 14). This meant, exactly as in Kruse et al.'s study, that the four PhD students registered at a Mozambican university were doing their PhD, supposedly full-time, in actuality in addition to all the normal work they had to do as well as whatever other consultancy jobs they did to make ends meet, and their extended family responsibilities. All were the first in their family to do a PhD, with the exception of one interviewee whose older sister was also undertaking a PhD.

Table 1. Demographic details of interviewees.

Pseudonym	Age	marital status	no. of children	previous attempts at PhDs applied	enrolled
Jorge	42	divorced	2	yes	yes
Senito	61	married	2	yes	yes
Abigail	48	married	2	yes	no
Layan	57	widowed	3	yes	no
Iyana	40	married	2	yes	no
Nasma	47	married	2	no	no

I conducted individual semi-structured interviews with each of the students to explore their motivations for and experiences of doing a PhD. I also asked them about the value they attached to their PhD education, and how other people in their work and home environment saw that education. The interviews were thus issue-based.

In conducting the research I followed best research ethics practice in line with the recommendations of the

Swedish Ethics Review Authority (https://etikprovningsmyndigheten.se/en/). In this context it should be said that I could not seek ethics approval from that authority because my research was not conducted in Sweden (see Griffin & Leibetseder, 2019) and the Swedish authority cannot grant ethical approval for work done outside its jurisdiction (Note 5). At the same time Mozambique has no ethics review board for Social Sciences and Humanities research to which one might apply. Since this pilot study also did not involve any immediately sensitive topic I decided to follow the Swedish Ethics Review Authority's guidelines. In this - apart from transparency towards the research participants enacted through the information sheet and through sharing my interview schedule with them in advance, storing the data on a password protected university server and duly pseudonymizing all interviewees - I also followed the imperative to do no harm, to tell participants that they could withdraw from the study at any time, and that their participation was voluntary and unremunerated. As part of the process of seeking consent I asked that I could audio-record the data and use them in publications arising out of the research. All agreed and signed the relevant consent form.

The interviews were conducted on the veranda of the hotel in Maputo where I was staying. This was a quiet place where we could talk undisturbed. The interviews lasted on average 41 minutes, with the shortest being 32 minutes and the longest 54 minutes. The conversations were easy and some of the remarks made suggested to me that the interviewees were talking freely, and that they did not feel uncomfortable about the questions they were asked.

I audio-recorded and transcribed all the interviews myself. The transcriptions were partly verbatim and partly summative, with the aim of being faithful to what had been said and how it had been said, but also in recognition of the fact that in all cases English was the second, more likely the fourth, fifth or six language (after one or more local languages, Portuguese, French, German, Russian, and Spanish which were other languages that my informants also spoke). This meant that the interviewees sometimes took time to respond whilst they were searching for the right word or expression, indicated by phrases such as 'how to say?', and I decided not to include this in the excerpts I use.

Given that this was a pilot study and the interview number was small, I analysed my data manually, coding them to identify the key themes in relation to doing a PhD in an LIC. Since the interviewees had all been asked, albeit in a conversational style (Burgess, 1984: 102), rather similar questions about their motivations and experiences of doing a PhD, it was possible to compare their responses and look for patterns as well as particularities. The interviewees' views regarding those themes varied, of course, but there were certain issues where their responses were unambiguously unanimous, and others, where their responses were quite distinct. This divergence, as I shall discuss below, also had gendered dimensions.

3. Results and Discussion

Below I discuss the motivations that shaped my interviewees doing their PhDs. In line with my theoretical framework I will start with discussing what I deem to be altruistic motives before addressing those that concerned the self. It is particularly with regard to the former that my pilot study diverges significantly from research done on PhD students' motivations in high-income countries.

3.1 Scholarships as Motivating Factors

In the literature on PhD students' motivation to undertake a PhD the financing of that PhD is practically never mentioned. In contrast to this, all my interviewees without exception stressed the importance of having a scholarship for doing a PhD. Having a scholarship was key. It trumped subject or disciplinary interests. Abigail, for example, was a biologist by training who had completed a Masters in Science Education locally; her institution offered a 50% discount on fees for staff training at the same institution. When the possibility to get a scholarship for a PhD in Gender Studies presented itself, she decided to apply because it was funded, even though she was worried about applying for this because, as she said, 'from the beginning it was not my areabefore I knew nothing about gender, but now I like it.' The need for a scholarship was such, and not just in her case, that all other considerations were subordinated to that. Any notion of 'passion for the subject' as some research on PhD students' motivation for doing a PhD emphasizes, proved irrelevant in this context of significant material deprivation. In Layan's household, for instance, which included three adult children, some with their own children, she was the only one earning. As she said: '[because] they don't work, I feel that I must support them - [her daughter] live with her husband but some day she says, "Mum, give me some money, mum, my boy I want to send to school." In fact I am responsible for all of them.' (Note 6).

All my interviewees had repeatedly tried for various scholarships but without success. Layan, for example, said: 'with my friend, we applied to be sponsored to study in Australia but we, she got and I didn't because of my English. I was waiting for some opportunity to study.' Opportunity here equated with a scholarship. Nasma also

said: 'I applied for different scholarships... for many.' Abigail, like Jorge, tried to apply for a PhD position in Brazil, a preferred destination for Mozambicans because it is a Portuguese-speaking country, but the offer of a place in both instances came without a scholarship so neither could take the offers up. As Abigail put it: 'Without a scholarship it would be difficult to pay... according to my salary as a teacher which is very low.' All the interviewees were united in their view that, as Jorge said: 'No one here in Mozambique are doing their PhD or postgraduate studies abroad by paying themselves. It is always by the scholarship or with donors or with international agencies.'

But PhD studies at home without scholarships also proved difficult. Significantly, only the two men in my pilot study had previously been enrolled in a PhD in Mozambique. This is significant because it indicates the gendered asymmetries in education opportunities that prevail in Mozambique: men's education is still considered more important than women's, so whilst financial sacrifices may be made for men, they are not likely to be made for women. Both Jorge and Senito had aborted these studies, though for different reasons. Senito had been told to stop doing his PhD because the university had changed its pedagogical policy, and his research no longer aligned with that policy. Jorge, on the other hand, had given it up when the opportunity for a scholarship abroad finally presented itself.

Senito's case is interesting because it highlights the close alignment between institutional/state requirements and educational opportunities: in LICs, country needs may dictate what can and cannot be studied, thus making the issue of choice and self-fulfilment rather secondary. Indeed, Senito was of the so-called March 8 generation (see Nota, 2022: 34) where Mozambicans could not choose which subjects to study but were told what to do in line with the country's requirements, which in Mozambique was then mainly for teachers. As he described it: '[When I went to university] I didn't make a choice because there was a politic of the government to send... the economy was the so-called planned economy so I had to do a course of becoming a teacher, teacher training... but it was not my willing [desire] so you can imagine how I was when they told me to go to the teacher training. Because my willing [desire] was to do mechanical engineering and I couldn't do that.' When in 2008 he considered doing a PhD because he was teaching at a university by then, he had no opportunity: 'I had no idea how to do... because at that moment even the government did not encourage more people to do a PhD. I think they were thinking it was enough for you to do a Bachelor. So postgraduate work was not so much important at that moment.'

In sum, getting a scholarship was critical for all my interviewees to motivate them to undertake a PhD. This was driven by the poor economic situation of the country which meant that salaries were very low (Nota, 2022: 31) making PhD study unaffordable, even though all my interviewees were in full-time work as academics. At the same time they all had extensive fiscal and other responsibilities for their extended families among whom unemployment of the younger generation was very common. It is for this reason that I would describe needing a scholarship as a motivational factor as altruistic since that scholarship usually benefitted not just its recipient but their extended family.

3.2 Serving your Country and your Institution as a Motivational Factor for Doing a PhD

In none of the research from high-income countries on PhD students' motivation for doing a PhD cited above did serving your country or your institution figure. However, in my interviewees' accounts this was a prominent factor, expressed in a variety of ways. Abigail for instance said, doing a PhD 'is to give ideas to develop our country, it's important to develop [the] economy etc.' Jorge talked about the fact that having a PhD is important because 'all these people are really ... critical for the system, you see, how we can contribute to our country's advancement or improvement and change.' He wanted 'to make a very concrete contribution to my country.' Senito talked about his 'institutional motivation': 'I chose [my PhD topic] because at that moment the university was changing its vision to the vision of transforming the university into a research university. Then I said, ... if I can do research, maybe I can give a contribution to the university in terms of operationalizing this intention'. Senito's view was that a PhD should be done 'to help people to solve their problems. I think particularly in our situation, maybe we need... an applied research, for instance to solve problems like the agriculture and food production...' Layan's view equally was that with her PhD 'I will have, I will improve my capacity, to see the phenomena, to work, to work with community, with people who ask me to help.' Nasma said very simply: 'I'm going to help the institution.' While the men spoke more overtly about serving their country, the female interviewees talked more in terms of helping people and their university. Helping the institution has to be seen in a context where those who gained scholarships had to sign contracts with their institutions that they would spend the equivalent amount of time as they had studied working in the institution before changing jobs. Such beholden-ness is uncommon in high-income countries. It is, of course, also a measure to stop the brain drain that often goes together with studying abroad, not least in African countries (see Chand, 2019; Moshtari & Safarpour, 2023). But it is also associated with the fact that opportunities to move jobs within LICs such as Mozambique are few, and many people, especially highly educated ones, therefore wish to remain in the capital city, Maputo. In any event, all my interviewees cited either serving their country and/or helping people and their institution as a motive for doing their PhD. This was the second altruistic motive that emerged strongly in the interviews.

3.3 Having a Voice, Being Heard and Participation

The third altrustic motive that was articulated in the interviews was the desire to have a voice and be heard. Especially the men were very clear that they wanted to participate effectively in their workplace and in wider society and they viewed having a PhD as key to that. As Jorge put it:

As a PhD I am a respected person, not only within academia or the university but also in society's world... [having a PhD] has a huge impact on the people's capacity to participate in democracy. Without it you will be manipulated, you will not be able to make decisions for yourself, other people will do it for you, but when you are aware about what is your goals here in Mozambique as a citizen, as an academic and so on, you will be in a better position to participate.

Senito put it slightly differently, saying:

When you don't have a PhD you may have very good ideas but no one wants to listen to you... I used to say our problem here is to value the source and not the idea. Of course the source is also important but we should also value the idea... so doing a PhD, it gives you some authority.

In both Jorge's and Senito's cases, having a voice was connected with participating as citizens as much as as academics, and wanting to make a contribution. Such a contribution seemed, however, only possible from a position of authority and this is what a PhD conferred. As Abigail put it: 'When you have a PhD it is different. Sometimes you have a voice. People call you always. If you don't have a PhD they don't call you to give ideas and information.' She also linked this to participation in the public sphere: 'When you have better education you have better understanding of democracy because you can understand what direct participation is.' Whilst in research from high-income countries having authority or status is something that is sometimes mentioned (e.g. De Clercq et al., 2021), it is not usually linked to citizenship and participation in the public sphere. It is for this reason that I classify having a voice as an altruistic motivation since the interviewees' emphasis was on participation and engagement with society and people at large rather than merely for their own benefit.

I now turn to the motivations for undertaking a PhD that had to do with self-concern.

3.4 Thirst for Knowledge, Confidence-building, Defying Gender Norms and Career Progression

There were mainly four motivations associated with self-concern that manifested themselves in the interviews: a thirst for knowledge, confidence-building, defying gender norms and the opportunity to advance one's career. Especially the women I interviewed, but not only they, expressed the desire to learn as a key reason for wanting to do a PhD. Layan said: 'In my special culture, to study is a need [...] to me it was a way of life, studying.' She really enjoyed the experience. Abigail completed her Master's degree and then her PhD because she 'wanted to increase her ideas in biology' and because as a university teacher it was expected that she would do a Masters (while teaching). But doing a PhD was also partly about the fact that she enjoyed doing research. Senito said: Personally I wanted to do a PhD because I like to learn more, and to acquire more confidence.' Iyana said that she had always wanted to do a PhD. Nasma decided to pursue a PhD because in her cross-departmental role as academic quality officer she had to engage with people in other departments and 'give them ideas about the documents they were producing'. She repeatedly stressed how doing a PhD had given her the confidence to do this. For two of the women there was also a strong gender dimension to doing a PhD. Iyana said that she 'grew up at a time when natural sciences was for boys'. She 'wanted to do medicine but also to challenge society that natural science can also be for girls, to show that it's possible'. Layan said: 'I see the other girls in my community that doesn't went to school, they face big problems in life. Me too, I have my problems but they, their problems are more, more,...' This desire to assert and secure oneself in a male-dominated culture and against conventional gender norms was also evident in Nasma's account.

Nasma, Iyana and Senito all shared the fact that they had an adult child with special needs. Nasma's husband had been reluctant to allow her to study first for her Master's, and then for her PhD, saying, according to her: 'at first he said, no, no, you won't be concentrating because of our situation [regarding their child], you'll not succeed [...] But I said, let me try, let me try... he said, no, it's better only to take care of our children because it's not easy.' Nonetheless, she persisted, completed her Master's and was set to complete her PhD at the time of the interview. Importantly and tellingly, no such obstacles were laid in Senito's way. Despite also having a child with special needs there was no assumption that this might hamper his studies. However, whereas in Nasma's case the decision to do her PhD in a neighbouring country in Africa rather than in Latin America or Europe was prompted

by the sense that she needed to be in close proximity to her family because of her child, Senito undertook his PhD partly in Europe because he felt that while he was in Mozambique he had no time to do his PhD.

It's not easy to study while you have to work at the same time. That is the great challenge. And... in our situation it becomes more difficult because at the same time you have to solve the problems of your family, so the family issues interfere a lot in a situation of someone studying. That is the reason why I asked to have some times abroad, not here.

Career opportunities played a motivational role for some of my interviewees. Iyana said that the PhD 'will give me promotion, give me more space to act in the academy... some programs, you don't get there if you don't have a PhD so this will give me a means to get to other positions.' But promotion and career were not uppermost in the interviewees' minds. As Nasma told me, 'at the moment the government doesn't have money. So if you get promoted they will not pay you because they don't have money.' Such considerations never emerge in the accounts of PhD students' motivations from high-income countries, but they also suggest quite why career was not a key motivating factor.

4. Conclusion

Theoretically, the pilot study challenges education motivation theories developed mainly in western countries and largely ignoring the external different conditions under which students are educated, especially at advanced levels, in LICs. These contexts, however, are critical when it comes to understanding what motivates people in LICs to undertake PhDs. Western-based theories tend to set up binary motivation models involving intrinsic and extrinsic motivational factors but largely centring on the self. Against this, my pilot study shows PhD students motivated strongly by what I term altruistic factors which are related directly to their context, namely the need for scholarships to do a PhD whilst supporting extended families, the desire to serve one's country, institution, and people, and the desire to have a voice and be able to participate effectively in the public sphere. These motivations trumped issues such as intrinsic interest in a subject or career aspirations, not least because the local conditions regarding what one could or was allowed to study, the very limited graduate labour market, as well as the simultaneous labour as full-time academics, full-time PhDs and providers for extended families produced different priorities. In this respect, Anna's history which I recounted in the introduction was both atypical and typical. Like two of my interviewees she had been enrolled in more than one PhD but had abandoned previous ones. All my interviewees had also repeatedly tried for scholarships but could not take up any that did not provide full funding. There were certain gendered dimensions to this: unlike in Anna's case, my female interviewees had little or no possibility to go abroad to get a PhD because separation from their family over long distances was an issue. This was not the case for the men both of whom had studied abroad, precisely to escape the multiple demands the women could not leave behind. The men were also much more focused on the sense of what their country needed as a motivational factor whilst the women tended to see matters more in terms of their institutions and communities. All of these motivations never appear in the relevant literature from high-income countries. Empirically, the pilot study thus produces original data offering novel insights into this issue that supply some evidence for the theoretical challenge regarding education motivation theories generated in western countries. The findings also develop our understanding regarding the role of postgraduate education in LIC contexts where career choices are constrained in ways that are somewhat different from those in high-income countries.

Implicit in these findings are important issues for donor countries and international scholarship programs that commonly supply scholarships for PhD students from LICs. First, scholarships that involve PhD students from LICs moving to different countries require adequate support to manage the transition to another country with all the administrative labour this entails and which can cut into a PhD student's time. Second, scholarships need to be adequate both in the duration that they are allocated and in the amount provided. Here it has to be understood that students from LICs usually support extended families and are likely to give at least part of their scholarships to family members for the latter's education, health needs, etc. This also means that they are likely to want to work part-time or more to make up for the funds they need to survive, with implications for the amount of study time available to them. This needs to be factored into considerations regarding scholarships.

If the scholarships are provided for PhD students to study in their home country, both duration and amount remain equally important, and not just for the PhD students but also for the local academics supporting that student. This is because such academics usually have very low salaries and consider PhD supervision 'extra work' that should be remunerated separately. Donors need to familiarize themselves appropriately with the academic practices of the LIC so as to understand what exactly should and should not be financed. Further, scholarships that do not cover living costs in the home country, and failure to ensure that PhDs in LICs are

relieved of their local academic work duties will mean that completion rates are slow and low. This study shows that PhD students who remain in LICs whilst on a scholarship tend to work full-time as well as study which is both very demanding and likely to lead to poor completion rates. Donors have a duty to counteract this.

This pilot study invites further research both with much more extended numbers of informants but also with informants from other LICs to understand if similar motivations as indicated here can be found in other low-income countries. Such research would also redress the imbalance in our current understanding of PhD students' motivation for undertaking a PhD, and help explore further the issue of the relevance of context for these motivations. As one of my interviewees, Iyana, put it: 'Education has this way of making you know that you are opening your mind to the environment, to know the situation and to know how to... live.'

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Notes

- Note 1. See https://hdr.undp.org/data-center/documentation-and-downloads, accessed 7/6/2023.
- Note 2. See https://www.worlddata.info/africa/mozambique/economy.php, accessed 2/6/2023.
- Note 3. The call for greater effectivity here rests on the results of the Kruse et al. (2017) which, *inter alia*, highlighted the low completion rates among PhD students in Mozambique.

Note 4. At

https://data.worldbank.org/indicator/SE.TER.CUAT.DO.FE.ZS?end=2018&locations=MZ&start=2016, accessed 27/7/2023.

Note 5. See

 $https://etikprovningsmyndigheten.se/faq/vilken-dokumentation-kravs-for-etikprovning-av-forskning-dar-information-till-exempel-samlas-in-och-lagras-utomlands-och-dar-data-sedan-ska-behandlas-i-sverige-for-analys-och-bearbetning/?link_id=3e6a1dd4-575c-4ad9-b144-988901284382, accessed 22/6/2023.$

Note 6. For accuracy's sake, all quotes are verbatim, including grammatical infelicities.