Doctoral Dissertation

Educational Aid Meeting Grassroots Needs: Insights from Teachers' Help-Seeking in Mozambique

SUGATA SUMIDA

Graduate School for International Development and Cooperation
Hiroshima University

March 2018

Educational Aid Meeting Grassroots Needs: Insights from Teachers' Help-Seeking in Mozambique

SUGATA SUMIDA

A Dissertation Submitted to
the Graduate School for International Development and Cooperation
of Hiroshima University in Partial Fulfillment
of the Requirement for the Degree of
Doctor of Philosophy

March 2018

We hereby recommend that the dissertation by Ms SUGATA SUMIDA entitled "Educational Aid Meeting Grassroots Needs: Insights from Teachers' Help-Seeking in Mozambique" be accepted in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY

Committee on Final Examination:

吉田 和浩

YOSHIDA Kazuhiro, Professor
Chairperson

堀田泰司

HOTTA Taiji, Professor

石田洋子

ISHIDA Yoko, Professor

黒田則博

KURODA Norihiro, Professor Emeritus

黒田一雄

KURODA Kazuo, Professor
Waseda University, Graduate School of Asia-Pacific Studies

Date: January 22, 2018

Approved: Takuya Baba

Date: February 23, 2018

BABA Takuya, Professor
Dean

Graduate School for International Development and Cooperation
Hiroshima University

SUMMARY

A discussion on whether official development assistance (ODA) to education, or educational aid, can meet grassroots needs in developing countries begins in a few years. Before starting the discussion, we have to know unerringly what the grassroots needs are. This is crucial because the understanding of needs would directly affect the result of the concerned discussion. If we overlook some of the needs, it leads us to the false result and consequently creates an inappropriate educational policy. The investigation into grassroots needs has been done quite a lot, focusing on students (children and adolescents), teachers, and parents. However, these investigations merely observe the explicit needs and neglect the process which describes how needs become explicit. The process would contain some implicit needs which are not yet become explicit or which are faded away before they become explicit.

This study, therefore, explores the process of the need emergence. The study holds that the process can be illustrated by describing the stages which individuals must choose to express (or not express) the desire for help for the problems they face. It stands on an idea that individuals take several stepwise considerations regarding trade-off between the benefits gained by expressing the needs, which potentially leads to a better situation, and the expense or efforts to express the needs including overcoming the psychological or physical constraints. To pursue this idea, this study employs the concept of help-seeking.

This study proceeds in four central chapters. The first (chapter 2) reviews the literature on help-seeking. This lays the basis of our understanding regarding from whom people seek help (help resources) and what factors hinder or promote the help-seeking (related factors). It also considers the applicability of the concept in the context of the educational sector in developing countries. The second (chapter 3) explores the help-resources and the related factors for this study's context by conducting a case study on teachers in Mozambique. It takes a qualitative approach with a sample of ten teachers. The third (chapter 4) checks its validity and develop a measurement instrument for the teachers' help-seeking in Mozambique. With the instrument, it further examines the related factors by the help-resource preference. It uses the quantitative approach using survey data with 296 samples. Based on the findings from the previous chapters, the last of the central chapters (chapter 5) strives to give form to the help-seeking process and further considers the new insights regarding the grassroots needs that have come to light by revealing the process.

The contribution of this study primarily resides in filling the gap between the current studies and theories of help-seeking by presenting an analysis of one grassroots subject in a context of the educational sector in developing countries. Meanwhile, the measurement instrument developed during the study can become an analytical framework to conduct future studies within a similar context to this study. Finally, this study serves to pose the importance of, and foster the discussion around, a more rigorous understanding of grassroots needs.

CONTENTS

CHAPTER I – Introduction

1.1. Background

The centrality of official development assistance (ODA) on education, or educational aid, lies in meeting grassroots needs in developing country. Its fundamental significance is made apparent by the fact that the human-rights approach has been dominant for educational development throughout the past three decades (Tikly & Barrett, 2011). When aid does not meet to grassroots needs, development is delayed, social equality is immobilized, and new problems such as aid-related corruption and a vicious circle of aid dependency have occurred (Djankov, Montalvo, & Reynal-Querol, 2008; Moyo, 2009).

In the investigation on how educational aid meets grassroots needs, the primary concern is to understand what are the 'grassroots needs.' Without accurately capturing what the needs are, it would be unlikely that aid could meet the needs (Barrett, Sayed, Schweisfurth, & Tikly, 2015). Also, when the understanding of needs changes, answers for related inquiries including the degree of responsiveness, failure of response, and effectiveness of aid are also changed (Rose, 2015). Thus, how to understand needs becomes a foundation for all inquiry about educational aid meeting needs.

Research has identified a diversity of grassroots-needs in the context of developing countries. Children's needs garner much of the attention with research, investigating means for their stable access to school and attainment of sufficient learning. The studies ranged from materialistic needs such as school uniform, school meals, good and school facilities (e.g. Ben Abdelkarim, Ben Youssef, M'henni, & Rault, 2014; Evans, Kremer, & Ngatia, 2009; Koolwal & Van de Walle, 2010; Vermeersch & Kremer, 2005) to non-materialistic ones such as parents support and good teacher (e.g. Sumida, 2017b). Recently, capability needs disadvantaged children were also elucidated as a fundamental to achieve learning excellency (Seeberg, 2014).

Parents' needs are also explored as a means for their children to obtain a quality education. Included in such needs are financial support for paying tuition, labors forces

as substitutes for their children, and their education attainment (e.g. Jensen & Nielsen, 1997; Kabeer & Mahmud, 2009; Parker, Todd, & Wolpin, 2006).

Literature also shows teachers' needs for better pedagogy. It shows that teachers are in need of more textbooks in class, better quality textbook, supplemental teaching tools such as information and communication technology (ICT), and smaller class size (e.g. Barrera-Osorio & Linden, 2009; Hanushek & Woessmann, 2017; Michaelowa, 2001; Westbrook et al., 2013). Some other literature found that teachers also want financial incentives, informative feedback, and better employment contract to increase their teaching motivation (e.g. Bourdon, Frolich, & Michaelowa, 2010; Duflo, Dupas, & Kremer, 2015; Kremer, Glewwe, & Ilias, 2010; Westbrook et al., 2013). In addition to the abundant literature, there are many practical attempts linked to the educational aid project, to grasp what the latest needs are in the fields of grassroots.

The previous literature has a rich knowledge of grassroots needs, however, they are still insufficient to understand the full shape of the needs. The literature knows what kind of needs the grassroots people have, but does not know how they express the needs. Ueno (2011) observed that explicit needs are just a part of the picture and there are other needs going unexpressed or unrecognized, which she called 'latent needs.' She explains that needs emerge as a process, and the process is a continuum where latent need can become explicit anytime. Moreover, the needs can consistently change (Monette, 1977; Watkins & Kavale, 2014), therefore, the accumulation of evidence of one-shot observation may not be sufficient to capture the accurate needs (J. J. Bernard, 1956).

This study, therefore, examines the process of 'need-emergence.' It addresses questions of to whom, and why (and why not) needs are expressed.

For pursuing this issue, this study investigates need emergence through a case study of teachers in Mozambique. Roughly speaking, actors in the educational sector in developing countries can be divided into country-level and grassroots-level. The country level includes governments and international donors, and the grassroots-level includes the school principals, teachers, parents, and students. The teachers are one of the grassroots-level actor expected to express needs in order to solve daily problems

at school.

This study adopts help-seeking as a conceptual framework to help to understand the need emgerence of teachers in Mozambique. Dedicated to describing from whom individuals seek help and factors related to their decision, the concept helps to explain how and why teachers express needs.

By describing the process of need emergence, this study reveals that there are new perspectives of understanding the grassroots needs that have not been observed by the previous literature such as the big-picture view and the characteristics of grassroots needs. This study, therefore, provides new theoretical insights to understand the grassroots needs.

Outline of the Study

The research question of this study is:

How do teachers in Mozambique seek help?

The question was further problematized by the following four guiding questions, which will each be addressed in successive chapters:

(1) How do people seek help? This theoretical understanding of the mechanisms and related factors are indispensable to investigate the teachers' help-seeking in developing countries. Chapter 2 will examine the typical occurrence of help-seeking by setting out our understanding the two main aspects of the concept; help-resources and factors related to help-seeking.

(2) What are the help-resources and the factors related to teacher's help-seeking in Mozambique? Two chapters (chapter 3 and 4) will consider where the Mozambican teachers seek help and what factors influence their decision. As demonstrated in the details later, the help-seeking concept has not yet been applied in the context of the educational sector in developing countries. Thus, it cannot be applied retroactively to this study's context. Therefore, first, chapter 3 will carefully unpack the Mozambican teachers' help-resources and related factors by using a qualitative method. Then, chapter 4 will first test the validity of them by using a quantitative method. Employing the validated findings as an analytical framework, chapter 4 will further identify specific

factors which relate to help-seeking which vary in accordance with help-resources.

(3) What is the process of teacher's help-seeking in Mozambique? Chapter 5 will strive to outline the help-seeking process by using the above findings of the help-resources and related factors.

(4) What does it mean to understand the grassroots needs? After revealing the process, chapter 5 will further consider, in the latter part, the new ways of conceiving grassroots needs.

Before the study proceeds to the central chapters, the remainder of this chapter adds a more detailed explanation of the three important bases of this study. The next section provides additional information about this study's background. It presents a review and trajectory regarding the debate about educational aid meeting needs, reaching the concern of the current study. The following section describes the empirical element about teachers in Mozambique, which is necessary to contextualize and make sense of the study findings. The last section outlines the methodology employed and some of its concerns.

1.2. The rise of the issue of educational aid meeting grassroots needs

The issue of educational aid meeting meet needs has been studied widely at the country-level. The previous research has investigated to what degree educational aid funding is associated with the national enrolment rate, completion rate, gender disparity ratio or pupil-teacher ratio (e.g. Dreher, Gehring, & Klasen, 2015; Global Monitoring Report, 2015; Nielsen, 2010; Sumida, 2017a; Thiele, Nunnenkamp, & Dreher, 2007; Turrent & Oketch, 2009).

The scholars further argue the reasons why educational aid does not respond to these countries needs (Steer & Wathne, 2010; Sumida, 2017a), how much of an impact educational aid makes on a country's needs (Birchler & Michaelowa, 2016; D'Aiglepierre & Wagner, 2013; Dreher, Nunnenkamp, & Thiele, 2008; Michaelowa, 2004; Michaelowa & Weber, 2007; Riddell & Niño-Zaraza, 2016) and how to increase the imapct of aid (Ashford & Biswas, 2010; Cassity, 2010; Christensen, Homer, & Nielson, 2011; Fredriksen, 2010; Hattori, 2009).

Amidst this active debate, recently, some scholars signaled the necessity to discuss the issue by focusing on the grassroots level. Easterly (2006), for example, claims that donor countries overly neglect grassroots voices and that it is urgently needed to check that aid properly reach people at the grassroots. He is concerned that if aid is implemented without grassroots feedback, it brings grassroots people under aid donor and government control, and eventually disenables them. This concern has also gained increasing global attention in the practical field of educational aid as the global development agenda has shifted its focus from the country-level to the individual level. To measure the educational development, the latest global agenda the Sustainable Development Goals included the indicators of student's learning proficiency including literacy and mathematics in addition to the national enrollment rate and completion rate that have been used in the previous agenda (Global Education Monitoring Report, 2017).

Currently, both academics and development practitioners seek research to verify whether educational aid responds to grassroots needs. However, by hastily seeking this verification, a false sense of comprehension is more likely to result. When the examination of whether educational needs are responding to grassroots needs become a primary concern for educational policy, efforts are directed toward identifying merely the explicit needs without recognizing that there may be many other needs that are not recognized. Consequently, the discussion loses sights that meeting the needs do not guarantee that aid is reaching the grassroots people who are really in needs. In the worst case, the aid could cause, without knowing, the creation of new problems such enriching the privileged people and enlarging the existing educational disparity. In this context, investigating the nature of grassroots needs has urgently sought.

1.3. Teachers in Mozambique

Teachers in developing countries

Teachers in developing countries face multiple difficulties. Although literature that systematically examines teachers in developing countries is scarce, a few studies

suggest the difficult situation faced by them. Teachers in developing countries engage in a variety of complex tasks ranging from preparing, giving, and grading lessons, assignments, and tests, managing classrooms, developing instructional materials, and provide feedback to students and parents, which create conflicting demands on teachers' time and commitments (Global Education Monitoring Report, 2017).

The overload of work along with under-resourced schools such as limited instructional materials contribute to teacher frustration (Badenhorst & Koalepe, 2014). Teachers face overcrowded classrooms, particularly since the Education for All and the Millennium Development Goals in 2000 had increased children's access to schools, making it difficult to perform quality teaching (Hillman & Jenkner, 2005). The poor salary and the deterioration of the occupational status of the teaching profession cause low motivation for teaching (Bennell & Akyeampong, 2007). The inappropriate support in a system such as pre-service training and in-service training as well as at schools such as support from peers and supervisors, make it difficult for teachers to provide quality teaching (Bennell & Akyeampong, 2007). Recently, the expectation on teachers has been greater (Done & Murphy, 2016; Smith, 2014), so that they appeared to face more problems.

Teachers in Mozambique are in the same situation. They face similar problems such as the heavy workload, inadequate pedagogical support, and overcrowded and mixed-class environments (Mulkeen, 2008). Unique barriers of Mozambique include having scarce support for HIV/AIDS infected teachers and difficulty serving as a cultural mediator between modernity and traditional society, in particular for the rural areas (Palme, 1999).

This study examines teachers as an exemplar for grassroots people because they are the one who has, recognize and express needs. Needs can be recognized and expressed by either a person him/herself, by a third party, or both (Ueno, 2011). In the practice of educational aid, the need assessments were often made by foreign aid practitioners, often neglecting the people who have needs (Easterly, 2006). Need belongs to a person in need, and thus it is crucial to observe needs from the perspective of the person in need (Ueno, 2011). For this reason, a teacher is a fitting case enabling researchers to

observe the emergence of needs from the perspective of the person in need.

Besides that, the teacher-based sample is expected to yield at least three advantages for conducting rigorous research. Firstly, the data collected from teachers assure relatively guileless and reliable quality. Respondents who can be involved in the operation of educational aid projects or be responsible for building a relationship with foreign aid providers, such as school principals, may have multifaceted opinions on seeking help from foreign aid. It is because their responses often tie with the future expectation of foreign aid and appropriateness of answers. Whereas, respondents who do not have adequate knowledge about foreign aid, such as students, may have no opinions for seeking help from foreign aid. It is most likely that teachers are not virtually involved in any operations or negotiations of foreign aid but have some knowledge about foreign aid.

Secondly, using the teachers as samples enable the researcher to collect a relatively large number of samples efficiently for a given condition. As explained previously, this study will take a quantitative survey to validate the qualitative findings and also to see the generalizability of the findings. For this purpose, it needs a sufficient sample size to withstand the statistical scrutiny.

Thirdly, using teachers as samples minimizes bias due to illiteracy which could occur in a questionnaire survey. As presented previously, the adult literacy rate is 50 percent in Mozambique, and so some parents may have difficulty reading and writing. Most teachers in Mozambique can read and write and are thus able to answer the questions correctly.

This study examines teachers as a suited case for the study purpose but acknowledges that not all of these observations will strictly apply to other grassroots people. However, a teacher is a profession which works as a helper and thus has gained less attention in the help-seeking theory (Mizuno, 2017). Studying teachers in Mozambique would add one evidence about teachers' help-seeking and thus contribute to filling the gap overall between current studies and the concept of help-seeking.

Mozambican context

Mozambique is a country located in the southeastern part of Africa with a population of 28 million people (World Bank, 2017) (Figure 1). The country is categorized as a low-income country which had a GNI per capita of 480 US dollars in 2015 (World Bank, 2017). There are significant ethnic groups including Makhuwa, Tsonga, Lomwe, Sena which encompass numerous subgroups with diverse languages, dialects, cultures, and histories. The major religions include Roman Catholic along with Muslim, Zionist Christian, and Protestant (Central Intelligence Agency, 2017). The official language is Portuguese, but in daily life, many people use their local languages such as Emakhuwa, Xichangana, Cisena, Elomwe, and Echuwabo. The life expectancy is 57.6 years old, which is slightly lower than the sub-Saharan African average of 60 years old. The poverty rate is severe in Mozambique, with 54.7 percent of the population living on less than 1.9 US dollars a day.

Mozambique became independent from Portugal in 1975 after winning the Mozambique war of independence, in which the anti-colonial force of the Front for the Liberation of Mozambique (FRELIMO) fought against the Portuguese rule. After independence, however, the country still had experienced political instability and security for a decade, due to a civil war between the FRELIMO who established a one-party state based on Marxist principles and the opposition forces of anti-Communist Mozambique National Resistance (RENAMO). Also, periodical natural disasters such as droughts, cyclones, and floods have hindered the development of the country. The country became stable after the FRELIMO abandoned the communist regime and introduced a new constitution, multiparty election, and free market economy in 1989 and the peace agreement was in force between two parties by 1992 (MacGonagle, 2013).

The Constitution of Mozambique regulates the current education system in 1992, replacing the previous framework of the National Education System formed in 1983. Primary education is compulsory with a seven-year course consisting of two levels: level one, grade 1-5 (EP1) and level two, grade 6 and 7 (EP2). General secondary education lasts five years, consisting of lower secondary grade 8 to 10 (ESG1) and upper secondary

of grade 11 and 12 (ESG2). Technical, vocational education and training (TVET) is a two-year program with three fields of study, which are agriculture, industry, and business. The course prepared for training teacher is called the Institutos de Formaçáo de Professores (IFP, Teacher Training Institute), which was reformed in 2007 by combining the Instituto de Magistério Primário (IMAP, Primary Teacher Training Institute) and the Centro de Formação de Professores Primários (CFPP, Center of Primary Teacher Training). This course is offered after completing ten years of general education, and thus the system is called the '10+3' system. Tertiary and higher education lasts three to five years depending on the degree type, and also has a two-year master course (UNESCO International Bureau of Education, 2012).

Related to the organizational structure, there has been a gradual decentralization reform since 1994, and some of the government functions and authorities concerning education management have been transferred, along with other public services, from the Ministry of Education to the provincial, district, and school-level. Thus, currently, the Provincial Education Directorate (DPE) and the District Service of Education, Youth and Technology (SDEJT) are responsible for many educational matters including material resources, financial resources for expenditures, teaching, and non-teaching staff. In particular, district governments are considered a 'development pool' and became responsible for a large part of the authority regarding planning, policy administration, and human resource management a the local level, and budgeting (UNESCO International Bureau of Education, 2012).

The government has issued several policies to improve educational development. They issued the first educational policy, called the Education Sector Strategic Plan (ESSP1) for the period of 1999 to 2005, and placed the top priority on the provision of basic education. Their specific objectives were: (1) expanding access to basic education, (2) improving the quality of education, and (3) enhancing the organizational and administrative structures in the education sector. During this period, the government also issued two other policies: one is to abolish tuition in primary schools, and the other is to introduce the semi auto-promotion system in primary education. After that, the second and third five-year policies have been issued, called the Strategic Plan for

Education and Culture (PEEC) and the Education Sector Strategic Plan (PEE) issued for the period of 2006 to 2011 and 2012 to 2016, respectively, with a continued effort to achieve the goals of the first plan. In the third strategy, they prioritized the seven-year primary-level education for all children.

In respect to the situation of education, Mozambique is still considered being poor in both access and quality, and far from achieving a universal primary education. The net enrollment rate of primary education improved dramatically from 43 percent in 1990 to 89 percent in 2015, though the transition to secondary education is still limited to 66 percent as of 2015 (UNESCO Institute for Statistics, 2017). The literacy rate is still meager: 67 percent for the youth population aged 15 to 24 years old; 50 percent for adult literacy including ages over 15 years old; and 21 percent for the elderly population for ages over 65 years old as of 2009 (UNESCO Institute for Statistics, 2017). In terms of the learning outcomes of school children, it is inferior compared with neighboring countries. Among fourteen southern and eastern African countries, Mozambique is ranked the fourth from the bottom in the reading proficiency test after Lesotho, Malawi, and Zambia (SACMEQ, 2007). The score is notably lower in rural provinces.

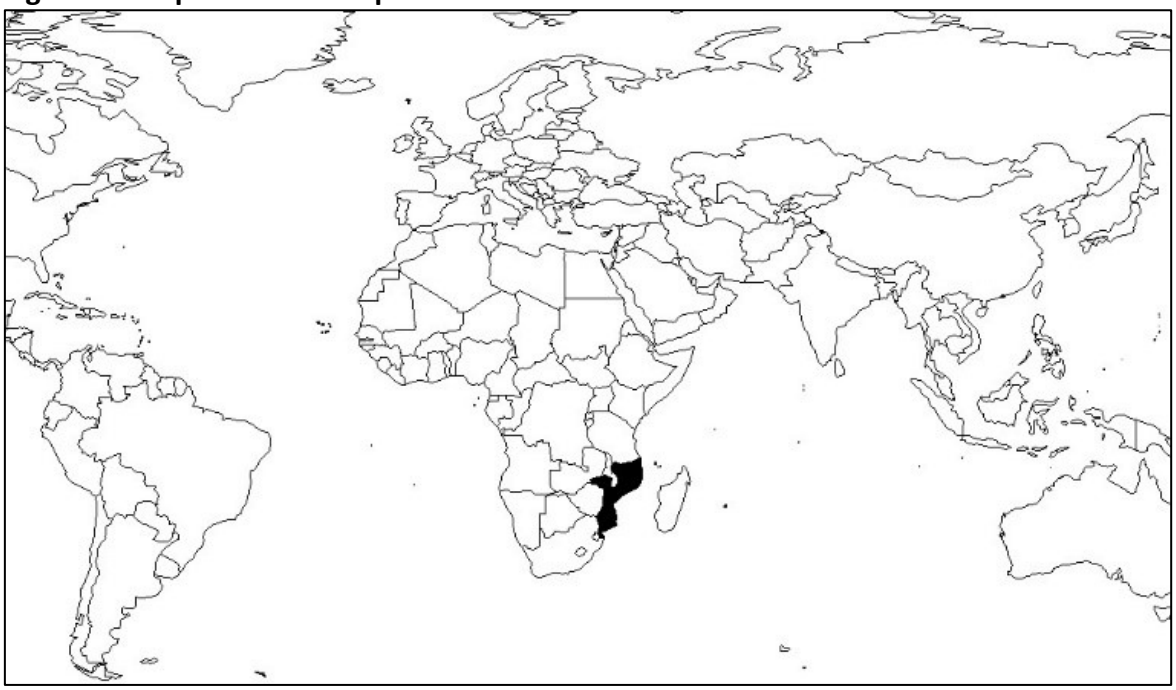
Mozambique has received a considerable amount of educational aid, having the second largest aid package for the period between 1995 and 2015 in sub-Saharan Africa. The aid amount in actual value increased steadily with a peak in 2005 with 258 million US dollars. Since 2006, it has declined and in 2014 became 85 million US dollars (OECD, 2015).

Mozambique has been the donor's favorite country to provide aid to, being selected as a priority country by seventeen donor countries as of 2014, which is the highest numbers among the low-income countries (OECD, 2014). It may be related to the country's good reputation that it is known as a success story in Africa, making a great recovery from political and economic challenges in the past and having achieved rapid economic growth (DeRenzio & Hanlon, 2007). Mozambique became eligible to receive the fund of the Education for All-Fast Track Initiative (FTI) in 2003 by having met the criteria required, including having Poverty Reduction Strategy Papers (PRSP), sound education policies and sector program, and a commitment to monitor key indicators

based on the indicative framework.

This favored status is also seen in the way of having a lot of General and Sector Budget Support. The budget support requires a trusty relationship between donor and aid recipient, in which the donor's fund is directly distributed to a national account instead of for each aid project. The process of budget support contains that donors and the recipient government agree on variables or indicators of educational development every year. The sector budget support in the education sector is called Fundo de Apoio ao Sector de Educação, and the Education Sector Support Fund in English, and was established in 2002 and funded by seven donors (Handley, 2009). In 2015, it was funded by nine donors, namely, Canada, Finland, Germany, Ireland, Italy, Portugal, UNICEF, World Bank, and the Global Partnership for Education (Embassy of Finland in Maputo, 2016).

Figure 1: Map of Mozambique



(Source) Created by the author using 'R' rworldmap data developed by South (2012)

1.4. Methodological Issues

Empirical observation

This study employs a mixed methods research approach for empirical observation.

The mixed methods research is a methodology involving both qualitative and quantitative research. The qualitative research aims at obtaining a comprehensive understanding of the issue pursued (Rubin & Rubin, 2005). Whereas the quantitative research put emphasis on the generalizability by ensuring that the knowledge gained is representative of the population from which the sample was drawn (Miles & Huberman, 1994). Each type of research has both limitations and strengths. By combining the strength and overcoming the limitation of each, the mixed methods approach can provide a stronger understanding of the research problems or questions than either can by itself (Creswell & Plano Clark, 2007).

Mixed methods research involves the collection of both qualitative and quantitative data, the analysis of both forms of data, and the integration of two forms of data through merging, connecting, or embedding. These procedures are incorporated into a distinct mixed methods design that includes the timing of the data collection (concurrent or sequential) as well as the emphasis (equal or unequal) for each database (Creswell, 2014).

The exploratory sequential design is one of the designs which starts with a qualitative phase followed by a quantitative phase (Creswell, 2014). The researcher first collects the qualitative data, then analyzes the results, develops an instrument based on the results, and finally administers it to the sample of the population. Accordingly, the second database builds on the result of the first database. The primary intent of this design is to develop a better research instrument with specific samples of the population. It is often used for the case where there is no adequate instrument available for measuring the concept with the sample that the researcher wishes to study.

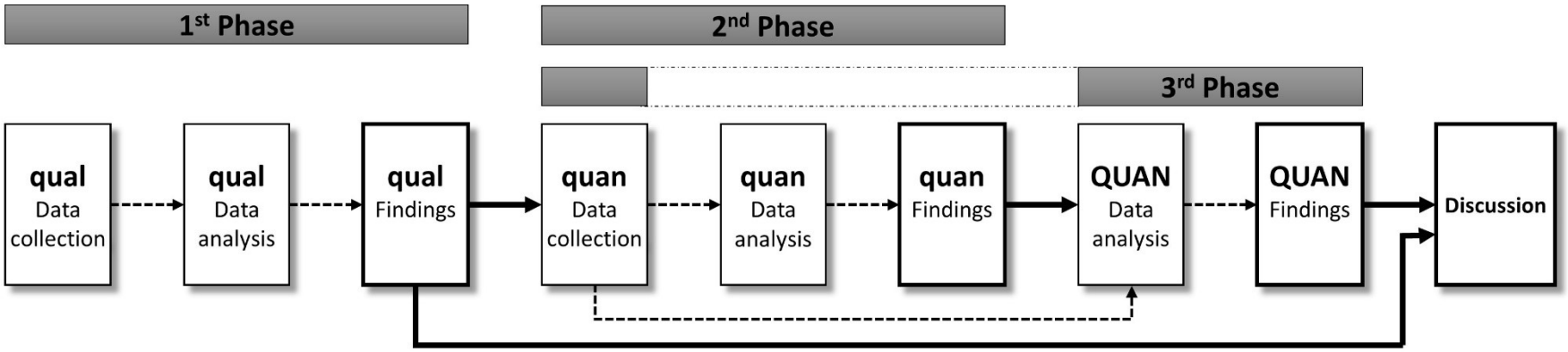
This study chooses this design because, as shown in the literature review of next chapter, it could not find an adequate instrument to measure the Mozambican teachers' help-seeking. The literature review on help-seeking will find that there is very limited literature on the teacher, and moreover no literature in the context of the educational sector in developing countries. Therefore, this study needs steps to develop an appropriate measurement instrument and to use it to measure the actual situation of

the case. In effect, the study takes a three-phase procedure: the first phase explores the help-seeking of teachers in Mozambique, the second develops a measurement instrument, and the third identifies the factors relating to the Mozambican teachers' help-seeking.

Figure 2 presents a diagram of this study's procedure with using an illustrative system developed by Morse (1991). The 'qual' indicates the qualitative research, and the 'quan' and 'QUAN' indicate the quantitative research. The capital letter of 'QUAN' means that the third phase is the primary research approach, and the first and second phases are the preparatory stages.

In the first phase, the study explores the teacher's help-seeking resources and the related factors by conducting a semi-structured interview. The data are analyzed descriptively aided by coding, and the results are summarized as findings. These three steps are presented in chapter 3. In the second phase, the survey is conducted employing the questionnaire developed by the previous findings. The collected data are used to extract important factors from the question items by using the principal component analysis technique. The findings become a measurement instrument or an analytical framework for the following analysis. These three steps are presented in section 4.2 of chapter 4. The study, then, uses the findings as a measurement instrument or an analytical framework and examines the factors related to the teachers' help-seeking decisions which vary by help-resources. This part is presented in section 4.3. The discussion of chapter 5 uses the findings of quantitative data as a primary source, but also uses the findings of qualitative data as supplemental evidence. Other methodological issues including tools and outcomes will be presented later in chapter 3 and 4.

Figure 2: Diagram of Methodology



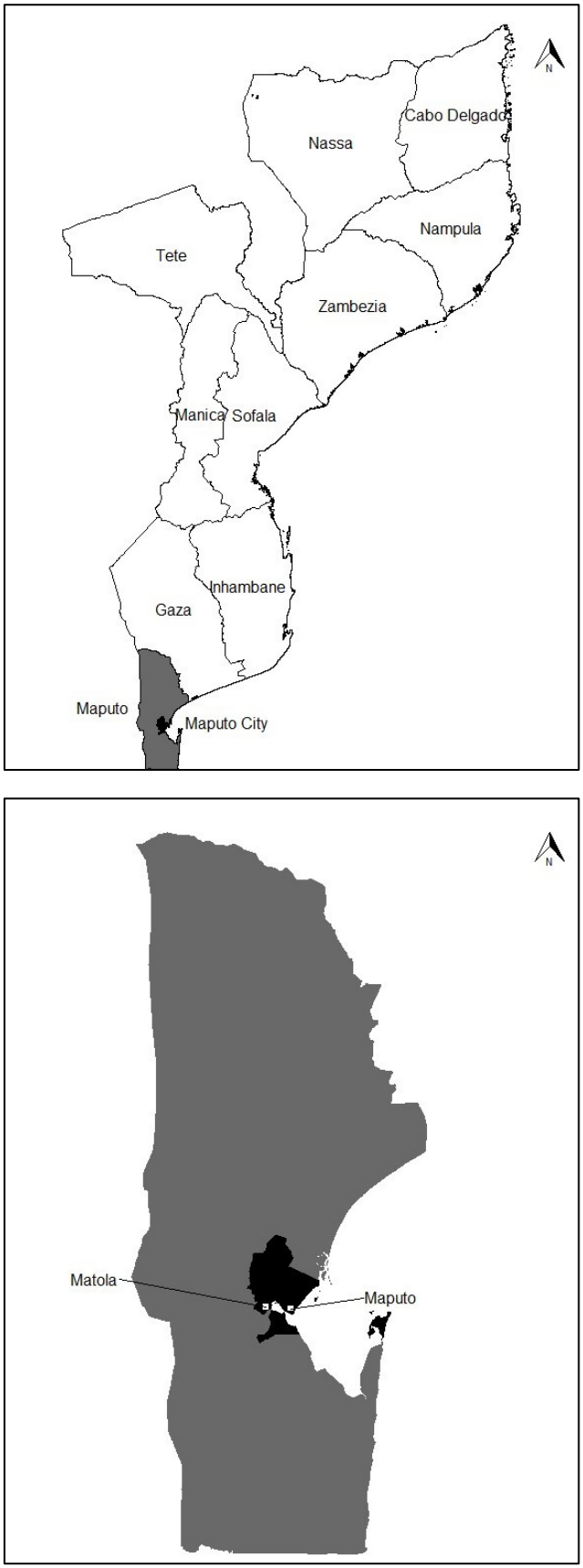
Step	Semi-structured interview (n=10)	Explore the help-seeking for Mozambican teachers	Present the potential help-resource and the factors	Survey (n=296)	Test the validity of the findings Extract key factors	Present a measurement instrument	Administer the instrument to identify the factors	Present the factors related to the help-seeking	Draw the help-seeking process
Tool	Fieldwork IC recorder	Nvivo 10 (Coding, Descriptive analysis)		Fieldwork Questionnaire	STATA 14 (Principal Component Analysis)		STATA 14 (T-test)		
Outcome	Audio-recorded conversation Field note	Transcribed text Coded text	Description of 3 help-resource 4-factor groups	Response scores	Factor variables	Framework to measure help-seeking	T-test results	Validated 3 help-resources and 4-factor groups	Illustration of help-seeking process
Chapter/ Section	3.1	3.2		4.1	4.2		4.3		5

(Source) Created by author based on the Morse's illustrative system

The sample

The study chooses ten teachers for qualitative research and 296 teachers for quantitative research in the Maputo and Matola municipalities. Both municipalities are located in the capital city of Maputo and have the largest population in the country (Figure 3). This selection was mainly due to the researcher's financial constraints, concentrating the study to an area where schools were located close to each other. Consequently, it becomes a limitation of this study, where the sample represents more of the urban area's characteristics. For instance, people in this area may have more open-minded personalities, knowing more about foreign aid, or having more modernized sociocultural value. The rationales behind the sample number, selection process, and characteristics of the samples will be explained in each empirical observation chapter; chapter 3 for the qualitative sample, and chapter 4 for the quantitative sample.

Figure 3: Map of Maputo and Matola municipalities



(Source) Created by the author using the map data of Global Administrative Area (2017)

CHAPTER II – Help-Seeking for Educational Sector of Developing Country

As mentioned in the previous chapter, this study employs the concept of help-seeking to elucidate the process of grassroots needs emergence. This chapter will develop a general account of the typical process of help-seeking by reviewing the previous literature. First, the concept of help-seeking is introduced with explanations for three main aspects constituting the concept: the help resources, the factors related to help-seeking decisions, and the processes. This chapter serves as a conceptual framework to examine the data collected in empirical studies for the following two chapters. The guiding question for this chapter will be: 'How do people seek help?'

Section 2.1 reviews the previous literature discussing the concept of help-seeking in general and also in the educational sector. It explores how the concept has been applied overall and to whom it has been applied in the educational sector.

Section 2.2 explores persons or places from which people seek help, so-called the help resources, in the field of the educational sector. Most of the literature on the education sector is based on the context of developed countries. Therefore, it looks for the literature that deals with cases in developing countries in a different sector.

Section 2.3 reviews the literature explaining the factors that influence the help-seeking decisions and also the help-seeking processes. The literature on the related factors is abundant enough to be meta-analyzed for several factor groups. Referring to this meta-analysis as a base, this section explores the factors that are relevant to the education sector of developing countries. Finally, section 2.4 summarizes the chapter.

2.1. The concept of help-seeking

The concept of help-seeking explores the behavior of a person who has a problem to be solved by requesting the help of others (DePaulo, 1983). Traditionally, it was aimed at persons who cannot seek help and addressed a question of why those persons cannot or do not seek help although they have problems. The feature of this concept is to shed light on individuals who have problems and to understand their autonomous

decision on help-seeking or not-help-seeking. This study aims at focusing on individual teachers with problems and at exploring their voluntary expression of needs. Therefore, the concept suits this study to pursue the objectives. This study deems the occurrence of 'help-seeking' as the 'need emergence.' In other words, it conceives of the conditions where a person expresses a need by seeking help. It is noted that this study focuses on the process leading up to the expression of a need and does not include the part thereafter as in whether or not the need is recognized by a third party.

The help-seeking concept has been applied to broad fields of study in particular of psychology, psychiatry, public health care, and internal medicine (e.g. Forrest, Smith, & Swanson, 2017; Ogrodniczuk, Oliffe, & Black, 2017; Ulas, Binbay, Kirli, Elbi, & Alptekin, 2017; Whitaker, Ghanouni, Zhou, Lyratzopoulos, & Morris, 2017). Relatively less but, it also has been used for the educational sector (e.g. Winter, Patel, & Norman, 2017).

The concept became popular in the early 1990s in the United States and European countries but is still relatively new for other developed countries; for instance, it became popular in Japan after the year of 2000. For developing countries, few studies exist. Most of them are in the field of medical science; one on mental illness in Malawi (Chilale, Silungwe, Gondwe, & Masulani-Mwale, 2017), one on mental health in Sudan (Sorketti, Zuraida, & Habil, 2012), one on epilepsy in Ethiopia (Tsigebrhan, Hanlon, Medhin, & Fekadu, 2017), and one on psychiatric problems in Malaysia (Razali & Najib, 2000).

In the education sector, research has applied this concept to three subjects; students (or children and adolescents), parents and teachers. The research has observed the help-seeking behavior of each subject but for different types of problems. Extensive literature exists for students, ranging from ones at elementary school to university. A study targeted at elementary school children examines students having academic difficulty such as in math or reading (Newman, 1990; Newman & Goldin, 1990). A study focused on secondary school students investigates more daily-life problems such as with family, interpersonal relationships, health, education, and the emotional problems (Boldero & Fallon, 1995; Offer, Howard, Schonert, & Ostrov, 1991; Schonert-Reichl & Muller, 1996). For university students, many studies examine students who have

troubles with psychological disturbances and mental health problem in addition to academic problems (e.g. Edward H. Fischer & Turner, 1970; Karabenick, 2004; Li, Dorstyn, & Denson, 2014; Nam et al., 2013).

The literature on parents and teachers are much fewer than ones on students. Studies on parents of school-age children examine those who have a child with intellectual disabilities, those who are either teenage parents or single parents, and those who have abused a child (Douma, Dekker, De Ruiter, Verhulst, & Koot, 2006; Honda, 2015). The research focused on teachers examined distress related their teaching skills, self-confidence, students' problematic behaviors, school administration and policy problems, and lack of spare time (Hsu, 2005; Tamura & Ishikuma, 2001). They report that the distress increased the tendency to reach burnout in the absence of appropriate help-seeking (Tamura & Ishikuma, 2001).

2.2. Help-resources

Persons who face problems may have choices of where they wish to seek help, called a help-resource. How many choices they have, and which resources they choose vary depending on the problem types and also on the person's age. It is known that one who has more choices of help resources is more likely to seek help (e.g. Taylor et al., 2004). Also, when comparing between informal resources such as parents and friends and formal resources such as counselors and experts, people prefer seeking help from informal resources (e.g. Boldero & Fallon, 1995).

For students' academic problems, elementary school students have help-seeking choices from either a classmate, parent, or teacher. Among them, they prefer to seek help from teachers or parents instead of from a classmate (Newman & Goldin, 1990). This preference is contrary to middle school students who show a preference of seeking help from a friend rather than a teacher, and this is more so for the older-ages of middle school (Amemiya & Wang, 2017). When it comes to university students, they again prefer to seek help from teachers rather than friends (Karabenick, 2004).

For emotional problems, secondary school students have more choices from formal resources such as a school psychologist, team coach, or alcohol and drug abuse center.

However, they tend to choose the informal resource rather than the formal one including teachers (Offer et al., 1991; Schonert-Reichl & Muller, 1996). University students come to have more professional resources such as psychologist and psychiatrists, although similar to secondary students, they do not tend to choose the formal place but prefer the closer contacts such as friends and teachers (Wakimoto, 2008).

In the case of teachers, they have resource choices from colleagues, supervisors, principals and, in some cases, a school counselor. A study shows that most of the teachers prefer to seek help from colleagues who are experiencing a similar situation to them (Hsu, 2005). A recent study by Liu (2017) suggests that there is another resource, the online resource, with which junior teachers may search for information on the internet to solve an academic problem, emails teachers to request help and makes an online request to peers or unknown experts for academic help.

In the case of developing countries, it is easily assumed that these formal resources are not as available as in a developed country. Instead, they have options to go to traditional or conventional places. Literature reports that people, especially in rural areas, tend to seek help from traditional places for various problems in daily life. For instance, Razali and Najib (2000) report that in Malaysia some people choose to go to a traditional healer, called 'bomoh,' when they have a mental problem. They explain that this is because the culture holds strong social support, and thus the choice of help resources is heavily influenced by the belief and precedent practices of parents, friends, and relatives (Razali & Najib, 2000). The similar case is also found in Tanzania, (Marsland, 2007), North Malawi (Chilale et al., 2017), South Africa (Nelms & Gorski, 2006), Sudan (Sorketti et al., 2012), and Ethiopia (Tsigebrhan et al., 2017). Informed by the previous literature, the help resources in the context of the education sector in developing countries are listed in Table 1.

Table 1: Help resources in educational sector of developing countries

Help seeker	Help resources
Child	Friend
	Teacher
	Parent
	Traditional place
Adolescent	Friend
	Teacher
	Expert (psychologist, medical center, psychiatrist)
	Traditional place
Teacher	Colleague
	Supervisor
	Principal
	School counselor
	Online
	Traditional place

(Source) Created by the author

2.3. Factors related to help-seeking preference

Whether a person seeks help or not is determined by several factors. Literature which examines the factors is abundant, which warrants a range of literature review and meta-analysis. Srebnik, Cauce, and Baydar (1996) collected literature that examined children and compiles the factors into three group: illness profile, predisposing characteristics (including demographic characteristics and sociocultural values/beliefs), and barriers/facilitators. Mizuno and Ishikuma (1999) review 156 literature on college students in the United States and propose four categories of factors; demographic characteristics, personality factors, network factors, and the severity of the problem. These two analyses overlap in some of the groups and included factors. Using these groups as a reference, the following will review the original literature for more details of each factor.

Evidence has shown that demographic characteristics relate to the decision of whether a person does help-seeking or not. The primary approach to the characteristics includes gender, age, educational level, income level, and ethnicity. Among them, the gender difference has gained the most attention. The literature shows that females hold more positive attitude toward help-seeking than male. This result is most consistent over all ages, regions, and cultures (Barnett et al., 1990; Edward H Fischer & Cohen, 1972; Garland & Zigler, 1994; Kessler, Brown, & Broman, 1981; Nam et al., 2010).

The association of age with the help-seeking decision is somewhat mixed, where the results vary depending on how the age group is divided. Leaf, Bruce, Tischler, and Holzer (1987) examined 4184 adults and found that both age-end groups, the youngest group (18- 24 years old) and the oldest group (above 64 years old), are more likely to hesitate for help-seeking than the middle-aged group. Schonert-Reichl and Muller (1996) examined 221 adolescents aged from 13 to 18 years old for their help-seeking from professionals (teachers, school counselors, coaches, or the principal), and found that the older adolescents show a higher intention of help-seeking than younger age. Tijhuis, Peters, and Foets (1990) examined 10171 Dutch adults ranging from 18 to 97 years old and showed that the group who liked to seek help is nine-years younger in average than ones who do not like to seek help.

In their analysis, the relationship with education and income level was also evident in that groups who like to seek help have a higher educational level and also a higher income than groups who do not like to seek help (Tijhuis et al., 1990). Concerning the ethnicity factors, it is known that persons with an Asian background have a more negative attitude toward help-seeking compared with ones with a European or American background (Ito, Masuda, Komiya, & Hioki, 2015; Sue & Sue, 1974). The preference of help-resource also differs between them. For instance, when comparing between Asian students and European students, Asian students preferred help-resources of the same ethnicity and older counselor (Tedeschi & Willis, 1993), and friends rather than teachers (Mau & Jepsen, 1990).

In addition to these demographic factors, Srebnik et al. (1996) distinguish sociocultural values and beliefs as predisposing factors. They explain that the sociocultural values of a person and family affect the perception and definition of the problem, and thus affect the method of coping – which is whether or not to obtain help and from who. The study shows that Chinese-Americans who accept more their American culture are more likely to seek help than ones who do not accept it (Atkinson & Gim, 1989; Tata & Leong, 1994). It demonstrates that the help-seeking decision varies depending on the acceptance level of sociocultural values. In the context of developing countries, this factor seems more crucial in terms of from whom they seek help. Razali

and Najib (2000) report that people in Malaysia direct themselves to traditional healers because they and their family believe the mental illness has a supernatural cause. They observed that the traditional belief of strong social support is the primary factor in determining the help-seeking action. Chilale et al. (2017) similarly explain that people in northern Malawi choose to consult traditional healers because many of them believe that mental illness is attributed to socio-cultural factors related to witchcraft, spirit possession, or curses.

There is also evidence for personality factors and the severity of one's problem having an impact on the help-seeking attitude. Nam et al. (2013) conduct a meta-analysis of these factors by taking 7,397 college students from 19 studies. They report that out of nine factors, three factors including self-stigma, anticipated benefits, and self-disclosure are related to the presence of help-seeking action, whereas the other six including anticipated risks, depression, distress, self-concealment, social support and public stigma is not statistically related to the help-seeking. Similarly, the analysis of Liu (2017) reviewed 18 studies with 6,839 college students and examined another nine factors. They found that two variables, one's attitude toward seeking professional psychological help and the anticipated utility, are strongly associated with the help-seeking intention.

The last group includes factors related to one's network. Social support is one network from where one can obtain interactive help in society or from family, friends, community, professionals or colleagues. It is known that a person who seeks help has a lower level of social support. Goodman, Sewell, and Jampol (1984) examined two groups of students, one who had received counseling and the other that had not. He found that the former group has a lower level of social support than the latter group. A study by Phillips and Murrell (1994) also show that older adults who do not have so much social support are more likely to seek help from external sources such as a doctor, mental health centers, and priests. The previous experience of receiving help is another factor that can be included in the network factor group. The study proves that a person who experienced or had contact with professional help show a higher intention toward help-seeking help than ones who did not have any contact (Halgin, Weaver, Edell, &

Spencer, 1987; Surgenor, 1985). Tijhuis et al. (1990), similarly, show that persons who know someone at a mental health service are more likely to show positive intention to make the help-seeking action.

Juxtaposing the four meta-analyses and two studies which illuminate the unique features for developing counties, Table 2 summarizes the groups and factors related to help-seeking.

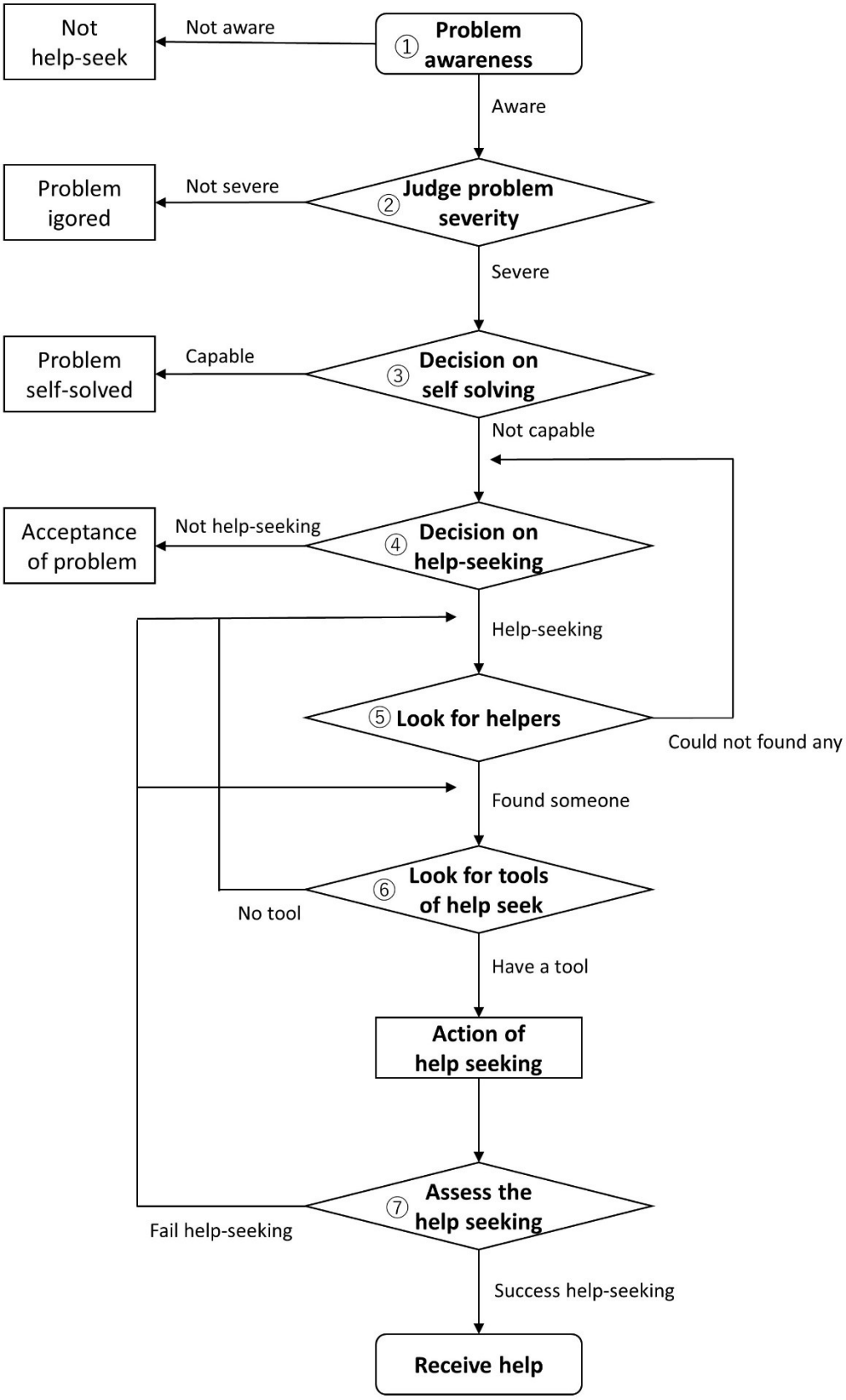
Table 2: Factors related to help-seeking

	Srebnik, et al. (1996)	Mizuno & Ishiguma (1999)	Nam, et al. (2013)	Li, et al. (2014)	Razali & Najib (2000) Chilale, et al. (2017)
Demographic characteristics	Gender	Gender			
	Age	Age			
	Income	Income			
		Education level			
	Family characteristics				
	Ethnicity	Cultural background			
(Sociocultural characteristics)	Value/attitude/knowledge concerning problem				Perception about problem causality
	Ethnic identify			Adherence to Asian values	Traditional/cultural belief
	Religion				
Personality	Open to outsiders	Self-esteem			
			Self-concealment	Self-concealment	
		Self-disclosure	Self-disclosure	Self-disclosure	
			Public stigma	Public stigma	
			Self-stigma		
			Anticipated benefits	Anticipated utility	
			Anticipated Risks	Anticipated risk	
		Attribution style			
	Attitudes toward use of service			Attitude toward help-seeking to professionals	
Severity level of problem	Assessment of need	Problem's severity			
	Perceived need				
(Illness profile)			Depression		
			Psychological distress	Psychological distress	
Network	Network strength				
(Barrier/facilitator)		Social support	Social support	Social support	
	Knowledge about and use of service				
		Previous aid experience			

(Source) Created by the author

While many scholars have identified influential factors, some scholars explain that these factors are related to the help-seeking decision in multiple and stepwise manners. They propose a step-by-step path that a person would take for the decision to seek help. Scholars have developed a three-stage model which consists of (1) problem recognition, (2) decision to seek help, and (3) support and service utilization (Andersen & Newman, 1973; Goldsmith, Jackson, & Hough, 1988; Srebnik et al., 1996). On the other hand, Takagi (1998) suggests a more segmented seven-stage model which includes (1) problem recognition (if problem is not recognized, the help-seeking does not occur), (2) judgement of problem severity (if problem is not severe, the help seeking does not occur), (3) judgement of self-solving (if the problem can be self-solved, the help-seeking does not occur) , (4) decision of intention for help-seeking (judgement based on the benefit and cost brought by help-seeking / non-help-seeking), (5) look for potential helpers, (6) consider method of help-seeking, and (7) evaluate the help-seeking (judgement about how they helper accepts the help-seeking) (Figure 4). These models can explain why some people can seek help and why some cannot seek help.

Figure 4: Takagi's model of help-seeking process



(Source) Created by the author based on Takagi (1998)

2.4. Summary

This chapter has sought to understand the basis of the help-seeking occurrence by reviewing the previous literature. It serves as a conceptual framework for the following empirical observation by providing the fundamental aspects and approaches in applying the concept of help-seeking.

Section 2.1 reviewed the literature of help-seeking with a focus on the educational sector. It showed that the concept had been applied mainly to three subjects in the educational sector: students, parents, and teachers. Also, it had been adequately used to explain their help-seeking behavior for the various types of problems spanning such concerns as academic difficulty, psychological disturbance, distress about teaching, and self-confidence.

Section 2.2 reviewed the choices for help-resources that each subject possibly has. The literature showed that students have choices of a friend, teacher, parent, or expert (psychologist, medical center, psychiatrist). Teachers have colleagues, supervisors, the principal, and in some case, school counselors and online support. In addition, it suggested that people in developing countries may have traditional places, such as a traditional healer as a choice for a help-resource.

In section 2.3, literature in the broader field was reviewed to understand the factors related to the help-seeking decision and also the process of help-seeking. It found various kinds of factors and was able to be grouped into four main areas: namely demographic characteristics, personality, the severity level of the problem, and networks. It also informed that the process of help-seeking consists of several steps which convey persons to make an intentional or unintentional judgment about help-seeking. The steps include problem recognition, judgment of problem severity, judgment of self-solving, and the decision of intention for help-seeking.

This chapter introduced the help-seeking concept and laid a basic foundation for the following empirical study. However, the knowledge obtained in this chapter is mostly drawn by the cases of developed countries. Also, no application was found in the context of the educational sector in developing countries. Thus, the framework suggested in this chapter still contains various uncertainties such as the improbable

help-resource choices and with too many factors to observe, that seem inappropriate to apply in the context of the developing countries promptly. For this reason, this study merits the two-phase approach which uses both qualitative and quantitative methods.

CHAPTER III – Qualitative Observation

The previous chapter presented the foundation for the help-seeking concept by reviewing the previous literature, which also included some uncertainties that do not immediately fit in this study context. It showed that the help-resources available to teachers are colleagues, supervisors, principals, school counselors, online aids, and traditional places (healers). However, it is doubted whether teachers in developing countries have the choices of online resources or school counselor resources in the situation where the internet network is still scarce, and many schools have very basic human resources support. Moreover, the previous literature suggested more than twenty factors that relate to help-seeking preference. However, some of them are plausibly not related to the grassroots people's help-seeking in developing countries.

Therefore, this chapter and next chapter empirically investigates the specific resources and factors contextualized in the educational sector in developing countries by using the case study of teachers in Mozambique. As a preliminary examination, this chapter employe the qualitative approach with in-depth interview data. The guiding question for the two chapters is "What are the help-resource and factors related to teacher's help-seeking in Mozambique?"

Section 3.1 explains the methodological issues relating to the observation. It first explains the method of qualitative research, and then presents the tool of a semi-structured interview, the details of sample data including the selection process, characteristics and validity, and the analysis method.

Section 3.2 shows the findings from the interview data by ten teachers. The findings are structured by factor groups rather than by teachers. It is done to illuminate the factors identified from the analysis. Consequently, some of the interview data and the analysis process are omitted, which may bring some concerns about the reliability of the interpretation. To minimize these concerns, this part uses quotes wherever possible to let them speak for themselves.

Based on the findings, section 3.3 will rebuild the conceptual framework with a

narrower focus and bring it into alignment with the quantitative research.

3.1. Methodology

Qualitative analysis is a method which enables the researcher to observe a social phenomenon and comprehend an individual's experience in connection with the broader societal dynamics (Rubin & Rubin, 2005). The previous chapter informed that one's help-seeking behavior is heavily associated with the sociocultural environment. Thus, this approach is best suited for an accurate understanding of the individual's help-seeking behavior.

The data collection in qualitative approach can take several methods including interview, survey, contents analysis, participant observation, and focus group (Jones et al., 2016). This study uses the interview using a semi-structured protocol. It is because the interview method enables us to obtain more breadth and depth of data by reaching a pluralism of perspectives of respondents' personal experiences and preference (Weiss, 1994). The semi-structured protocol allows a flexible approach in which the interviewer sets up a general structure of central questions and leaves the detailed structure open during the interview (Drever, 1995). So that, the interviewee can have a fair degree of freedom in what to talk about, how much to say, and how to express it. As the preliminary phase of the investigation, this technique is suited to capture a broader range of idea.

For the semi-structured interview, ten guiding questions were prepared based on the knowledge informed by the previous literature. They are:

(1) Have you ever been involved in or received external aid for a project or program?
(2) What was the project or program?
(3) How did you get involved in the project or the program? What was your position?
(4) Do you have any foreign friends?
(5) Do you have any problems that you face at school now?

(6) Do you seek out someone to help with the problems?

(7) If so, to who?

(8) Why do (or not) you seek help from the place/person?

(9) What do you think about foreign aid? (Good image or bad image?)

(10) Do you think there is a difference if the project or program was provided by the government?

The questions capture the four dimensions that the previous chapter identified, although they were asked in a different order than above due to the answer-friendly consideration. They were ordered as follows: the questions from first to fourth capture the network characteristics; the fifth question captures the severity of problems; the sixth question captures the help-seeking preference; the seventh question captures the help-resource preference; and questions from eighth to tenth capture the personality and sociocultural value. The list of questions is presented in Appendix 1.

Data collection

The fieldwork took place for ten days between 21 February and 3 March 2017 and collected ten teachers' data.

Ten teachers were selected based on the purposeful sampling strategy, more specifically with using the stratified sampling technique. The purposeful sampling is a commonly used strategy to identify information-rich cases for the most efficient use of limited resources (Patton, 2002). In the fieldwork, a researcher, using existing social ties, was able to identify several candidates who met the criteria as an informant as Bernard (2002) and Spradley (1979) indicate. They were knowledgeable about or experienced with help-seeking, had availability and willingness to participate in the interview, and also the ability to communicate experiences and opinions in an articulate, expressive, and reflective manner. Among the candidates, ten teachers were selected through the stratified sampling technique. The technique is aimed to achieve the maximum variation, but more to capture significant variations rather than to identify one shared patterns across cases. In the current study, the requirements for the sample

variation are stratified in order first by the experience or knowledge about foreign aid, age, gender, and teacher's school level. Table 3 shows the list of interviewees.

Seven teachers out of ten have experience in or knowledge about foreign aid with variations in donor country including Japan, the United States, Denmark, Germany, and Finland. The gender ratio leans towards males with eight males versus two females. The ages of teachers range from the 20s to 50s, with the majority in their 30s. The variation of school level is well-balanced, including primary, secondary, and higher education. Overall, the sample has a satisfactory range of variations in the experience of foreign aid and demographic characteristics, which can achieve a certain degree of representativeness.

Before the interview, every respondent signed a statement of informed consent that detailed arrangements of confidentiality in particular. The interview was conducted using both Portuguese and English. Respondents were interviewed in physically comfortable environments like classrooms, staff rooms, or a café. For most of the cases, the interview was audio-recorded for content verification upon the respondent's consent, but in a few cases where researcher thought it would be instructive, it was recorded by writing notes. In all cases, the researcher wrote extensive field-notes about people, events, and activities.

Table 3: List of interviewed teachers

ID	Sex	Age	School level	Teaching Subject	Knowledge about foreign aid	
Teacher A	Male	20s	Secondary	Science	Yes	Participated in teacher training organized by JICA (Japan)
Teacher B	Female	30s	Secondary	English	No	--
Teacher C	Male	50s	Secondary	Math Science	No	--
Teacher D	Male	40s	Primary	All subject	Yes	Involved in a woman empowerment project funded by USAID (US) as a staff.
Teacher E	Male	50s	Secondary	English	Yes	Involved in teacher training project organized by DANIDA (Denmark) as a staff
Teacher F	Male	30s	Primary	All subject	No	(His school was built by JICA)
Teacher G	Male	30s	Secondary	English	Yes	Participated in teacher training organized by GIZ (Germany)
Teacher H	Male	30s	University	Math	Yes	Participated in research training organized by Finland
Teacher I	Female	30s	University	Science	Yes	Involved in research project with GIZ
Teacher J	Male	50s	University	Science	Yes	Involved in research project with GIZ

Analysis method

The computer software program NVivo 10 aided the data management and analysis. The data were transferred into the software, clarified, and transcribed in English. Real names of respondents were changed into pseudonyms to assure anonymity and confidentiality of the data. The analysis was mostly descriptive using coding methods and highlighting the words which seemed to be crucial and also that emerged frequently. The goal of this study is not to define the typical or representative process and factors to generalize them, instead to identify possible resources and factors to suggest the following statistical analysis. Thus, the descriptive analysis is sufficient to serve its role. The empirical observations in this and the following chapters will also serve as supplemental evidence to explain some of the phenomena of help-seeking. Thus, it is used to establish the meaning of the phenomenon and its various aspects from the views of respondents through a three-stage process of description, analysis,

and interpretation.

3.2. Findings

From the interview data, some specific features of help-seeking appear, which are unique to the current case context of the education sector in developing countries. This section presents these features in the following order: help-seeking preference and the help-resource, the factors of the perceived problem, the factor of personality and sociocultural values, the factor of network characteristics and the factor of demographic characteristics.

Help-seeking preference and help-resource

The data showed that most of the teachers in the sample face some problems in school life, but their reaction to help-seeking vary. While many teachers showed a positive intention to seek help from someone, some teachers showed a negative intention. Roughly speaking, although details varied depending on the problem, the former includes seven teachers, and the latter includes three teachers including the teacher C, teacher B, and teacher E. Particularly the teacher C was extreme. He mentioned that “even I face a problem, I will not request help. If I do so, I lose my self-confidence.”

Among those who show positive intention for help-seeking, there were different help-resource preferences. Overall interview data found that they have three resources: colleagues, the teacher training organized by the government, and teacher training organized by a foreign country. Many teachers considered that when they have a problem, they seek help from colleagues. Particularly for the problems of students learning and behavior, they often consult with them and solve the problem by themselves. However, for more pedagogical problems such as introducing a new textbook and new curriculum, some teachers indicated a preference to take a formal teacher training. The teacher G is the one who prefers to receive teacher training from the government. He mentioned the preference by comparing with to foreign one:

(Teacher G) “If we have a problem, our government should take care of us. If we think there is aid from a foreign country, we take it for granted, and the government becomes lazy. … We have to appeal to government more.”

From his talk, it is known that he prefers help from the government while having a feeling of distrust regarding their political corruption and inefficiency. Although he believes seeking help from a foreigner is a “shame” and sometimes lose their “dignity,” and thus prefers the government training. The data also found some prefer to seek help from a foreigner. Teacher A stated that:

(Teacher A) “For regular problems such as students chatting too much, or their scores are bad, I would go to colleagues. In my school, there are many senior teachers. But for the pedagogical skill, I would go to a foreign country’s training.”

The interview data showed that the help-seeking preferences have both cases in which either they do or do not seek help, and it depends on the kinds of problems. Moreover, the help-resources for this case context are colleagues, teacher training organized by the government, and teacher training organized by a foreign country. While the review of the previous literature suggested six resources including a colleague, supervisor, principal, school counselor, online source, and or traditional place, this analysis narrows it down to three resources.

Factors of perceived problems

The interview data showed that the level of problems perceived by teachers relates to the help-seeking decision. It indicated that the teachers who recognize their problems show positive intentions to seek help, whereas teachers who do not recognize the problem as significant do not show help-seeking intentions. Teacher B, who is not positive for seeking help, mentioned that “if the foreign people give us help, people should receive it. But I do not think I need it for me.” Teacher E made a similar

comment that “assistance like teacher training is for the person who really needs it.”

The perceived level of problems affects the help-seeking decision, but it also seems to depend on the kinds of problem. In the interview, many teachers raised the issue about lacking teaching materials. It seems that they feel the frustration of not being able to explain the textbook contents as appropriate as they wish. They notably commented lack of textbooks for students and supplemental teaching instrument. Teacher C mentioned:

(Teacher C) “My class does not have good teaching instruments. If I want to teach about the human body or organs inside the body, I do not have the model. My colleague, the music teacher, also has the same problem. They do not have music instrument. We need more teaching instruments.”

Similarly, they also think the school facilities are inadequate or not well-maintained. They described that “classrooms are not enough” and “the roof is broken by the last heavy rain.” The quality of school facilities varies among public schools; thus unequal school conditions are obvious for teachers. The teacher who worked at the well-maintenance school mentioned that:

(Teacher F) “My school was fortunately built by JICA, so there are hand washing facilities and corridor with a roof, and it is a very clean and good school. I think teachers want to work at a school like mine. Parents also want to send their children to a clean school. I want to send all my children to a clean school.”

Most teachers acknowledge that their school has problems in teaching materials and facilities, although all the teachers answered that they virtually did not seek help for these problems. They mentioned that these problems are not their problem but are the school’s or school head’s problem.

The problems for which the teachers showed the intention of help-seeking were the

ones about pedagogical issues. Teacher A mentioned “there is a way to use the blackboard more effectively. I want to use the blackboard well.” He knows that, from previous experience, there is a technique to use the blackboard better, so that he was eager to learn that from an external expert. Another problem was concerning the teachers’ motivation. Teacher G implied that many teachers have low motivation for teaching due to the long working hours, and seemingly are looking for some stimulation to learning new knowledge and skills. He described that:

(Teacher G) “We have to teach 24 hours a week, and we are allowed an extra 15 hours as overtime work at another school. Many teachers work 15 hours of overtime, and I also work so. We are very busy and tired. We do not have time to do new things.”

Overall, the analysis confirmed that the perceived problem is a strong candidate for the factors affecting the help-seeking decision. As the previous literature suggested (Chilale et al., 2017; Liu, 2017; Nam et al., 2013; Razali & Najib, 2000), the influence is depending on the level of perceiving and how they perceived the problems. The data of this study especially showed that the problems of the pedagogical issue and motivational issue are the ones that plausibly affect the decision of teachers in Mozambique.

Factors of personality and sociocultural values/beliefs

The previous literature has shown many factors are included in this group. The analysis can identify four plausible factors that explain the teacher’s behavior toward help-seeking. The first one is self-esteem. As mentioned before, teacher C, who showed some refusal toward help-seeking, commented that “I believe that we should solve our problems by ourselves. If we depend on foreign people, we lose ourselves and lose our self-respect.” His comment implies a strong feeling of independence and high self-esteem that makes him oppose asking help from others. Corresponding to the literature of Mizuno and Ishikuma (1999), it is confirmed that a person who has higher self-

esteem shows less intention for help-seeking from others in the current context.

The second factor is similar to the stigma but includes a slightly different meaning. The association is mainly found in relation to seeking help from a foreign country. The previous literature on help-seeking used the stigma as discrimination or prejudice which causes dishonor or humiliation from receiving help (e.g. Nam et al., 2013). However, in the current context, teachers feel receiving aid as related to privilege that creates jealousy or hostility from other people who did not have the opportunity to receive aid. Teacher A described receiving foreign aid as "I receive (it) as a representative of the school, as a representative of Mozambique." The analysis found that this kind of stigma determines some of the teacher's help-seeking behavior. Teacher I showed concern about how other people think about her receiving foreign aid. She mentioned that she would hesitate to seek help from foreign help publicly. She stated that:

(Teacher I) "If I receive foreign aid, there is jealousy from my neighbors. In the past, my furniture was stolen from my house. I do not want to say I am involved in foreign aid so much."

Consequently, the teacher who worries about retribution caused by receiving aid would refrain from seeking help.

The third factor is the expected benefit from receiving aid. The data found a pattern that the teacher who has a high expectation of benefits obtained by the help tended to show a positive intention toward help-seeking, and a teacher who has a low expectation tends to show a contrary intention. Teacher H showed the definite preference to seek help from foreign training and described that the training by a foreign country gives him "new things, new information, and a new way of thinking." On the contrary, teacher B does not see any utility obtained by participating in the training. Thus he does not want to seek help from a foreigner. He mentioned:

(Teacher B) "My friends went to training by foreigners, but they were the things that

we already know. They do not know what we need, I think."

Similarly, teacher J mentioned, "we do not have the instrument that they use at the training. If we do not have the instrument in my school, there is no meaning," and expressed no interest in seeking help from foreign training. This finding confirmed the previous knowledge (e.g. Liu, 2017), where there is a strong association between the expected benefit and help-seeking preference.

The last factor is not entirely convincing but possibly identifies the image of help. In the interview, a question was asked about the image of help assuming that the reputation (or good-bad image) of the helper, the government, and the foreign country, may affect the help-seeking decision. However, this image seemed not to be associated with the teacher's help-seeking decision. The data showed that almost all teachers have a bad image of government help and a good image of foreign help. However, they mentioned for both that receiving the training is an "opportunity," "good for the community," and "appreciated." When it comes to help-seeking, some teachers expressed "no need," "not their business," and "it sometimes becomes bad."

However, the help image in term of its nature seems to associate with the decision of help-seeking. It is particularly the case for the help of foreign country. In the analysis, some teachers conceive the foreign help as a thing that the foreign country asks and offers them instead as a thing that they need to request. Thus, they showed no seeking intention or even no need of help-seeking action to the foreign help. Teacher I said:

(Teacher I) "I personally will not request any (help from a foreign country). If some country says they want to work with us, then I can probably accept and work together."

Similarly, teacher J explained that "I often get a request from foreign aid donors as I got from Germany. That is why I work together," and showed the passive stance for the help.

This factor of help image was not precisely identified in the previous literature. It

implied that people conceive of help differently between the developed and developing the countries. Consequently, this may result in a unique process of help-seeking in the developing country.

Factors of network characteristics

The association between network factors and help-seeking preference is particularly evident for the resource of foreign help. The most likely factor was an English-speaking skill. While many teachers in Mozambique do not speak English, teachers who can speak English were willing to receive foreign help. On the contrary, teachers who do not speak English seem uncomfortable for requesting help from foreigners. Teacher F explained the reason why he does not seek help from foreign experts as "I do not speak so much English. So, I do not think I can go to the training by a foreign country." (Note that most teacher training held locally were conducted in Portuguese.) This network tool of English-speaking skills works as a promoting factor for seeking help from foreign places.

The second factor is the previous experience of foreign training. The teachers who had participated in the teacher training before showed a strong motivation for seeking help. They mentioned that they "for sure request the help if there is a chance," and they "definitely want to join."

Another factor is the acquaintance of foreign people. The teachers who have been involved in a foreign aid project showed an intention for help-seeking. Teacher E was involved in an aid project from USAid when he was a university student, and since then has been connected with some of the American friends. He showed a willingness to participate in teacher training, thus requesting assistance if there is an opportunity.

Among the network factors, the English-speaking skill is a unique factor observed in this study context. It is entirely comprehensible that in the case of Mozambique, English becomes a key to seeking help from foreigners. It may correlate with another factor, such as educational level of demographic characteristics, which will be discussed later. It deserves careful consideration for further analysis. Two other factors, the previous experience and the acquaintance of foreign friends corresponds with the previous

studies (e.g. Halgin et al., 1987; Tijhuis et al., 1990). However, this was the case for foreign resources, and may not be applicable to help-seeking from a colleague and the government. Thus, a special technique may be needed for further analysis.

Factors of demographic characteristics

Finally, the sample of this study gives some explanations, although slight, about the different behavior in help-seeking by demographic characteristics. The interview data indicate that the help-seeking decision may vary by gender. One case of teacher B shows that female teachers hesitate to request the help from a foreign country. She said that:

(Teacher B) "Teacher training in a foreign country takes one or two months, right? I cannot leave the house so long. I have a husband and child."

For teacher B, the training in the foreign country is physically unavailable. Thus she does not request such as help. This finding may imply that a female is less likely to seek help, which contradicts the previous knowledge (e.g. Nam et al., 2010). However, the finding here only accounts for the foreign resource, thus it requires close examination in the following analysis.

The interview data also shows indistinctly that the factors of age and teaching subject may relate to the help-seeking preference. Teacher A explained the reason why he requested help from teacher training by the foreign government as:

(Teacher A) "I heard that young teachers are selected for those foreign aid training. Actually, the last time I was the youngest of the applicants. Also, the subject matters. Many pieces of training are for either science or math."

The hypothesis that younger people are more likely to request help than older people is consistent with Tijhuis et al. (1990). Whereas, the one that a science teacher is more likely to seek help than liberal arts teacher is newly derived in this study context. It may

relate to helping contents that the help provider prepares for teachers. In other words, if the help providers mean to provide the help specifically for a science teacher, this hypothesis would hold.

One-way or another, the association of demographic characteristics with help-seeking behavior is still questionable, thus needs further analysis.

3.3. Summary

This section investigates the help-resources and factors that are particularly relevant to the case study of teachers in Mozambique. It first explains the details of the qualitative research including the data collection process, the description of the sample, and data analysis. The findings show the Mozambican teachers' unique help-seeking behavior by suggesting that they have three help-resources and that their decisions about help-seeking are influenced mainly by four-factors. The findings of this section serve as a preliminary framework to develop the measurement instrument.

The analysis found that there are various help-seeking behaviors by teachers in Mozambique. It showed that some teachers prefer seeking help, and some not at all. It also shows that some teachers prefer seeking help from colleagues, while some seek help at teacher training organized by the government, and others prefer seeking help at teacher training organized by foreign countries. Their behavior also changed depending on the problems: sometimes seeking help from colleagues, and sometimes seeking help from the government. The finding of the help-seeking resources can be summarized and outlined as below.

HR1: No one

HR2: Colleague

HR3: Teacher training from the government

HR4: Teacher training from a foreign country

Regarding the related factors, the analysis found four-factor groups. The first group is the teacher's perceived problems. It included the pedagogical problem and

motivational problem. They can be summarized as:

H1: Teachers' perceived problem is related to their help-seeking preference

H1-1: Teachers who perceive pedagogical problem seriously are more likely to seek help than those who do not

H1-2: Teachers who perceive motivational problem seriously are more likely to seek help than those who do not

The second-factor group is related to the teacher's personality. It showed four factors including self-esteem, public stigma, the expected benefit of help, and image help. The findings can be summarized as below.

H2: Personal characteristics are related to seeking help

H2-1: Teachers who have high self-esteem are more likely to seek help than those who have low self-esteem

H2-2: Teachers who perceive a low public stigma are more likely to seek help than those who perceive a high public stigma

H2-3: Teachers who have a high level of expected benefit from help are more likely to seek help than those who have a low level of expected benefits

H2-4: Teachers who believe that help is a gift are more likely to seek help

It is noted that the findings of the personality groups contain some uncertainties with overlapping factor elements that may not be distinguished from each other. Particularly the image of help aid holds some elements to be interpreted as public stigma or the expected benefit.

The third group of factors is the network factors. It included English speaking ability, the previous experience of aid, and knowing someone in foreign aid. They are summarized below:

H3: Network factors are related to help-seeking preferences

H3-1: Teachers who speak English are more likely to seek help

H3-2: Teachers who have previous experience of receiving aid are more likely to seek help than those who do not

H3-3: Teachers who know someone in foreign aid projects are more likely to seek help than those who do not

Finally, the analysis showed that some demographic factors might relate to the teacher's help-seeking preference. It suggested the factors of gender, age, and teaching subject. They can be outlined as below.

H4: Demographic factors are related to the help-seeking preference

H4-1: Male teachers are more likely to seek help than female teachers

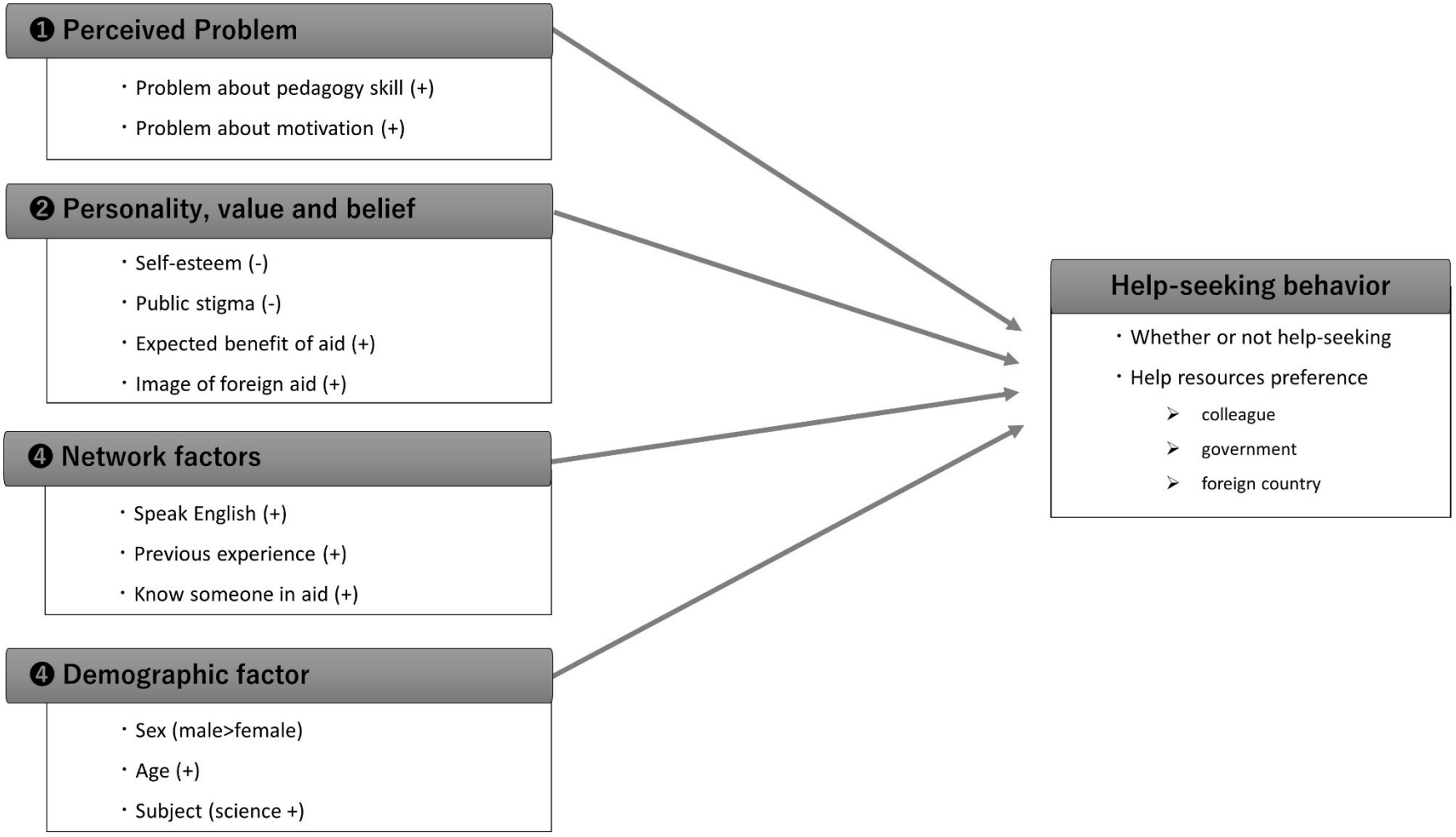
H4-2: Younger teachers are more likely to seek help than older teachers

H4-3: Teachers who teach science courses are more likely to help seek than those who teach liberal arts

However, these associations seem very ambiguous. The sample size was very small, and it seemed greatly depending on the problem contents or the help provider. Therefore, it can be assumed that the above hypothesis has a high possibility to be rejected in the next analysis. The findings of this chapter are summarized in the diagram of Figure 5

.

Figure 5: Conceptual framework of teachers' help-seeking in Mozambique



CHAPTER IV – Quantitative Observation

After having delineated the preliminary framework of help-seeking by teachers in Mozambique, this chapter conducts two examinations by using quantitative data. First, it examines the validity of the framework. The framework suggested by the previous chapter had some issues, where the help-seeking preference may vary depending on problem types, the personality factors may be categorized as different factor names, and the influence of demographic factors was not accurately captured. Therefore, the former part of this chapter uses collected quantitative data and defines a more accurate framework that is suitable for examining the teachers in Mozambique. This finding serves as a measurement instrument or analytical framework for the next examination. Then, the latter part of this chapter administers the instrument to the same sample and identifies specific factors related to the Mozambican teachers' help-seeking preference that vary by the help-resources.

Section 4.1 will consider the methodological issues. It first constructs a questionnaire informed by the previous findings and literature. Then, it explains the process of data collection, descriptive summary, and analysis method.

Section 4.2 will first demonstrate the descriptive summary of responses of help-seeking preference and four-factor groups: demographic characteristics, perceived problem, personality, and network. The demographic characteristics will be presented first because it serves to present the sample characteristics. Then, for two-factor groups, the perceived problem and the personality, the responses are examined and constructed into new variables by using the principal component analysis.

Section 4.3 will test the mean score difference of the refined variables between two groups which have different help-seeking preferences. These results explain the reasons why some teachers seek help, and some do not. Lastly, section 4.4 will summarize this chapter.

4.1. Methodology

Quantitative analysis is a method to test a theory by specifying a narrow hypothesis with the collection of data to support or refute the hypothesis (Creswell, 2014). It is used with the intent of generalizing from a sample to a population (Fowler, 2013). This method is suitable because the aim of this chapter is to test the hypothesis established in the previous chapter and connect to the discussion regarding the general help-seeking process in Mozambique. The quantitative research can take two designs, the survey research and the experimental research. This study will take the survey research using a questionnaire mainly due to the feasibility of data collection.

The questionnaire

A questionnaire was constructed based on the framework suggested, exploring appropriate questions for help-seeking preferences and the four-factor groups: perceived problem, personality characteristics, network characteristics and demographic characteristics. The idea for most questions emanated from the quotes during the interview, and some were informed by the previous literature.

The variables about help-seeking preference were the primary interest of this study. The knowledge from the previous chapter indicated that the preference varies depending on the problem types. Thus, the questionnaire prepared twelve virtual problems, which seemingly teachers face at school. It further asked for each problem about whether teachers want to seek help or not and also from whom they want to seek help. The questions are asked in the form of: 'If I (have a problem), I would go to a:' Then, four answer choices were given: 'No one,' 'Colleague,' 'Training from the government,' and 'Training from foreigners.'

The twelve questions are:

(1) If I feel some of my students are not learning well, I would go to

(2) If I want to improve my teaching skill, I would go to

(3) If I feel I am not explaining the textbook's contents well, I would go to

(4) If I want to learn how to use a blackboard effectively, I would go to

(5) If I face difficulty keeping my class quiet, I would go to

(6) If I lose confidence in my teaching, I would go to

(7) If I have difficulty encouraging an underachiever, I would go to

(8) If I feel stress about my teaching, I would go to

(9) If I feel helpless to my students, I would go to

(10) If I lost my motivation for teaching, I would go to

(11) If I want my student to be more active in my class, I would go to

(12) If I lost my confidence as a teacher, I would go to

Of the demographic characteristics, five factors are measured by the following forms: Gender is captured as a dichotomous variable for 'male' coded as 0 and for 'female' coded as 1. The age variable is captured by five values grouped by age range. They are coded as 0 for ages from '18 to 24' years old, coded as 1 for ages from '25 to 34' years old, coded as 2 for ages from '35 to 44' years old, coded as 3 for ages from '45 to 64' years old, and coded as 4 for ages 'over 65' years old. The variable of teaching subject is captured by three values for 'liberal arts' with code 0, 'science' with code 1, and 'other' with code 2. The choice of 'other' is given mainly for teachers at primary school who do not have a specific subject for teaching. The variable for education level is grouped by four levels; 'primary' with code 0, 'secondary' with code 1, 'IMAP/IFP' with code 2, and 'university' with code 3. Finally, the home province is also asked for the comprehensive examination of demographic characteristics. The answer choices were given as 'Maputo,' 'Gaza,' 'Inhambane,' 'Manica,' 'Nampula,' 'Niassa,' 'Sofala,' 'Tete,' 'Zambezia,' and 'Cabo Delgado.' The administrative classification shows eleven local legislatures including Maputo municipality as a special legislative area, although the Maputo municipality is located geographically in the Maputo province, thus these two locations are combined as one.

Questions for the perceived problem are the same twelve questions as the ones used for the help-seeking preferences. The questions are thus:

(1) Some of my students are not learning well

(2) I want to improve my teaching skill

(3) Sometimes I cannot explain the textbook's contents well

(4) I want to learn how to use a blackboard more effectively

(5) I face difficulty keeping my class quiet

(6) Sometimes I lose confidence in my teaching

(7) I have difficulty encouraging an underachievers

(8) I feel stress when I am teaching

(9) Sometimes I feel helpless to my students

(10) Sometimes I lost my motivation for teaching

(11) I want my student to be more active in my class

(12) Sometimes I lost my confidence as a teacher

For these questions, five answer choices are given with the Likert scale ranging from 1 for 'Totally disagree,' 2 for 'Disagree,' 3 for 'Not sure,' 4 for 'Agree,' and 5 for 'Totally agree.'

For the network characteristics, following questions captures four variables: One is about the skill of English language in a sentence of 'Do you speak English?' The teachers are given four choices of 'No at all,' 'Very little,' 'Yes, some,' and 'Fluently.' The number of foreign friends is captured by a question of 'How many friends who are from a foreign country, do you have?' The questionnaire allowed teachers to write any number. But later in the data cleaning, they were grouped into four categories of '0', '1-4', '5-9', and '10.' The connection to foreign aid project is also asked by two questions: 'Do you know anyone who is working in a foreign country's project?' and 'Have you ever participated in teacher training which was hosted by a foreign country?' Both questions give the answer choices of 'Yes' and 'No.'

Regarding the personality factor group, the previous knowledge implied that they are overlapping or are interrelated particularly in between sociocultural values and image help. Here listed are an extensive range of plausible questions which relate to one's personality, and later re-creates the factors by using the statistical technique of principal component analysis. This technique aggregates some answers that have a

similar pattern and thus can find a more suited factor that represents the answers included. A more detailed explanation of this technique is presented at the end of this section. The questions included are:

(1) Generally, support for teachers is not enough
(2) We need more opportunity to get training for my teaching
(3) I recommend for my colleagues to taking a teacher training
(4) In the near future, I want to have advice about my teaching
(5) I think I can solve most of my problems by myself
(6) When I have a problem at school, I would welcome professional advice
(7) I prefer solving my problems by myself
(8) I seek help only after I try by myself first
(9) I admire a person who can cope with problems without resorting to seek help
(10) A person should work out his own problem and get help is a last resort
(11) Teacher training helps me to improve my teaching
(12) I don't think teacher training will help me so much
(13) I like learning English because I can communicate with foreign people
(14) I want to know things that I don't know yet
(15) I feel confident after I join training by foreign experts
(16) Training hosted by government is better than one by a foreign country
(17) The government officers know what I need to improve my teaching
(18) The government should be responsible for supporting teachers
(19) I prefer getting support from my government rather than a foreign country
(20) I feel confident after I join training by government
(21) A teacher who receives training from a foreign country improves his teaching
(22) Foreign experts give me good skills to solve my problems
(23) If a foreign expert offers me training, even though I do not have problem, I would accept it
(24) Information from foreign country is better than my government
(25) Support from a foreign country is generally good

(26) I feel uneasy asking help from foreign people because of what other people would think

(27) Receiving a foreigner's help is a shame on a person's life

(28) If I receive a foreigner's help, other people might be jealous of me

(29) Participating in training by a foreign expert is an honorable thing

(30) The government always supports my teaching problems

(31) Generally, I talk about personal problems with other people

(32) For any problem, I tend to hide the fact that I have a problem

(33) I would like to get attention if I face difficulties in my life

(34) I usually do not like talking about my problems with other people

(35) It is difficult to talk about myself especially with foreign people

The respondents are given five answer choices with the Likert scale: 1 for 'Totally disagree,' 2 for 'Disagree,' 3 for 'Not sure,' 4 for 'Agree,' and 5 for 'Totally agree.'

By combing the five-factor parts, the questionnaire comes to consist of sixty-seven questions. Five parts have then changed the order for response-friendly purpose as demographic characteristics (5 questions), perceived problems (12 questions with Likert scale), help-seeking preference (12 questions), network characteristics (4 questions) and personal characteristics (35 questions with Likert scale). Table 4 shows a list of variable names, the number of each question in the questionnaire, a description of the questions, variable types, and answer choices. In the questionnaire, the respondent's name was not asked, but for record purposes, the date and respondent's school name are asked. The questionnaires were translated into the Portuguese language and printed out on one paper, front and back. The questionnaire is presented in Appendix 2 (Portuguese) and 3 (English).

Data collection

The data collection took place for about two months from 5 June to 31 July 2017. Two local research assistants were recruited and worked as a team.

In order to distribute the questionnaires, the study used a manual method, where

the team visited schools and handed over the questionnaire in person. Other methods for distributing questionnaires such as by mail and online could have been used, but in Mozambique, the mail service and internet systems are not entirely reliable. Thus, the manual method is considered an appropriate method for the current study.

A total of forty schools were visited. They consisted of twenty-three primary schools, twelve secondary schools, one primary-secondary school, and four tertiary schools. Among them, four schools including three secondary schools and one primary-secondary school are private. The schools were randomly selected among schools that fulfill the following two criteria: (a) accessible by the research team and (b) not during a vacation period (some schools were on vacation from the end of June). According to the government document, the total numbers of schools in the Maputo city are one hundred primary schools and thirty-seven secondary schools (Ministry of Education of Mozambique, 2017), although the actual number could be more because there are some private schools which do not register with the government system.

The primary approach to recruiting teachers was a snowballing approach. First, the research team found a gatekeeper teacher at schools visited. Then, the team was introduced to another teacher. In a few cases, the team used the existing social ties with the local education system. By using various sources, access to a broader range of teachers was made possible. All teachers were given informed consent forms that included the details about the research purpose, the use of the questionnaire's answers, and the eventual distribution of the publication.

The research team asked teachers to answer the questionnaire on the spot and tried to collect them as much as possible. However, in some cases, the team received a request to leave it with them. In that case, the team came back to collect them at a later day. Among those who requested to leave the questionnaire, some of them did not return the questionnaire after all, although, there were very few cases. Thus it may not be so much of a concern that could affect the result.

The total number of collected questionnaires became 296 after excluding two questionnaires that had suspicious answers. One of them had precisely the same answers with others, and the other one has distinct response pattern such as 1-3-5-1-

3-5-1-3-5. For sixty-seven questions, the average observation was 284, ranging from 237 to 295 as shown in the last column of Table 4. It confirmed that the database holds adequate quality for further analysis.

Analysis method

The data management and analysis were aided by the computer software program STATA 14. The questionnaire answers were coded and inputted into STATA's data sheet. Each questionnaire answer was named with the teacher ID from 1 to 296.

For developing a measurement instrument, this study uses a technique of the principal component analysis (PCA). The PCA technique is used to extract critical information from the data described by several inter-correlated variables. By examining the pattern of similarity between the observations and the variables, the extracted information is represented as a set of new orthogonal variables called principal components (Abdi & Williams, 2010).

To administer the instrument on the sample, the study takes a t-test technique. The teachers are divided into two groups using the answers of the dependent variables, and the group's mean score explanatory variables are compared. The current analysis understands that the difference in characteristics and perceptions between the two groups can explain the different preference of help-seeking between them.

.

Table 4: List of questions in the questionnaire (page 1)

Variable	Number in Quest.	Description	Type	Answer choice	Obs.
Demographic variables					
Gender		Gender	Categorical (dichotomous)	Male Female	268
Age		Age	Categorical (ordinal)	18-24 25-34 35-44 45-64 65+	284
Subject		Teaching subject	Categorical (nominal)	Liberal Arts Science Other	237
Education		Education level	Categorical (ordinal)	Primary Secondary IMAP/IFAP University Others	278
Province		Home province	Categorical (nominal)	Maputo Gaza Inhambane Manica Namplua Niassa Sofala Tete Zambezia Cabo Delgado	284

Variable	Number in Quest.	Description	Type	Answer choice	Obs.
Preference of Help Seeking					
HS1	Q13	If I feel some of my students are not learning well, I would go to	Categorical (nominal)	1: No one	295
HS2	Q14	If I want to improve my teaching skill, I would go to		2: Consultation with colleagues	290
HS3	Q15	If I feel I am not explaining the textbook's contents well, I would go to			285
HS4	Q16	If I want to learn how to use a blackboard effectively, I would go to		3: Training by government	289
HS5	Q17	If I face difficulty keeping my class quiet, I would go to			284
HS6	Q18	If I lose confidence in my teaching, I would go to		4: Training by Foreign country	286
HS7	Q19	If I have difficulty encouraging underachievers, I would go to			293
HS8	Q20	If I feel stress about my teaching, I would go to			290
HS9	Q21	If I feel helpless to my students, I would go to			290
HS10	Q22	If I lost my motivation for teaching, I would go to			290
HS11	Q23	If I want my student to be more active in my class, I would go to			286
HS12	Q24	If I lost my confidence as a teacher, I would go to			287
Perceived Problems					
PR1	Q1	Some of my students are not learning well	Categorical (ordinal)	1: Totally agree	294
PR2	Q2	I want to improve my teaching skill		2: Agree	287
PR3	Q3	I cannot explain the textbook's contents well		3: Not sure	290
PR4	Q4	I want to learn how to use a blackboard more effectively		4: Disagree	284
PR5	Q5	I face difficulty keeping my class quiet		5: Totally disagree	290
PR6	Q6	I lose confidence in my teaching			293
PR7	Q7	I have difficulty encouraging underachievers			284
PR8	Q8	I feel stress when I am teaching			287
PR9	Q9	I feel helpless to my students			279
PR10	Q10	I lost my motivation for teaching			289
PR11	Q11	I want my student to be more active in my class			288
PR12	Q12	I lost my confidence as a teacher			294

Variable	Number in Quest.	Description	Type	Answer choice	Obs.
Personal Characteristics			Categorical (ordinal)	1: Totally agree 2: Agree 3: Not sure 4: Disagree 5: Totally disagree	
CH1	Q30	Generally, support for teachers is not enough			291
CH2	Q31	We need more opportunity to get training for my teaching			291
CH3	Q32	I recommend for my colleagues to taking a teacher training			286
CH4	Q33	In the near future, I want to have advice about my teaching			285
CH5	Q34	I think I can solve most of my problems by myself			281
CH6	Q35	When I have a problem at school, I would welcome professional advice			287
CH7	Q36	I prefer solving my problems by myself			284
CH8	Q37	I seek help only after I try by myself first			285
CH9	Q38	I admire a person who can cope with problems without resorting to seeking help			286
CH10	Q39	A person should work out his own problem and get help is a last resort			288
CH11	Q40	Teacher training helps me to improve my teaching			280
CH12	Q41	I don't think teacher training will help me so much			288
CH13	Q42	I like learning English because I can communicate with foreign people			284
CH14	Q43	I want to know things that I don't know yet			285
CH15	Q44	I feel confident after I join training by foreign expert			284
CH16	Q45	Training hosted by government is better than one by foreign country			283
CH17	Q46	The government officers know what I need to improve my teaching			286
CH18	Q47	The government should be responsible for supporting teachers			284
CH19	Q48	I prefer getting support from my government rather than a foreign country			282
CH20	Q49	I feel confident after I join training by government			281
CH21	Q50	A teacher who receives training from a foreign country improved his teaching			283
CH22	Q51	Foreign experts give me good skill to solve my problem			279
CH23	Q52	If a foreign expert offers me training, even though I do not have problem, I would accept it			285
CH24	Q53	Information from foreign country is better than my government			285
CH25	Q54	Support from a foreign country is generally good			285
CH26	Q55	I feel uneasy asking help from foreign people because of what other people would think			286
CH27	Q56	Receiving a foreigner's help is a shame on a person's life			274
CH28	Q57	If I receive a foreigner's help, other people might be jealous of me			284

Variable	Number in Quest.	Description	Type	Answer choice	Obs.
CH29	Q58	Participating in training by a foreign expert is an honorable thing	Categorical (ordinal)	1: Totally agree	277
CH30	Q59	The government always supports my teaching problem		2: Agree	283
CH31	Q60	Generally, I talk about personal problem with other people		3: Not sure	277
CH32	Q61	For any problem, I tend to hide the fact that I have a problem		4: Disagree	280
CH33	Q62	I would like to get attention if I face difficulties in my life		5: Totally disagree	282
CH34	Q63	I usually do not like talking about my problem with other people			285
CH35	Q64	It is difficult to talk about myself especially with foreign people			289
Network characteristics					
Net1	Q25	25 Do you speak English?	Categorical (nominal)	No at all Very little Yes, some Yes, fluently	282
Net2	Q26	26 How many friends who are from a foreign country, do you have?	Numerical		276
Net3	Q27	27 Do you know anyone who is working on foreign country's project?	Categorical (dichotomous)	Yes No	292
Net4	Q28	28 Have you ever participated in teacher training which was hosted by a foreign country?	Categorical (dichotomous)	Yes No	291

4.2. Findings 1: Develop a measurement instrument

Demographic characteristics

Table 5 shows the descriptive statistics of the demographic characteristics. The gender variable shows that the sample has more males than females with 51 percent and 39 percent respectively. The age group variable shows that the largest group is the middle-age group, 40 percent are in the 25-34 age group and 29 percent in the 35-44 age group. The youngest and oldest groups are relatively smaller. The subject variable shows a fair balance, which is 41 percent liberal art teachers and 38 percent science teachers. In respect of the teacher's education level, nearly half (46 percent) of the sampled teachers hold a university degree, followed by secondary education (35 percent), the IMP/IFP (13 percent), and primary education (5 percent). The home province variable presents that roughly two-thirds (63 percent) of the samples are from the capital province of Maputo, and the followings are two neighboring provinces, Gaza and Inhambane (one percent each). The teachers who are from other seven provinces are few (around 10 percent).

The variables of the demographic characteristics serve not only to present the sample characteristics, but also to be examined as one of the factors related to the help-seeking preference. Based on the knowledge obtained in the last chapter, these variables can be defined as a dichotomous variable as followings: For the gender variable, male teachers are coded 0, and female teachers are coded 1. For the age variable, the age groups of 18-24 and 25-34 can be considered as young and coded as 1. The age group of 35 and above is then coded as 0. Relating to the subject variable, the science teachers are coded as 1, and the liberal art teachers are coded as 0. For the education variable, the IMAP/IFP and university are considered higher education, thus are coded as 1, and the primary and secondary education are coded as 0. For the variable of the province, Maputo is an urban province and coded as 1, and other provinces are coded as 0. The refined variables are listed in Table 16 at the end of this section.

Table 5: Descriptive summary of demographic characteristics

	N	%		N	%
Gender			**Education**		
Male	152	51.3%	Primary	16	5.4%
Female	116	39.1%	Secondary	75	25.3%
(missing)	28	9.46%	IMAP/IFP	40	13.5%
			University	139	46.9%
Age			Other	8	2.7%
18-24	40	13.5%	(missing)	18	6%
25-34	120	40.5%			
35-44	86	29%	**Province**		
45-64	37	12.5%	Maputo	189	63.8%
65-	1	0.3%	Gaza	32	10.8%
(missing)	12	4%	Inhambane	31	10.4%
			Manica	9	3%
Subject			Namplua	1	0.3%
Liberal Arts	123	41.5%	Niassa	1	0.3%
Science	114	38.5%	Sofala	10	3.3%
Others	37	12.5%	Tete	4	1.3%
(missing)	22	7.4%	Zambezia	6	2%
			Cabo Delgado	1	0.3%
			(missing)	12	4%

Help-seeking preference

Table 6 shows the responses to the questions about the help-seeking preference. The responses contain the four choices of 'Nobody,' 'Colleague,' 'Government,' and 'Foreigner.' The table shows the frequency of responses and the proportion shared in a question. The total average of twelve questions is also presented at the bottom line and shows that 16 percent of teachers do not seek help from anywhere. Particularly for two questions, HS11 and HS5, the result shows a high ratio of no-help-seeking preference, roughly one-fourth of teachers, with having 28.7 and 25 percent for the 'Nobody' answer. The questions HS11 is about 'If I want my student to be more active in my class.' The question HS5 is about 'If I face difficulty to keep my class quiet.' For another three questions, it also shows a relatively higher ratio of the no-help-seeking preference at around 20 percent. These questions are the question HS10 'If I lost my motivation for teaching,' the question HS4 'If I want to learn how to use a blackboard effectively' and the question HS6 'If I lose my confidence about my teaching." On the other hand, for two questions, HS1 and HS2, it shows a lower rate of no-help-seeking preference with 4.7 percent and 3 percent respectively. Their questions are HS1, 'If I

feel some of my students are not learning well' and HS2, 'If I want to improve my teaching skill.'

Regarding the help resource preference, the total average shows that the majority of teachers prefer to seek help from a colleague amounting to 60.3 percent of them. 15.9 percent of teachers prefer training by the government, and only 5.5 percent of teachers prefer the training by foreigners. The problems that make teachers particularly prefer colleagues is HS1, 'If I feel some of my students are not learning well' and HS3, 'If I feel I am not explaining textbook's contents well' with having 86.5 percent and 79.1 percent, respectively. The problems which teachers relatively prefer to seek help from the government are HS2, 'If I want to improve my teaching skill' and HS12, 'If I lost my confidence as a teacher.' It shows the higher rates of 29.7 percent and 28.1 percent, respectively. For these two problems, the proportion for the training by the foreign country is also high compared with others, with having 14.9 percent and 8.8 percent, respectively. For the question HS5, 'If I face difficulty to keep my class quiet,' no teacher prefers to seek help from the foreign country.

The twelve variables of help-seeking preference are the interest variables, or dependent variables, of this study. The variables were captured as a nominal form in the questionnaire, but in order to conduct the further analysis, it needs to be transformed into three dichotomous variables. First one is a simple help-seeking preference that captures whether teacher wants to seek help or not. The teachers who responded 'Nobody' are coded as 0, and the teachers who responded 'Colleague,' 'Training from Government,' and 'Training from Foreigner' are coded as 1. The second variable captures preference on resource formality among help-seeking teachers. It measures whether teacher seeks help from the informal resource or the formal resource. The teachers who mark 'Colleague' are considered to have the informal resources preference and coded as 0. The teachers who mark either 'Government' and 'Foreigner' are considered to have the formal resource preference and coded as 1. The third variable also captures the resource preference but observes between domestic or foreign resource. The teachers who mark 'Government' are considered to have the domestic resource preference and coded as 0. The teachers who mark "Forienger" are

considered to have the foreign resource preference, are coded as 1.

After all, the variables for the help-seeking preference become thirty-six dichotomous variables. These variables are purposefully left as independent because the help-seeking preference highly depends on problems as observed in the previous knowledge. In the next section of the further analysis, these variables are inputted to the estimation separately. The descriptive statistics of the refined help-seeking variable are presented in Table 16 at the end of this section.

Table 6: Descriptive summary of help-seeking preference

	Variable	Nobody	Consult with colleagues	Training by Government	Training by Foreign country	missing
HS1	If I feel some of my students are not learning well, I will go to	14 (4.7%)	256 (86.5%)	13 (4.4%)	12 (4.1%)	1 (0.3%)
HS2	If I want to improve my teaching skill, I would go to	9 (3%)	149 (50.3%)	88 (29.7%)	44 (14.9%)	6 (2.0%)
HS3	If I feel I am not explaining the textbook's contents well, I would go to	23 (7.8%)	234 (79.1%)	20 (6.8%)	8 (2.7%)	11 (3.7%)
HS4	If I want to learn how to use a blackboard effectively, I would go to	58 (19.6%)	178 (60.1%)	43 (14.5%)	10 (3.4%)	7 (2.4%)
HS5	If I face difficulty keeping my class quiet, I would go to	74 (25%)	191 (64.5%)	19 (6.4%)	0 (0%)	12 (4.1%)
HS6	If I lose confidence in my teaching, I would go to	59 (19.9%)	133 (44.9%)	69 (23.3%)	25 (8.4%)	10 (3.4%)
HS7	If I have difficulty encouraging underachievers, I would go to	36 (12.2%)	214 (72.3%)	34 (11.5%)	9 (3%)	3 (1%)
HS8	If I feel stress about my teaching, I would go to	40 (13.5%)	195 (65.9%)	44 (14.9%)	11 (3.7%)	6 (2%)
HS9	If I feel helpless to my students, I would go to	53 (17.9%)	181 (61.1%)	39 (13.2%)	17 (5.7%)	6 (2%)
HS10	If I lost my motivation for teaching, I would go to	60 (20.3%)	134 (45.3%)	78 (26.4%)	18 (6.1%)	6 (2%)
HS11	If I want my student to be more active in my class, I would go to	85 (28.7%)	152 (51.4%)	33 (11.1%)	16 (5.4%)	10 (3.4%)
HS12	If I lost my confidence as a teacher, I would go to	52 (17.6%)	126 (42.7%)	83 (28.1%)	26 (8.8%)	8 (2.7%)
	Total	563 (15.9%)	2,143 (60.3%)	563 (15.9%)	196 (5.5%)	86 (2.4%)

Perceived Problems

Table 7 shows the descriptive statistics for the perceived problem, among twelve questions. The answers are coded with the highest value of 5 for 'Totally agree' to the lowest value of 1 for 'Totally disagree,' thus, the higher the value, the stronger the level of agreement. The table shows problems that teachers greatly agree with are PR11, 'I want my students to be more active in my class,' and the PR2, 'I want to improve my teaching skills,' with scores of 4.22 and 4.07, respectively. On the other hand, the problem that teacher generally disagree with is PR12, 'I lost my confidence as a teacher,' and PR10, 'I lose my motivation for teaching,' with scores of 2.05 and 2.17, respectively.

Table 7: Descriptive summary of perceived problems questions

Var.	Description	Obs.	Mean	S.D.	Min	Max
PR1	My students not learning	294	3.92	0.96	1	5
PR2	Improve teaching skill	287	4.07	0.96	1	5
PR3	Cannot explain the textbook	290	2.26	1.18	1	5
PR4	Want to learn effective blackboard use	284	3.08	1.32	1	5
PR5	Difficulty to keep class quiet	290	2.71	1.28	1	5
PR6	Lose confidence for teaching	293	2.46	1.19	1	5
PR7	Difficulty to encourage underachievers	284	2.56	1.27	1	5
PR8	Feel stress	287	2.27	1.33	1	5
PR9	Feel helpless	279	2.28	1.33	1	5
PR10	Lose motivation	289	2.17	1.19	1	5
PR11	Want students to be more active	288	4.22	1.03	1	5
PR12	Lose confidence as a teacher	294	2.05	1.28	1	5

Table 8 shows the correlation among the twelve items of the perceived problems. It shows that the items hold moderate, positive correlations (rs = 0.2 and 0.3). Some show particularly strong relations such as one between PR 3 'I can not explain textbook well' and PR6 'I lose my confidence in my teaching' (rs= 0.58), one between PR6 and PR7 'I have difficulty to encourage underachiever' (rs=0.574), and one between PR3 and PR12 'I lose confidence as a teacher.' Two items of the PR2 'Improve teaching skill' and the PR11 'Want student more active' do not have strong relationships with others.

Table 8: Correlation of perceived problems items

	PR1	PR2	PR3	PR4	PR5	PR6	PR7	PR8	PR9	PR10	PR11	PR12
PR1	1											
PR2	0.290	1										
PR3	0.165	0.045	1									
PR4	0.190	0.211	0.369	1								
PR5	0.181	0.123	0.419	0.290	1							
PR6	0.247	0.064	0.580	0.402	0.438	1						
PR7	0.244	0.101	0.471	0.232	0.446	0.574	1					
PR8	0.097	-0.075	0.458	0.182	0.390	0.556	0.442	1				
PR9	0.191	-0.059	0.469	0.344	0.378	0.497	0.421	0.533	1			
PR10	0.160	-0.114	0.429	0.112	0.345	0.486	0.567	0.551	0.555	1		
PR11	0.247	0.371	-0.026	0.129	0.006	0.117	0.094	-0.017	0.015	0.005	1	
PR12	0.172	-0.030	0.574	0.233	0.383	0.500	0.468	0.558	0.468	0.551	-0.015	1

Table 9 shows the eigenvalues, the eigenvalue difference, the proportion, and the cumulative proportion. The eigenvalue presents the amount of information contained in the component concerned, and the proportion is the ratio of contribution by the eigenvalue to explain the component concerned. The table shows that the eigenvalue of component 1 and 2 has a score over one. It also shows that the proportion of components from 1 to 2 accounts for 53 percent of the whole information, and the one from 1 to 3 explain 60 percent. Figure 6 is a scree plot of the eigenvalue. It shows a large drop from component 1 to 2, and the drop from component 2 to 3 becomes smaller, and the ones after component 3 become much smaller. From such observations, this study decides to take two components of perceived problem items.

Table 9: Eigenvalues for perceived problems items

	Eigenvalue	Difference	Proportion	Cumulative proportion
Comp1	4.645	2.930	0.387	0.387
Comp2	1.715	0.765	0.143	0.530
Comp3	0.950	0.197	0.079	0.609
Comp4	0.753	0.026	0.063	0.672
Comp5	0.727	0.115	0.061	0.733
Comp6	0.613	0.051	0.051	0.784
Comp7	0.562	0.045	0.047	0.830
Comp8	0.517	0.042	0.043	0.874
Comp9	0.475	0.058	0.040	0.913
Comp10	0.418	0.098	0.035	0.948
Comp11	0.320	0.014	0.027	0.975
Comp12	0.305	.	0.026	1.000

Figure 6: Scree plot of eigenvalues for perceived problems items

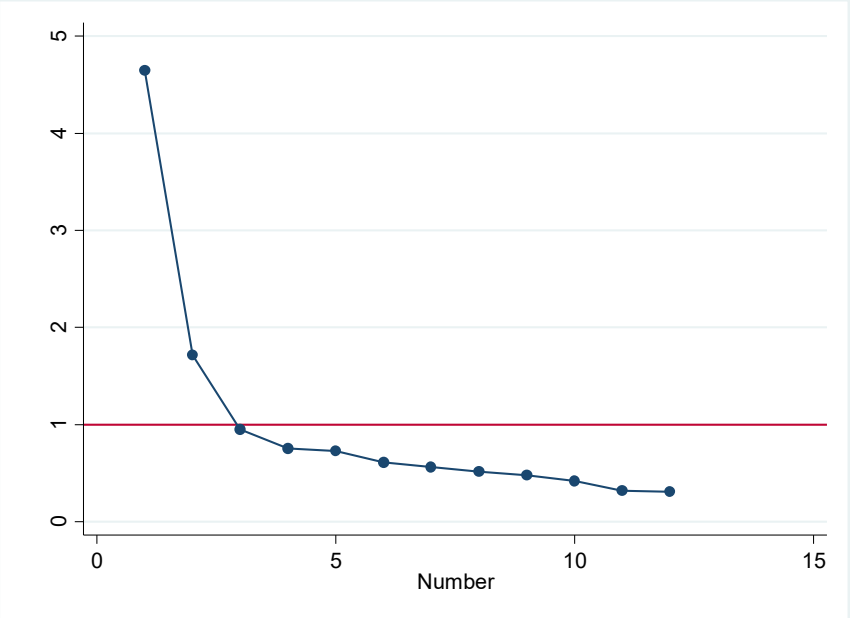


Table 10 shows the eigenvectors with varimax rotation for two components of perceived problem items. The eigenvectors indicate the correlation coefficient between original variables and each component. The varimax rotation was employed to simplify the expression of components by using a few significant items for each component to maximize the sum of the variances of squared loadings. The original eigenvectors are presented in Appendix 4.

Component 1 includes the information of PR8 'Feel stress,' PR10 'Lose motivation,' PR12 'Lose confidence,' and PR6 'Lose my confidence.' Thus, the components can be named as the psychological problems. Component 2 includes the item of PR2 'students are not learning,' PR11 'I want my students to be more active in class,' and PR1 'My students are not learning well.' Therefore, it can be named as a pedagogical difficulty.

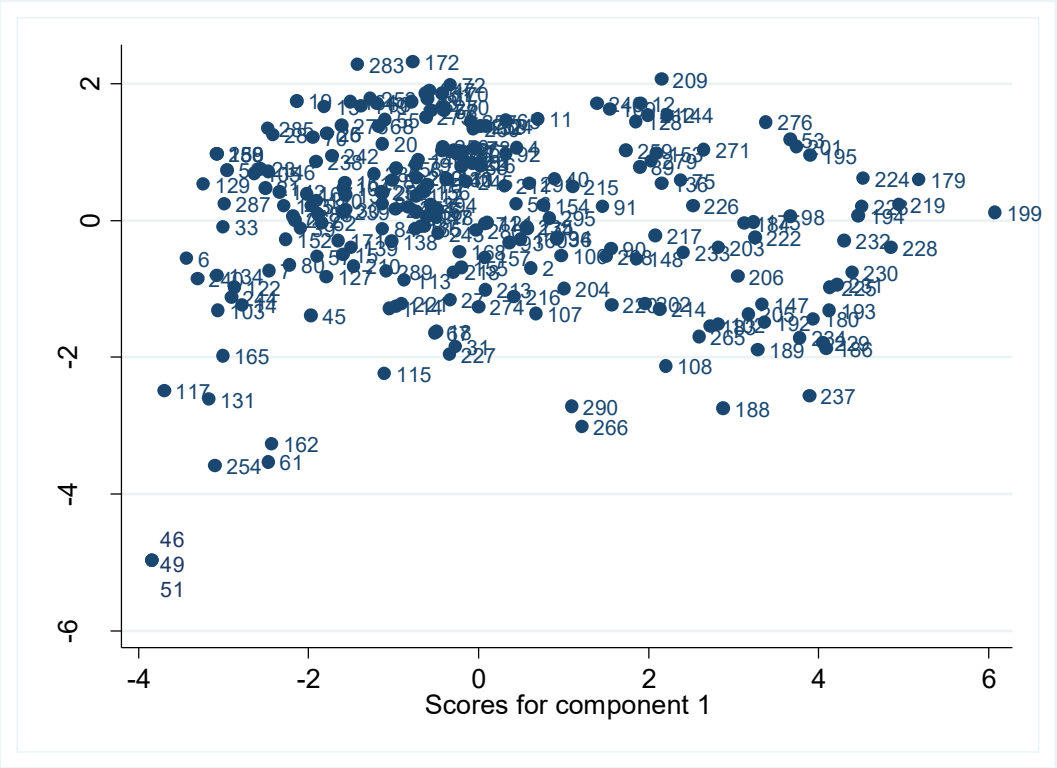
Table 10: Eigenvector of two components of perceived problems items (PCA with varimax rotation)

		Component 1	Component 2
PR8	Feel stress	0.3637	
PR10	Lose motivation	0.3627	
PR12	Lose confidence as a teacher	0.3622	
PR6	Lose confidence in teaching	0.3597	
PR9	Feel helpless	0.3487	
PR3	Cannot explain the textbook	0.3479	
PR7	Difficulty to encourage underachievers	0.3333	
PR5	Difficulty to keep class quiet	0.2814	
PR2	Improve teaching skill		0.6042
PR11	Want student to be more active		0.5284
PR1	My students not learning		0.4355
PR4	Want to learn effective blackboard use		0.3014
	Proportion	38.2	14.8
	Cumulative proportion	38.2	53.0

(Note) The items orders are re-arranged based on the loading values.
It only shows the values which have the loading score above 2.

Lastly, Figure 7 is drawn to confirm the result intuitively and also to examine the details about the samples. The scores for component 1 and component 2 are plotted with the number of each teacher's ID from 1 to 296. The teacher's response is spread with a dense area at the intersection of the value from -2 to 0 of component 1 and the value from 0 to 2 of component 2. At the left lower corner, teacher 46, 49, 51 responded 'Totally disagree' for all twelve problems questions, whereas, at the right upper area, teacher 199 responded 'Totally agree' for nine questions and 'Agree' for three questions. Similarly, the teacher 179 responded 'Totally agree' for three questions, and 'Agree' for eight questions.

Figure 7: Scatter graph for component 1 and 2 of perceived problem items



Personality Characteristics

Table 11 shows the descriptive statistics of thirty-five questions about personality characteristics. The answers range from the lowest value of 1 for 'Totally disagree' to the highest value of 5 for 'Totally agree.' The mean score of all questions is 2.59 which is located between 'Not sure' and 'Agree.' The top three questions which gained high agreement is CH14, 'I want to know things that I don't know yet,' CH18, 'The government should be responsible for supporting teachers,' and the CH1, 'Generally, support for teachers is not enough.' Their scores show 4.38, 4.29, and 4.28, respectively. On the other hand, the bottom three questions which did not get agreement are CH12, 'I don't think teacher training will help me so much,' CH27, 'Receiving a foreigner's help is a shame on a person's life,' and CH26, 'I feel uneasy asking help from foreign people because of what other people would think.' Their scores are 2.3, 2.34, and 2.49, respectively.

Table 12 shows the correlation among the thirty-five variables. Overall, it confirmed a moderate magnitude of correlations. The strong positive relations are particularly

found at ones between CH5 and CH7 (rs= .59) and CH26 and CH27 (rs= .59). The negative relations are identified between CH11 and CH12 (rs= -.45) and CH1 and CH30 (rs= -.037).

Table 11: Descriptive summary of personality characteristics items (page 1)

Var.	Description	Obs.	Mean	S.D.	Min	Max
CH1	Generally, support for teachers is not enough	291	4.28	0.85	1	5
CH2	We need more opportunity to get training for my teaching	291	4.27	0.82	1	5
CH3	I recommend for my colleagues to taking a teacher training	286	3.96	1.01	1	5
CH4	Shortly, I want to have advice about my teaching	285	3.92	0.90	1	5
CH5	I think I can solve most of my problems by myself	281	2.71	1.18	1	5
CH6	When I have a problem at school, I would welcome professional advice	287	4.08	0.91	1	5
CH7	I prefer solving my problems by myself	284	2.49	1.15	1	5
CH8	I seek help only after I try by myself first	285	3.85	1.02	1	5
CH9	I admire a person who can cope with problems without resorting to seeking help	286	3.46	1.27	1	5
CH10	A person should work out his problem and get help is a last resort	288	3.64	1.17	1	5
CH11	Teacher training helps me to improve my teaching	280	4.21	0.95	1	5
CH12	I do not think teacher training will help me so much	288	2.30	1.26	1	5
CH13	I like learning English because I can communicate with foreign people	284	4.18	0.90	1	5
CH14	I want to know things that I do not know yet	285	4.38	0.84	1	5
CH15	I feel confident after I join training by foreign expert	284	3.43	1.12	1	5
CH16	Training hosted by government is better than one by foreign country	283	3.01	1.02	1	5
CH17	The government officers know what I need to improve my teaching	286	3.40	1.03	1	5
CH18	The government should be responsible for supporting teachers	284	4.29	0.83	1	5
CH19	I prefer getting support from my government rather than a foreign country	282	3.16	1.20	1	5
CH20	I feel confident after I join training by government	281	3.59	1.00	1	5
CH21	A teacher who receives training from a foreign country improved his teaching	283	3.50	0.95	1	5
CH22	Foreign experts give me good skill to solve my problem	279	3.27	0.99	1	5
CH23	If a foreign expert offers me training, even though I do not have problem, I would accept it	285	3.91	1.02	1	5

(page 2)

Var.	Description	Obs.	Mean	S.D.	Min	Max
CH24	Information from foreign country is better than my government	285	2.86	1.12	1	5
CH25	Support from a foreign country is generally good	285	3.59	0.98	1	5
CH26	I feel uneasy asking help from foreign people because of what other people would think	286	2.61	1.13	1	5
CH27	Receiving a foreigner's help is a shame on a person's life	274	2.34	1.23	1	5
CH28	If I receive a foreigner's help, other people might be jealous of me	284	2.77	1.19	1	5
CH29	Participating in training by a foreign expert is an honorable thing	277	3.65	1.01	1	5
CH30	The government always supports my teaching problem	283	2.88	1.07	1	5
CH31	Generally, I talk about personal problems with other people	277	3.15	1.22	1	5
CH32	For any problem, I tend to hide the fact that I have a problem	280	2.89	1.16	1	5
CH33	I would like to get attention if I face difficulties in my life	282	2.68	1.26	1	5
CH34	I usually do not like talking about my problem with other people	285	3.19	1.14	1	5
CH35	It is difficult to talk about myself especially with foreign people	289	3.17	1.30	1	5

Table 12: Correlation of personality characteristics items (page 1)

	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8	CH9	CH10	CH11	CH12	CH13	CH14	CH15	Ch16	Ch17	Ch18
CH1	1																	
CH2	0.36	1																
CH3	-0.04	0.08	1															
CH4	0.12	0.16	0.20	1														
CH5	0.19	0.00	0.03	-0.02	1													
CH6	0.04	0.25	0.17	0.28	-0.09	1												
CH7	0.21	-0.02	-0.03	-0.14	0.59	-0.10	1											
CH8	-0.08	0.05	-0.04	0.00	0.16	0.14	0.09	1										
CH9	0.04	0.06	0.03	-0.01	0.27	0.09	0.25	0.25	1									
CH10	0.05	0.06	-0.06	0.01	0.25	0.10	0.14	0.48	0.41	1								
CH11	0.02	0.15	0.13	0.16	-0.11	0.06	-0.31	0.18	-0.04	0.19	1							
CH12	-0.02	-0.12	-0.02	-0.16	0.12	-0.11	0.18	-0.07	0.11	0.15	-0.45	1						
CH13	-0.06	-0.04	0.11	0.28	0.00	0.20	-0.08	0.06	0.00	0.09	0.28	-0.21	1					
CH14	0.00	0.06	0.10	0.24	-0.02	0.18	-0.18	0.21	0.00	0.14	0.35	-0.20	0.27	1				
CH15	-0.07	-0.10	0.16	0.14	0.01	0.02	0.03	0.02	-0.03	0.05	-0.03	0.16	0.14	0.15	1			
CH16	-0.07	-0.15	-0.15	-0.17	0.13	-0.04	0.08	0.05	0.12	0.18	-0.13	0.07	-0.18	-0.18	-0.08	1		
CH17	0.05	0.04	0.03	-0.13	0.24	0.23	0.19	0.18	0.28	0.17	-0.02	0.07	0.03	-0.07	-0.11	0.31	1	
CH18	0.03	0.06	0.13	0.07	0.08	0.08	0.03	0.15	0.11	0.15	0.24	-0.05	0.19	0.26	0.13	-0.04	0.21	1
CH19	0.04	-0.06	-0.05	-0.08	0.19	0.06	0.20	-0.04	0.19	0.10	-0.13	0.02	-0.08	-0.18	0.02	0.39	0.24	0.00
CH20	0.03	-0.04	0.03	0.05	0.08	0.14	0.06	0.08	0.21	0.09	0.05	-0.09	-0.08	-0.07	0.06	0.39	0.26	0.04
CH21	0.06	-0.01	0.17	0.29	0.22	0.04	0.20	0.02	0.07	0.12	0.08	-0.01	0.16	0.14	0.23	-0.12	-0.09	0.19
CH22	0.06	0.01	0.10	0.16	0.15	0.13	0.22	0.06	0.07	0.12	-0.09	0.07	0.18	0.00	0.19	-0.12	-0.01	0.09
CH23	-0.05	-0.07	0.10	0.29	0.13	0.01	0.06	0.05	-0.01	0.02	0.06	-0.14	0.26	0.10	0.01	-0.05	-0.03	0.05
CH24	0.10	0.09	-0.05	0.17	0.19	-0.01	0.16	0.00	0.13	0.00	-0.26	0.15	0.07	-0.12	0.11	-0.09	-0.08	-0.04
CH25	0.00	-0.02	0.15	0.04	0.13	0.00	-0.03	-0.08	0.03	0.10	0.09	0.10	0.00	0.10	0.05	-0.03	-0.04	0.08
CH26	-0.04	-0.11	0.09	-0.07	0.19	-0.07	0.16	-0.17	0.05	-0.18	-0.24	0.26	-0.14	-0.22	0.05	0.21	0.13	0.02
CH27	-0.02	-0.16	-0.03	-0.19	0.16	-0.19	0.19	-0.15	0.09	-0.02	-0.16	0.30	-0.17	-0.13	-0.01	0.16	0.10	0.01
CH28	0.03	0.06	0.02	-0.01	0.25	0.02	0.18	0.19	0.20	0.28	-0.01	0.17	0.00	-0.10	-0.01	0.09	0.14	0.07
CH29	-0.13	-0.01	0.06	0.04	0.10	0.07	0.04	0.07	0.19	0.21	0.22	0.00	0.21	0.12	0.04	-0.02	0.11	0.11
CH30	-0.34	-0.29	-0.04	-0.08	-0.03	-0.07	-0.05	0.01	0.05	0.00	-0.03	0.08	-0.14	-0.17	-0.07	0.36	0.10	-0.07
CH31	0.00	0.06	-0.04	0.08	0.00	0.11	-0.04	0.07	0.11	-0.05	-0.03	0.00	0.00	0.03	0.00	-0.01	0.10	-0.02
CH32	0.02	0.05	-0.08	-0.02	0.37	-0.09	0.27	0.09	0.15	0.20	-0.11	0.07	-0.07	0.09	0.00	0.06	0.12	-0.01
CH33	0.07	0.02	-0.03	-0.12	-0.01	-0.01	0.11	-0.07	0.01	-0.05	-0.24	0.22	-0.06	-0.07	-0.02	0.06	0.17	-0.03
CH34	0.13	0.04	-0.01	0.06	0.19	0.00	0.21	-0.07	0.11	0.11	-0.03	0.13	-0.04	-0.03	0.05	0.05	-0.02	-0.01
CH35	-0.11	0.01	-0.09	-0.10	0.13	0.09	0.01	0.05	0.20	0.11	-0.05	0.10	0.04	-0.01	-0.10	0.08	0.08	0.01

	CH19	CH20	CH21	CH22	CH23	CH24	CH25	CH26	CH27	CH28	CH29	CH30	CH31	CH32	CH33	CH34	CH35
CH19	1																
CH20	0.43	1															
CH21	0.03	0.14	1														
CH22	0.06	0.11	0.37	1													
CH23	0.04	0.07	0.33	0.33	1												
CH24	-0.01	-0.01	0.26	0.46	0.30	1											
CH25	-0.07	0.00	0.27	0.29	0.30	0.26	1										
CH26	0.15	0.14	0.02	0.08	0.08	0.27	0.00	1									
CH27	0.16	0.07	0.06	0.10	-0.03	0.17	0.11	0.59	1								
CH28	0.09	0.12	0.19	0.22	0.11	0.21	0.21	0.28	0.39	1							
CH29	0.10	0.10	0.09	0.18	0.01	0.01	0.09	-0.03	0.05	0.22	1						
CH30	0.15	0.23	-0.02	-0.02	-0.05	-0.11	0.00	0.22	0.21	0.18	0.08	1					
CH31	0.11	0.17	-0.04	-0.01	-0.11	0.11	-0.04	0.16	0.06	0.02	0.10	0.05	1				
CH32	0.07	-0.08	0.04	0.13	-0.05	0.04	0.07	0.05	0.18	0.17	0.15	0.04	-0.05	1			
CH33	0.15	0.08	0.07	0.20	0.00	0.14	0.06	0.28	0.27	0.13	0.02	0.00	0.21	0.22	1		
CH34	0.03	-0.08	0.17	0.08	0.09	0.02	0.05	-0.03	0.11	0.08	0.20	0.01	-0.27	0.37	-0.01	1	
CH35	0.10	0.05	0.03	-0.06	0.06	-0.04	0.16	-0.01	0.04	0.15	0.12	0.19	-0.15	0.16	-0.02	0.41	1

Table 13 shows the eigenvalue, the difference, the proportion, and the cumulative proportion of thirty-five items. It shows that the components from 1 to 12 have the eigenvalue of one and above. Relating to the cumulative proportion, the components from 1 to 4 account for 30 percent of all items, the components from 1 to 5 account for around 40 percent, and the components from 1 to 8 account for 50 percent. By looking at the scree plot of Figure 8, a large drop is found from 1 to 2, 2 to 3 and 3 to 4. Then, the drop becomes smaller from 4 to 5. Taking the above observations into consideration, this study decided to take four components of the personality characteristics.

Table 13: Eigenvalues for personality characteristics items

	Eigenvalue	Difference	Proportion	Cumulative
Comp1	3.944	0.600	0.113	0.113
Comp2	3.344	0.803	0.096	0.208
Comp3	2.541	0.449	0.073	0.281
Comp4	2.092	0.180	0.060	0.341
Comp5	1.912	0.391	0.055	0.395
Comp6	1.521	0.113	0.043	0.439
Comp7	1.407	0.089	0.040	0.479
Comp8	1.319	0.041	0.038	0.517
Comp9	1.278	0.095	0.037	0.553
Comp10	1.183	0.103	0.034	0.587
Comp11	1.080	0.046	0.031	0.618
Comp12	1.035	0.056	0.030	0.647
Comp13	0.979	0.060	0.028	0.675
Comp14	0.919	0.030	0.026	0.702
Comp15	0.889	0.104	0.025	0.727
Comp16	0.785	0.065	0.022	0.749
Comp17	0.720	0.013	0.021	0.770
Comp18	0.706	0.013	0.020	0.790
Comp19	0.694	0.069	0.020	0.810
Comp20	0.625	0.035	0.018	0.828
Comp21	0.589	0.005	0.017	0.845
Comp22	0.584	0.068	0.017	0.861
Comp23	0.515	0.003	0.015	0.876
Comp24	0.512	0.020	0.015	0.891
Comp25	0.493	0.035	0.014	0.905
Comp26	0.458	0.032	0.013	0.918
Comp27	0.426	0.023	0.012	0.930
Comp28	0.403	0.016	0.012	0.942
Comp29	0.386	0.049	0.011	0.953
Comp30	0.337	0.030	0.010	0.962
Comp31	0.307	0.021	0.009	0.971
Comp32	0.286	0.005	0.008	0.979
Comp33	0.281	0.035	0.008	0.987
Comp34	0.245	0.040	0.007	0.994
Comp35	0.205	.	0.006	1.000

Figure 8: Scree plot of eigenvalues for personality characteristics items

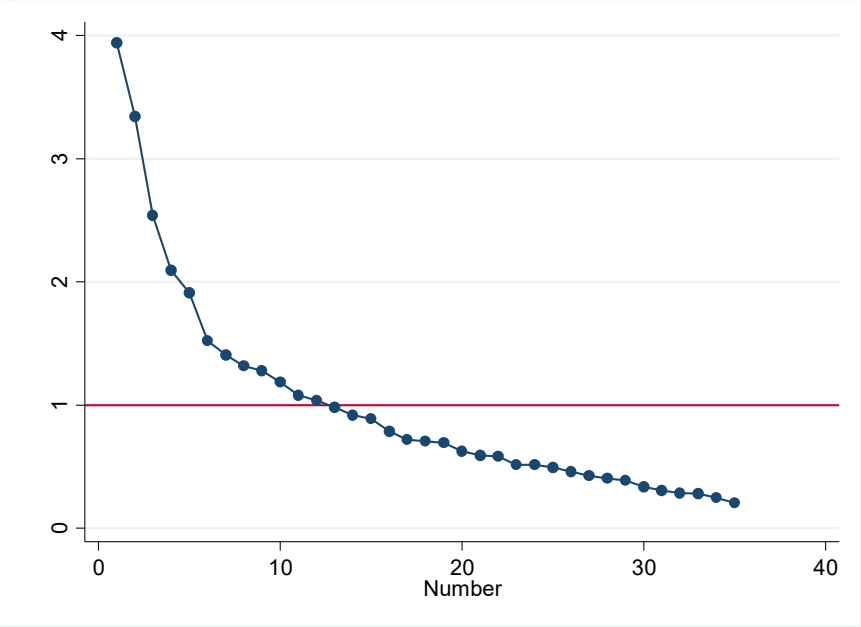


Table 14 shows the eigenvectors with varimax rotation. The original one with no rotation is presented in Appendix 5. Component 1 includes the items of CH11, 'Teacher training helps me to improve my teaching,' CH 26, 'I feel uneasy asking a help from foreign people,' CH27, 'Receiving foreigner's help is a shame on a person's life,' CH14, 'I want to know things that I don't know yet,' and CH8, 'I seek help only after I tries by myself.' Thus, this component can be named as "Self-esteem."

Component 2 includes the items of CH5, 'I think I can solve most of my problems by myself,' CH32, 'For any problem, I tend to hide the fact that I have a problem,' CH7, 'I prefer solving problems by myself,' and CH34, 'I usually do not like talking about my problem with other people.' Therefore, it is named as "Self-disclosure."

Component 3 includes the items of CH22, 'Foreign experts give me good skill to solve my problem,' CH21, 'A teacher who received a training from foreign country improved his teaching,' CH24, 'Information from foreign country is better than my government,' and the CH23, 'If a foreign expert offers me a training, even though I do not have problem, I would accept it.' This component is named as "Expected benefit from foreign help."

Component 4 includes the items of CH20, 'I feel confident after I join a training by government,' CH16, 'Training hosted by government is better than one by foreign

country,' CH30, 'The government always supports my teaching problem,' CH19, 'I prefer getting support from my government instead of foreign country,' and CH17, 'The government officers know what I need to improve my teaching.' Therefore, it can be named as "Expected benefit from government help."

Table 14: Eigenvectors of four components for personality characteristics items (page 1)
(PCA with varimax rotation)

		Component 1	Component 2	Component 3	Component 4
CH11	Teacher training helps me to improve my teaching	0.382			
CH14	I want to know things that I don't know yet	0.304			
CH8	I seek help only after I try by myself first	0.263			
CH13	I like learning English because I can communicate with foreign people	0.244		0.211	
CH6	When I have a problem at school, I would welcome professional advice	0.231			
CH10	A person should work out his problem and get help is a last resort	0.226	0.328		
CH33	I would like to get attention if I face difficulties in my life	-0.204			
CH12	I don't think teacher training will help me so much	-0.280			
CH27	Receiving a foreigner's help is a shame on a person's life	-0.299			
CH26	I feel uneasy asking help from foreign people because of what other people would think	-0.311			0.216
CH5	I think I can solve most of my problems by myself		0.375		
CH32	For any problem, I tend to hide the fact that I have a problem		0.354		
CH7	I prefer solving my problems by myself		0.348		
CH34	I usually do not like talking about my problem with other people		0.334		
CH9	I admire a person who can cope with problems without resorting to seeking help		0.277		
CH35	It is difficult to talk about myself especially with foreign people		0.227		
CH22	Foreign experts give me good skill to solve my problem			0.395	
CH21	A teacher who receives training from a foreign country improved his teaching			0.370	
CH24	Information from foreign country is better than my government			0.356	
CH23	If a foreign expert offers me training, even though I do not have problem, I would accept it			0.339	
CH4	In the near future, I want to have advice about my teaching			0.282	

(page 2)

		Component 1	Component 2	Component 3	Component 4
CH25	Support from a foreign country is generally good			0.270	
CH15	I feel confident after I join training by a foreign expert			0.216	
CH3	I recommend for my colleagues to taking a teacher training			0.204	
CH20	I feel confident after I join training by the government				0.423
CH16	Training hosted by government is better than one by foreign country				0.366
CH30	The government always supports my teaching problem				0.346
CH19	I prefer getting support from my government rather than a foreign country				0.329
CH17	The government officers know what I need to improve my teaching				0.312
CH31	Generally, I talk about personal problem with other people				0.216
CH1	Generally, support for teachers is not enough				
CH2	We need more opportunity to get training for my teaching				
CH18	The government should be responsible for supporting teachers				
CH28	If I receive a foreigner's help, other people might be jealous of me				
CH29	Participating in training by a foreign expert is an honorable thing				
	Proportion	9.2	8.6	8.5	7.8
	Cumulative Proportion	9.2	17.8	26.3	34.0

(Note) The items orders are re-arranged based on the loading values.
It only shows the values which have the loading score above 2.

Network characteristics

Table 15 shows the descriptive statistics of network variables. As to the variable of English-speaking skills, roughly 80 percent of teachers speak some English, including 37.1 percent of teachers speak 'Little,' 26 percent 'Some,' and 17.5 percent 'Fluent.' 14.5 percent of teachers do not speak English at all. Regarding the variable about foreign friends, roughly half of the teachers do not have any foreign friends, whereas the other half have at least one foreign friend. It is indicated that 44.9 percent of teachers answered '0,' and 48.2 percent of teachers answered either for '1-4,' '5-9' or 'over 10.' Concerning the variable about the acquaintances in connection with foreign aid projects, the number of those who know someone is slightly more (52 percent) than those not knowing (45 percent). One-third of the teachers have experienced training by a foreign country while the remaining two-thirds do not have the experience.

milar to the demographic variables, the network variables are also refined as a dichotomous variable. For the English-speaking variable, those who speak English 'Some' and 'Fluently' are coded as 1, and those who speak 'Not at all' and 'Little' are coded as 0. For the foreign friend variable, teachers who have one and more are coded as 1, and those who do not have any are coded as 0. Concerning the variable of an acquaintance in foreign aid projects, those who know someone are coded as 1, and those who do not know anyone are coded as 0. Regarding the experience of the foreign training, those who have the experience are coded as 1, and those who do not are coded as 0.

Table 15: Descriptive summary of network characteristics variables

	N	%		N	%
Speak English			**Number of Foreign Friends**		
Not at all	43	14.5%	0	133	44.9%
Little	110	37.1%	1-4	93	31.4%
Some	77	26%	5-9	28	9.4%
Fluently	52	17.5%	10-	22	7.4%
(missing)	14	4.7%	(missing)	20	6.7%
Acquaintance in foreign projects			**Experience of foreign training**		
Yes	156	52.7%	Yes	100	33.7%
No	136	45.95%	No	191	64.5%
(missing)	4	1.3%	(missing)	5	1.6%

Developed measurement instrument

Table 16 shows a list of the refined variables headed by the name of new variables and the description. The dependent variables consist of thirty-six variables. They capture the basic preference of help-seeking (help-seeking or not help-seeking) and also the preference by help-resource (help-seeking to the formal resource, and help-seeking to the foreign resource). The explanatory variables become fifteen including five demographic variables, two perceived problem variables, four personality variables, and four network variables. The two perceived problem variables are psychological problem variables and pedagogical difficulty variables. The four personality variables are self-esteem, self-disclosure, expected benefit from foreign help and expected benefit from government help.

Table 16: List of refined variables (page 1)

Variable	Description	Code	Type	Obs.	Mean	S.D.	Min	Max
Dependent Variables								
Help-seeking preference								
HSd1	My students not learning	0 = Not seeking help 1 = Seeking somewhere ('Colleague', 'Government' or 'Foreigner')	Categorical (Dichotomous)	295	0.953	0.213	0	1
HSd2	Improve teaching skill			290	0.969	0.174	0	1
HSd3	Cannot explain textbook			285	0.919	0.273	0	1
HSd4	Want to learn effective blackboard use			289	0.799	0.401	0	1
HSd5	Difficulty to keep class quiet			284	0.739	0.440	0	1
HSd6	Lose confidence in teaching			286	0.794	0.405	0	1
HSd7	Difficulty to encourage underachievers			293	0.877	0.329	0	1
HSd8	Feel stress			290	0.862	0.345	0	1
HSd9	Feel helpless			290	0.817	0.387	0	1
HSd10	Lose motivation			290	0.793	0.406	0	1
HSd11	Want students more active			286	0.703	0.458	0	1
HSd12	Lose confidence as a teacher			287	0.819	0.386	0	1
Help resource preference: to formal resources								
HRc1	My students not learning	0 = help from 'Colleagues' 1 = help from 'Government' or 'Foreigner'	Categorical (Dichotomous)	281	0.089	0.285	0	1
HRc2	Improve teaching skill			281	0.470	0.500	0	1
HRc3	Cannot explain textbook			262	0.107	0.310	0	1
HRc4	Want to learn effective blackboard use			231	0.229	0.421	0	1
HRc5	Difficulty to keep class quiet			210	0.090	0.288	0	1
HRc6	Lose confidence in teaching			227	0.414	0.494	0	1
HRc7	Difficulty to encourage underachievers			257	0.167	0.374	0	1
HRc8	Feel stress			250	0.220	0.415	0	1
HRc9	Feel helpless			237	0.236	0.426	0	1
HRc10	Lose motivation			230	0.417	0.494	0	1
HRc11	Want students more active			201	0.244	0.430	0	1
HRc12	Lose confidence as a teacher			235	0.464	0.500	0	1

Variable	Description	Code	Type	Obs.	Mean	S.D.	Min	Max
Help resource preference: to foreign resources								
HRf1	My students not learning	0 = help from 'Government'	Categorical	25	0.480	0.510	0	1
HRf2	Improve teaching skill	1 = help from 'Foreigner'	(Dichotomous)	132	0.333	0.473	0	1
HRf3	Cannot explain textbook			28	0.286	0.460	0	1
HRf4	Want to learn effective blackboard use			53	0.189	0.395	0	1
HRf5	Difficulty to keep class quiet			19	0.000	0.000	0	0
HRf6	Lose confidence in teaching			94	0.266	0.444	0	1
HRf7	Difficulty to encourage underachievers			43	0.209	0.412	0	1
HRf8	Feel stress			55	0.200	0.404	0	1
HRf9	Feel helpless			56	0.304	0.464	0	1
HRf10	Lose motivation			96	0.188	0.392	0	1
HRf11	Want students more active			49	0.327	0.474	0	1
HRf12	Lose confidence as a teacher			109	0.239	0.428	0	1
Explanatory Variables								
Demographic characteristics								
Gender: Female		0= Male 1= Female	Categorical (Dichotomous)	268	0.433	0.496	0	1
Age: Young		0= 35 and over 1= 18-34		284	0.563	0.497	0	1
Subject: Science		0= Liberal art 1= Science		237	0.481	0.501	0	1
Education: Higher education		0= Primary, Secondary 1=IMAP/IFAP and University		270	0.574	0.495	0	1
Location: Urban		0= Rural 1= Urban		284	0.335	0.473	0	1

Variable	Description	Code	Type	Obs.	Mean	S.D.	Min	Max
Perceived problems								
PComp1	Psychological problem		Numerical	232	0	2.155	-3.841	6.075
PComp2	Pedagogical difficulty			232	0	1.309	-4.975	2.320
Personal characteristics								
CComp1	Self-esteem		Numerical	181	0	1.986	-6.302	5.088
CComp2	Self-disclosure			181	0	1.829	-4.689	4.356
CComp3	Expected benefit from Foreign help			181	0	1.594	-5.510	3.941
CComp4	Expected benefit from Government help			181	0	1.446	-3.533	4.854
Network characteristics								
Net1d	Speak English	=1 if speak 'Some'/ 'Fluently'	Categorical (Dichotomous)	282	0.457	0.499	0	1
Net2d	Number of Foreign Friends	=1 if >1		276	0.522	0.500	0	1
Net3d	Know anyone who involves foreign project	0: No 1: Yes		292	0.534	0.500	0	1
Net4d	Experience of training by a foreign country	0: No 1: Yes		291	0.344	0.476	0	1

4.3. Findings 2: Identify the related factors by the help-seeking preferences

Table 17 shows the mean score of teachers who responded 'Nobody' (non-help-seeker) and teachers who responded either 'Colleague,' 'Government,' or 'Foreigner' (help-seeker) per explanatory variable. It has twelve estimations results for twelve dependent variables. It also shows the difference between the mean score and the significance of the calculated t-test statistics.

The table shows that there are several significant differences between the group of teachers who are and who are not prone to seek help for problems. Among the demographic characteristics, the age variable has one significant negative difference in column HS8d. The education variable has a negative difference in five columns, HS1d, HS2d, HS3d, HS5d, and HS7d. It suggests that the non-help-seeker group are usually older and often have a lower level of education. The result for the gender, subject, and location, are not significant.

Regarding the psychological problem variable, the results show one positive difference in the column HS2d and negative differences in the columns of HS10d and HS11d. For the pedagogical difficulty variable, it presents one negative difference in the column of HS11d. The negative signs are in concordance with our expectation, where teachers who are less likely to perceive problems are less likely to seek help. The positive sign in the column HS2d is peculiar, indicating that teachers who have perceived psychological problem tend not to seek help.

Among the personality variables, the result shows two variables, self-esteem and self-disclosure, having a significant difference. The result for the expected benefit from foreign help and government help is insignificant. For the self-esteem variable, it shows two positive differences in the columns of HS3d and HS6d, indicating that teachers who have higher self-esteem are less likely to seek help. The result for the self-disclosure shows a negative sign in the column of HS10d, which implies that teachers who do not disclose themselves tend not to seek help.

Concerning the network characteristics variables, it shows one significant sign for the experience of foreign training in column HS11d with a negative sign. It indicates that teachers who do not have experience of foreign training are less likely to seek help.

Table 17: Differences between non-help-seekers and help-seekers (page 1)

	HSd1			HSd2			HSd3			HSd4			HSd5			HSd6		
	No HS mean	HS mean	Diff.	No HS mean	HS mean	Diff.	No HS mean	HS mean	Diff.	No HS mean	HS mean	Diff.	No HS mean	HS mean	Diff.	No HS mean	HS mean	Diff.
Female	0.38	0.44	-0.05	0.50	0.43	0.07	0.45	0.44	0.02	0.43	0.44	-0.01	0.49	0.41	0.07	0.56	0.41	0.15
Young	0.45	0.57	-0.11	0.75	0.56	0.19	0.64	0.55	0.09	0.52	0.57	-0.06	0.57	0.55	0.02	0.46	0.59	-0.12
Science	0.64	0.47	0.17	0.50	0.48	0.02	0.50	0.48	0.02	0.48	0.48	-0.01	0.43	0.49	-0.05	0.50	0.47	0.03
High education	0.27	0.59	-0.316 *	0.00	0.59	-0.59 ***	0.32	0.61	-0.294 **	0.50	0.60	-0.10	0.49	0.62	-0.138 *	0.52	0.59	-0.07
Urban	0.33	0.34	0.00	0.56	0.33	0.23	0.45	0.33	0.13	0.41	0.33	0.08	0.37	0.32	0.05	0.36	0.33	0.03
Psychological problem	0.44	-0.02	0.46	2.63	-0.05	2.673 **	0.64	-0.07	0.71	-0.12	0.02	-0.14	-0.19	0.03	-0.22	0.40	-0.06	0.46
Pedagogical difficulty	-0.48	0.03	-0.50	-0.86	0.02	-0.88	-0.36	0.03	-0.39	0.05	-0.01	0.06	-0.13	0.07	-0.20	0.06	0.02	0.04
Self-esteem	1.59	-0.07	1.668 *	1.51	0.00	1.51	1.38	-0.11	1.486 *	0.53	-0.09	0.62	0.16	-0.04	0.20	1.08	-0.28	1.363 ***
Self-disclosure	1.02	-0.05	1.07	-0.36	0.02	-0.37	0.53	-0.02	0.55	0.07	0.01	0.06	-0.41	0.14	-0.55	-0.23	0.04	-0.28
Benefit from foreign help	0.17	-0.01	0.18	-0.50	0.00	-0.50	-0.55	0.07	-0.62	-0.48	0.10	-0.57	0.16	-0.06	0.23	0.13	-0.05	0.18
Benefit from government help	-0.32	0.01	-0.34	-0.75	0.04	-0.78	-0.19	0.00	-0.19	0.13	0.01	0.12	-0.02	0.01	-0.04	-0.38	0.10	-0.49
Speak English	0.62	0.45	0.17	0.78	0.45	0.33	0.41	0.46	-0.05	0.45	0.45	0.00	0.43	0.46	-0.03	0.41	0.46	-0.05
Foreign friend	0.43	0.52	-0.09	0.25	0.53	-0.28	0.41	0.53	-0.12	0.44	0.53	-0.10	0.51	0.53	-0.02	0.46	0.54	-0.07
Acquaintance in foreign project	0.50	0.54	-0.04	0.22	0.54	-0.32	0.48	0.53	-0.05	0.47	0.55	-0.07	0.53	0.55	-0.01	0.50	0.54	-0.04
Experience of foreign training	0.50	0.34	0.16	0.56	0.33	0.22	0.22	0.35	-0.14	0.26	0.37	-0.11	0.33	0.36	-0.03	0.38	0.33	0.05

	HSd7			HSd8			HSd9			HSd10			HSd11			HSd12		
	No HS mean	HS mean	Diff.	No HS mean	HS mean	Diff.	No HS mean	HS mean	Diff.	No HS mean	HS mean	Diff.	No HS mean	HS mean	Diff.	No HS mean	HS mean	Diff.
Female	0.36	0.44	-0.08	0.49	0.43	0.05	0.53	0.41	0.12	0.46	0.42	0.03	0.45	0.43	0.01	0.50	0.42	0.08
Young	0.61	0.56	0.05	0.40	0.58	-0.18 *	0.44	0.58	-0.14	0.47	0.59	-0.11	0.52	0.57	-0.05	0.53	0.58	-0.05
Science	0.55	0.46	0.09	0.48	0.48	0.00	0.47	0.49	-0.02	0.46	0.49	-0.03	0.44	0.49	-0.05	0.47	0.49	-0.02
High education	0.33	0.61	-0.278 **	0.48	0.59	-0.11	0.61	0.57	0.04	0.61	0.57	0.04	0.55	0.61	-0.06	0.53	0.58	-0.05
Urban	0.31	0.33	-0.02	0.30	0.34	-0.04	0.39	0.33	0.07	0.31	0.35	-0.04	0.29	0.36	-0.06	0.29	0.35	-0.06
Psychological problem	0.09	-0.03	0.12	0.00	-0.04	0.04	-0.03	0.02	-0.05	-0.54	0.15	-0.694 *	-0.42	0.18	-0.608 *	-0.44	0.11	-0.55
Pedagogical difficulty	-0.37	0.06	-0.43	0.06	-0.01	0.07	0.02	0.00	0.03	0.08	-0.04	0.12	-0.29	0.13	-0.425 *	-0.02	0.01	-0.03
Self-esteem	0.39	-0.06	0.45	0.41	-0.08	0.49	-0.11	0.03	-0.14	-0.16	0.04	-0.20	0.07	-0.06	0.14	0.50	-0.09	0.59
Self-disclosure	0.09	0.02	0.07	-0.41	0.07	-0.48	-0.23	0.05	-0.28	-0.60	0.17	-0.767 *	-0.27	0.14	-0.41	-0.35	0.06	-0.41
Benefit from foreign help	0.44	-0.03	0.47	0.19	-0.03	0.21	0.24	-0.06	0.30	0.31	-0.09	0.40	0.10	-0.05	0.15	0.23	-0.07	0.30
Benefit from government help	-0.32	0.02	-0.34	-0.47	0.09	-0.56	-0.23	0.05	-0.28	-0.32	0.10	-0.43	-0.19	0.07	-0.25	-0.29	0.06	-0.34
Speak English	0.59	0.44	0.15	0.54	0.45	0.09	0.39	0.47	-0.08	0.45	0.46	0.00	0.48	0.44	0.04	0.53	0.43	0.10
Foreign friend	0.47	0.53	-0.06	0.50	0.52	-0.02	0.52	0.52	0.00	0.46	0.54	-0.07	0.44	0.54	-0.09	0.48	0.52	-0.04
Acquaintance in foreign project	0.61	0.52	0.09	0.50	0.53	-0.03	0.50	0.54	-0.04	0.53	0.54	-0.01	0.45	0.56	-0.11	0.43	0.56	-0.12
Experience of foreign training	0.39	0.34	0.05	0.28	0.36	-0.08	0.31	0.35	-0.04	0.34	0.35	-0.01	0.25	0.38	-0.124 *	0.29	0.35	-0.05

(Note) * p＜0.1, ** p< 0.05, *** p < 0.01

Table 18 shows the result of the comparison between the group who seeks help from the 'Colleague' (informal resource seeker), and those the one who seeks help from either 'Government' or 'Foreigner' (formal resource seeker).

The result shows all five demographic variables characteristics with statistically significant differences in at least one column. For the gender and subject variables, it shows two significant signs in the columns of HRc11 and HRc12, and in the columns of HRc2 and HRc5, respectively. For the age, education, and location, the result presents one significant difference in the columns of HRc1, HRc2, and HRc9. These results suggest that teachers who do not seek help to formal resources are usually male, younger, from a rural area, and often teach science subject, and have a lower level of education.

In relating to the perceived problem variables, the table shows five significant differences for the psychological problem in the columns of HRc2, HRc5, HRc6, HRc10 and HRc12, and three for the pedagogical difficulty in the columns of HRc7, HRc9, and HRc11. The differences are all positive except one in the column of HRc5. The positive results are not in concordance with our expectation. It indicates that teachers who perceive problems more are less likely to seek help from the formal resources. They tend to prefer the informal resource. The negative sign in the column HRc5 indicates that teachers who perceive problems less are more likely to seek help from the formal resource.

Regarding the personality characteristics, the result shows the significant difference for the expected benefit from foreign help in the column of HRc4 and the expected benefit from government help in the column HRc9. These results are either not in concordance with our expectation. It suggests that teachers who have a higher level of expected benefits from the formal resource tend to seek help from a colleague.

Concerning the network variables, the results for two variables are significant. For the variables of foreign friends, the result shows the significant negative differences in the columns of HRc2 and HRc12. It suggests that teachers who do not have foreign friends are less likely to seek help from the formal resource. The result also shows the positive differences for the variables of experience of foreign training in the column of

HRc4, HRc6, HRc9, HRc10, HRc12. These results do not correspond to our expectation. The teachers who have experience of foreign training are less likely to seek help from the formal resource.

Table 18: Differences between informal resource seekers and formal resource seekers (page 1)

	HRc1			HRc2			HRc3			HRc4			HRc5			HRc6		
	Informal mean	Formal mean	Diff.	Informal mean	Formal mean	Diff.	Informal mean	Formal mean	Diff.	Informal mean	Formal mean	Diff.	Informal mean	Formal mean	Diff.	Informal mean	Formal mean	Diff.
Female	0.44	0.39	0.05	0.45	0.40	0.05	0.43	0.52	-0.09	0.43	0.45	-0.01	0.41	0.50	-0.09	0.37	0.47	-0.11
Young	0.59	0.36	0.227 *	0.59	0.52	0.07	0.54	0.59	-0.05	0.54	0.69	-0.15	0.54	0.67	-0.12	0.59	0.58	0.01
Science	0.46	0.58	-0.13	0.56	0.40	0.158 *	0.49	0.43	0.05	0.50	0.43	0.07	0.51	0.25	0.260*	0.50	0.42	0.09
High education	0.58	0.73	-0.15	0.53	0.66	-0.132 *	0.61	0.65	-0.04	0.60	0.60	0.01	0.64	0.50	0.14	0.56	0.62	-0.05
Urban	0.33	0.42	-0.09	0.33	0.33	0.00	0.33	0.30	0.03	0.32	0.37	-0.05	0.32	0.39	-0.07	0.35	0.31	0.04
Psychological problem	0.03	-0.66	0.69	0.46	-0.60	1.067 ***	0.00	-0.57	0.56	0.19	-0.52	0.71	-0.14	1.78	-1.911 ***	0.32	-0.54	0.855 **
Pedagogical difficulty	0.06	-0.36	0.42	-0.01	0.04	-0.06	0.07	-0.28	0.35	0.07	-0.25	0.32	0.12	-0.43	0.55	0.11	-0.10	0.21
Self-esteem	-0.12	0.34	-0.46	0.12	-0.10	0.22	-0.12	0.01	-0.14	-0.01	-0.33	0.32	-0.06	0.27	-0.32	-0.25	-0.32	0.07
Self-disclosure	-0.13	0.73	-0.87	-0.27	0.25	-0.52	-0.09	0.56	-0.65	-0.02	0.11	-0.14	0.15	-0.12	0.27	-0.23	0.33	-0.57
Benefit from foreign help	-0.01	0.05	-0.07	0.04	-0.03	0.07	0.03	0.35	-0.32	0.25	-0.40	0.652*	-0.01	-0.95	0.95	0.18	-0.29	0.47
Benefit from government help	0.01	0.06	-0.05	-0.06	0.12	-0.18	0.01	-0.08	0.09	-0.03	0.15	-0.18	-0.01	0.32	-0.32	0.14	0.06	0.08
Speak English	0.44	0.52	-0.08	0.42	0.49	-0.07	0.47	0.38	0.09	0.46	0.41	0.05	0.45	0.53	-0.08	0.43	0.50	-0.07
Foreign friend	0.52	0.57	-0.05	0.44	0.62	-0.179 **	0.53	0.54	-0.01	0.53	0.55	-0.02	0.54	0.40	0.14	0.49	0.60	-0.11
Acquaintance in foreign project	0.53	0.56	-0.03	0.57	0.51	0.06	0.53	0.57	-0.04	0.55	0.53	0.02	0.54	0.58	-0.03	0.56	0.52	0.04
Experience of foreign training	0.35	0.16	0.19	0.36	0.29	0.07	0.37	0.22	0.15	0.40	0.25	0.153 *	0.35	0.42	-0.07	0.40	0.24	0.165 **

(page 2)

	HRc7			HRc8			HRc9			HRc10			HRc11			HRc12		
	Informal mean	Formal mean	Diff.	Informal mean	Formal mean	Diff.	Informal mean	Formal mean	Diff.	Informal mean	Formal mean	Diff.	Informal mean	Formal mean	Diff.	Informal mean	Formal mean	Diff.
Female	0.42	0.57	-0.15	0.42	0.48	-0.06	0.40	0.45	-0.05	0.42	0.43	-0.01	0.37	0.63	-0.259 **	0.34	0.50	-0.164 *
Young	0.54	0.64	-0.10	0.57	0.60	-0.03	0.60	0.53	0.07	0.55	0.63	-0.08	0.55	0.62	-0.07	0.61	0.54	0.06
Science	0.47	0.42	0.05	0.49	0.48	0.01	0.49	0.49	0.00	0.53	0.45	0.08	0.48	0.54	-0.06	0.53	0.44	0.09
High education	0.61	0.63	-0.02	0.58	0.65	-0.07	0.57	0.56	0.01	0.54	0.62	-0.08	0.62	0.58	0.04	0.52	0.65	-0.13
Urban	0.32	0.40	-0.09	0.33	0.35	-0.01	0.28	0.46	-0.18 *	0.38	0.30	0.08	0.34	0.40	-0.06	0.36	0.33	0.03
Psychological problem	-0.09	0.29	-0.38	-0.02	-0.11	0.09	0.13	-0.34	0.47	0.57	-0.41	0.979 **	0.26	-0.12	0.38	0.62	-0.47	1.095 ***
Pedagogical difficulty	0.18	-0.54	0.723 **	-0.01	0.00	-0.01	0.13	-0.46	0.594*	0.05	-0.16	0.20	0.23	-0.25	0.476 *	-0.05	0.07	-0.12
Self-esteem	-0.18	0.50	-0.68	-0.07	-0.13	0.07	-0.08	0.42	-0.50	0.08	0.00	0.08	-0.04	-0.11	0.06	0.15	-0.29	0.45
Self-disclosure	0.02	0.03	-0.01	-0.09	0.50	-0.59	-0.01	0.29	-0.31	0.16	0.17	-0.01	0.00	0.55	-0.56	-0.27	0.34	-0.60
Benefit from foreign help	-0.01	-0.15	0.15	0.12	-0.41	0.53	-0.11	0.11	-0.22	0.07	-0.25	0.32	0.01	-0.23	0.25	0.01	-0.13	0.14
Benefit from government help	-0.05	0.35	-0.40	0.21	-0.23	0.43	0.18	-0.40	0.576*	0.16	0.04	0.12	0.10	-0.02	0.12	0.12	0.00	0.12
Speak English	0.44	0.43	0.01	0.42	0.53	-0.10	0.49	0.39	0.11	0.42	0.52	-0.10	0.45	0.43	0.01	0.38	0.50	-0.12
Foreign friend	0.54	0.49	0.05	0.50	0.60	-0.09	0.51	0.53	-0.02	0.50	0.60	-0.10	0.52	0.60	-0.09	0.45	0.60	-0.152 *
Acquaintance in foreign project	0.51	0.58	-0.07	0.50	0.65	-0.15	0.52	0.63	-0.11	0.50	0.58	-0.08	0.57	0.54	0.02	0.56	0.56	0.00
Experience of foreign training	0.34	0.33	0.01	0.38	0.28	0.10	0.39	0.24	0.149 *	0.41	0.26	0.152 *	0.39	0.32	0.08	0.40	0.28	0.124 *

(Note) * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Lastly, Table 19 shows the mean score for each group and the differences between the teacher group who seeks help from the 'Government' (Domestic resources seeker) and those who seeks help from 'Foreigner' (foreign resources seeker). The table has only for eleven columns instead of twelve because there was no one who responded to seek help from a foreign resource for question 5. The question was about 'If I face difficulty to keep my class quiet, I would go.'

For the demographic variables, the result shows the statistical differences for three variables: gender, age, and education. It indicates that teacher who seeks help from foreign resources instead of government resources are usually male, young, and often have a higher level of education.

Regarding the perceived problem variable, both of the results are not significant.

Among the personality variables, three variables appear with a significant difference. The result for the self-disclosure variable is negative in three columns: HRf2, HRf3, and HRf12. It indicates that teachers who disclose themselves more are more likely to seek help from a foreign resource. The difference for the expected benefit of government help is positive in three columns: HRf2, HRf6, and HRf9. It indicates that teachers who have a high level of expected benefit of government help are more likely to seek help from a government resource. The result for the expected benefit of foreign help is also strangely positive in column HRf2. It implies that teachers who have a high level of expected benefit of foreign help tend to seek help from the government resource.

Considering the network variables, the results for all four variables are statistically significant in at least one column. The results for speaking English and for having foreign friends have a negative and significant difference in column HRf9. The results for an acquaintance in a foreign project are negative and statistically significant in column HRf9 and HRf10. These results indicate that teachers who do not speak English, who do not have foreign friends, and who do not know anyone in foreign projects are less likely to seek help from a foreign resource. For the variable of experience of foreign training, the result shows are positive and statistically significant in column HRf2. It suggests that teachers who have experience of foreign training are less likely to seek help from a foreign resource.

Table 19: Differences between domestic resources seekers and foreign resource seekers (page 1)

	HRf1			HRf2			HRf3			HRf4			HRf6		
	Dome mean	Foreign mean	Diff.	Dome mean	Foreign mean	Diff.	Dome mean	Foreign mean	Diff.	Dome mean	Foreign mean	Diff.	Dome mean	Foreign mean	Diff.
Female	0.36	0.42	-0.05	0.43	0.33	0.10	0.50	0.60	-0.10	0.46	0.40	0.06	0.54	0.29	0.248 *
Young	0.31	0.42	-0.11	0.44	0.70	-0.262 **	0.55	0.71	-0.16	0.66	0.80	-0.14	0.52	0.75	-0.23
Science	0.58	0.58	0.00	0.36	0.50	-0.14	0.35	0.67	-0.31	0.36	0.70	-0.34	0.39	0.48	-0.09
High education	0.60	0.83	-0.23	0.70	0.58	0.12	0.56	0.86	-0.30	0.62	0.50	0.12	0.57	0.75	-0.18
Urban	0.38	0.45	-0.07	0.33	0.35	-0.02	0.25	0.43	-0.18	0.40	0.20	0.21	0.34	0.21	0.14
Psychological problem	-0.50	-0.89	0.39	-0.70	-0.38	-0.32	-0.32	-1.31	0.99	-0.65	0.13	-0.78	-0.68	-0.18	-0.50
Pedagogical difficulty	-0.43	-0.27	-0.15	0.14	-0.16	0.30	-0.10	-0.80	0.70	-0.18	-0.66	0.49	0.08	-0.55	0.63
Self-esteem	0.56	0.14	0.42	-0.33	0.39	-0.72	-0.11	0.41	-0.51	-0.58	0.72	-1.30	-0.28	-0.43	0.16
Self-disclosure	-0.08	1.46	-1.54	-0.05	0.91	-0.954*	-0.07	2.60	-2.667 **	0.29	-0.65	0.94	0.19	0.70	-0.51
Benefit from foreign help	0.65	-0.48	1.12	0.19	-0.51	0.704 *	0.30	0.52	-0.22	-0.16	-1.41	1.25	-0.13	-0.70	0.57
Benefit from government help	0.08	0.03	0.04	0.41	-0.51	0.917 **	0.15	-0.82	0.97	0.21	-0.10	0.31	0.34	-0.62	0.965 **
Speak English	0.46	0.58	-0.12	0.45	0.57	-0.12	0.39	0.38	0.01	0.40	0.44	-0.04	0.45	0.63	-0.17
Foreign friend	0.50	0.64	-0.14	0.59	0.67	-0.08	0.50	0.63	-0.13	0.60	0.33	0.26	0.58	0.67	-0.09
Acquaintance in foreign project	0.54	0.58	-0.04	0.45	0.61	-0.16	0.60	0.50	0.10	0.56	0.40	0.16	0.44	0.72	-0.279 *
Experience of foreign training	0.15	0.17	-0.01	0.36	0.16	0.198 *	0.25	0.14	0.11	0.24	0.30	-0.06	0.25	0.20	0.05

	HRf7			HRf8			HRf9			HRf10			HRf11			HRf12		
	Dome mean	Foreign mean	Diff.	Dome mean	Foreign mean	Diff.	Dome mean	Foreign mean	Diff.	Dome mean	Foreign mean	Diff.	Dome mean	Foreign mean	Diff.	Dome mean	Foreign mean	Diff.
Female	0.59	0.50	0.09	0.51	0.36	0.15	0.50	0.33	0.17	0.44	0.41	0.02	0.70	0.46	0.24	0.48	0.57	-0.08
Young	0.62	0.75	-0.13	0.57	0.73	-0.16	0.50	0.59	-0.09	0.59	0.82	-0.23	0.55	0.79	-0.24	0.50	0.68	-0.18
Science	0.45	0.33	0.12	0.43	0.70	-0.28	0.50	0.47	0.03	0.42	0.56	-0.15	0.46	0.67	-0.21	0.44	0.45	-0.02
High education	0.61	0.67	-0.05	0.58	0.91	-0.334 *	0.46	0.76	-0.308 *	0.58	0.78	-0.20	0.46	0.80	-0.336 *	0.62	0.73	-0.11
Urban	0.44	0.25	0.19	0.34	0.36	-0.02	0.43	0.53	-0.10	0.29	0.35	-0.06	0.42	0.36	0.06	0.33	0.33	0.00
Psychological problem	0.51	-0.58	1.09	0.00	-0.67	0.67	-0.31	-0.43	0.12	-0.38	-0.53	0.16	-0.41	0.52	-0.94	-0.42	-0.67	0.26
Pedagogical difficulty	-0.45	-0.91	0.47	-0.02	0.11	-0.13	-0.37	-0.68	0.31	-0.30	0.43	-0.73	-0.42	0.13	-0.55	0.12	-0.07	0.18
Self-esteem	0.31	1.03	-0.73	-0.15	-0.07	-0.08	0.70	-0.01	0.72	-0.10	0.41	-0.51	-0.30	0.26	-0.56	-0.21	-0.51	0.31
Self-disclosure	-0.07	0.30	-0.36	0.26	1.25	-0.99	-0.35	1.27	-1.62	0.08	0.55	-0.47	0.45	0.75	-0.30	0.06	1.06	-0.996*
Benefit from foreign help	0.03	-0.67	0.71	-0.25	-0.92	0.67	0.20	-0.02	0.22	-0.30	-0.02	-0.28	0.07	-0.82	0.89	0.03	-0.54	0.57
Benefit from government help	0.55	-0.21	0.76	-0.13	-0.55	0.42	0.12	-1.19	1.315 ***	0.18	-0.55	0.73	0.28	-0.59	0.87	0.08	-0.21	0.29
Speak English	0.42	0.44	-0.02	0.52	0.55	-0.02	0.29	0.63	-0.336 *	0.52	0.50	0.02	0.43	0.44	0.00	0.48	0.54	-0.06
Foreign friend	0.50	0.44	0.06	0.54	0.82	-0.28	0.39	0.82	-0.435 **	0.58	0.69	-0.11	0.64	0.53	0.11	0.57	0.69	-0.13
Acquaintance in foreign project	0.56	0.67	-0.11	0.67	0.55	0.13	0.51	0.88	-0.370 **	0.53	0.83	-0.308 *	0.53	0.56	-0.03	0.52	0.65	-0.13
Experience of foreign training	0.32	0.33	-0.01	0.33	0.09	0.24	0.21	0.31	-0.11	0.26	0.28	-0.02	0.39	0.19	0.20	0.32	0.16	0.16

(Note) * p＜0.1, ** p< 0.05, *** p < 0.01

4.4. Summary

This chapter performed two statistical examinations by using 296 teacher's survey data in Mozambique. First, it tested the validity of the framework suggested in the previous chapter. The validation solved some of the uncertainties concerned in the previous chapter by clarifying the specific help-resources and related factors in the case of teachers in Mozambique. Then, it also examined the specific factors related to the help-seeking preferences that vary by the help-resources.

In section 4.1, the questionnaire was constructed based on the knowledge derived from previous observations. It consisted of sixty-seven questions, including demographic information (5 questions), teacher's perceived problems (12 questions), help-seeking preferences (12 questions), network characteristics (4 questions) and personal characteristics (35 questions). With this questionnaire, the 296-survey data was collected in Mozambique.

In section 4.2, first, the responses of questionnaires were examined by the descriptive statistics. For the help-seeking preferences, the data confirmed a variation of the help-seeking preferences and resource preferences. The responses of the perceived problems and the personality were constructed into two and four new variables by using the principal component analysis. The variables of the perceived problem became a psychological problem and pedagogical difficulty. The variables of personality became self-esteem, self-disclosure, expected benefit from foreign help, and expected benefit from the government. Consequently, the total explaining variables became fifteen.

Section 4.3 examined the mean scores of the above-refined variables by two groups that were divided by the responses from the help-seeking preferences and estimated the differences between the two groups using the t-test. The estimations were conducted for three comparative groups to see the specific factors which differed by seeking help from three help resources. The first comparison was between the non-help seekers and the help-seekers. The second one was between the informal resource seekers and the formal resources seekers. The third one was between the domestic resource seekers and the foreign resource seekers.

Frist result suggested that the decision whether or not teacher seeks help or not is depended on age, education level, psychological problem, pedagogical difficulty, self-esteem, self-disclosure, and experience of foreign training. The second analysis showed that the decision considering whether teachers seek help to informal resources or formal resources is associated with all demographic factors including gender, age, subject, location, education level, perceived problem factor including psychological problem and pedagogical difficulty, expected benefit from both foreign and government help, foreign friends, and previous experience. The third analysis found that the decision concerning whether teacher seek help to domestic resources or foreign resources is related to factors of gender, age, education level, self-disclosure, expected benefit from foreign and government help, all network factors including speaking English, foreign friends, acquaintance of foreign project, and previous experience of foreign training.

CHAPTER V – Discussion

The two preceding chapters have found the help-resources and related factors of teacher's help-seeking in Mozambique. Using the findings above, this chapter considers the propositions that answer this study's research question and furthermore provides the implications of the propositions to this study's starting concern, which was to understand grassroots needs. In particular, the chapter first illustrates the process of help-seeking and then proposes several new insights to understand the grassroots needs. The guiding question for the former part is 'What is the process of teachers' help-seeking in Mozambique?' and the one for the latter part is "What does it mean to understand grassroots needs?"

Section 5.1 will first define a frame of teachers' help-seeking process referring to the Takaki's (1998) model. Then, it will consider which factors can explain the help-seeking preference, and also at what stage they explain by reviewing the three comparative estimations conducted previously. The identified factors will be arranged in a row within the framework. For the arrangement of orders and adding the interpretation, the analysis will use the findings of qualitative research as supplemental evidence. By doing this, this section will build a teacher's help-seeking process.

Section 5.2 will discuss the significance of revealing the process for understanding grassroots needs. It considers how the knowledge of the need emergence process deepen our understanding of the grassroots needs, and what approach the new knowledge can suggest for the better understanding the grassroots needs.

5.1. Framing the process of teachers' help-seeking

This study refers to Takagi's (1998) model to describe the process of help-seeking. As reviewed before, his model describes relatively more detailed steps with seven stratified factors (Figure 4). In the process, the factors serve as a junction that divides one's decision into help-seeking or not help-seeking. By referring to this idea, this study first identifies factors that can serve as a junction and then arranges them in order to

illustrate the process.

While the Takagi's model describes the process until the point whether one seeks help or not, this study extends the illustration until the point to which a help-resource is chosen. Therefore, the study adds two more blocks on top of Takagi's model, creating a three-block frame: The first block includes up to the help-seeking, the second one thereafter includes the formal resources, and the third one includes up to the help-seeking from a foreigner. With this frame, the previous three statistical estimations are compared and identified as to which factors fit into which block.

Table 20 shows the consolidated table of Table 17, Table 18, and Table 19. Headlines of columns are now named (a), (b) and (c), respectively. A simplified triangle represents statistically significant differences. The white upward pointing triangle indicates a positive value of the difference and a black downward triangle indicates a negative value. The number of triangles corresponds to the number of significant difference in the three original tables. If a cell has a lot of triangular marks, it means the result is robust.

Table 20: Results of three estimations

	(a) Help-seeking preference: No help seeker	(b) Help resources preference: Informal resource seeker	(c) Help resources preference: Domestic resource seeker
Female		▼▼	△
Young	▼	△	▼
Science		△△	
Higher education	▼▼▼▼▼	▼	▼▼▼
Urban		▼	
Psychological problem	△▼▼	△▼△△△	
Pedagogical difficulty	▼	△△△	
Self-esteem	△△		
Self-disclosure	▼		▼▼▼
Expected benefit from foreign help		△	△
Expected benefit from gov. help		△	△△△
Speak English			▼
Foreign Friends		▼▼	▼
Acquaintance in foreign project			▼▼▼
Experience of foreign training	▼	△△△△△	△

(Note) △ indicates a positive values and ▼ indicates a negative values.

The comparison of three results shows that result (a) has four unique variables including education, psychological problems, pedagogical difficulties, and self-esteem. For the education variable, the result (a) has robust results with five significant marks, whereas result (b) has only one, and the result (c) has three. It indicates that the non-help-seeker group includes teachers who have a lower level of education. Regarding the perceived problem variables, three negative signs including two for psychological problems and one for pedagogical difficulty, are distinctive as the other two results do not have such robustness. Concerning the self-esteem variable, it appears with two positive signs whereas the other results do not have any.

Based on this observation, the process until a decision of help-seeking can be illustrated using two steps; the problem awareness and self-esteem. It explains that these two factors affect the teacher's decisions whether they seek help or not mostly. It can be understood that teachers who do not recognize problems and teachers who have high self-esteem tend not to seek help. In addition, the evidence of the interview data suggests that these two steps have an order of influence. Teacher C stated, "even if I face a problem, I will not request help. If I do so, I lose my self-respect." Thus, the problem awareness factor would precede the self-esteem factor. These teachers have different reasons for not-seeking-help, and thus can be classified as *Innocents* and *High self-esteemer*, respectively.

The table shows that result (b) has five unique variables for teachers who do not seek help from formal resources. The first two are the demographic variables. The gender (female) variable with two negative signs and subject (science) variable with two positive signs appeared only at the result (b) and not at other two results. It suggests that the teachers who do not seek help from formal resources tend to be males and science teachers. Another two unique variables are the perceived problem variables. The positive signs for four of the psychological problems and three of the pedagogical difficulties are particularly notable. In respect to the variable for previous experience of foreign training, the result (b) shows five positive signs whereas the other two have only one.

These features suggest that there are two steps in the process from a point when

one decides to seek help from a point when one decides to seek help from the formal resource. The steps are the severity of the problem and previous experience of foreign training. It can explain that teachers who perceive problem more and the teachers who have previous experience of foreign training tend not to seek help from the formal resource. These two types of teachers in this block can be named as *Self-helper* and *Foreign aid disappointer*, respectively.

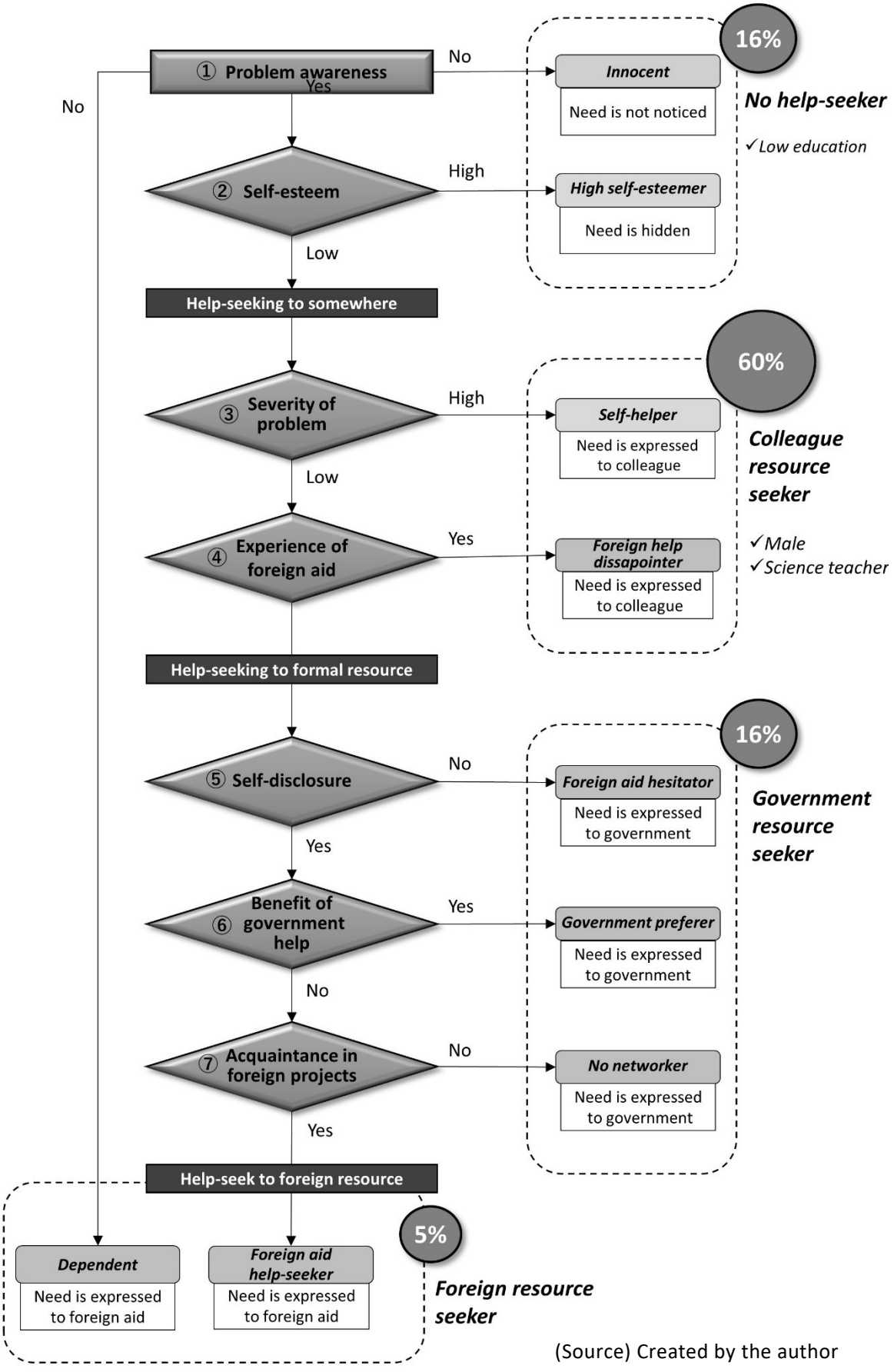
The table shows that result (C) has three critical variables. The first two are related to the personality variables. Three negative signs of self-disclosure and three positive signs of expected benefit from government help are unique compared with the other two results. The variable for an acquaintance with foreign projects appears as significant only with the result (c). These features imply three steps for the help-seeking process until the decision that teachers seek help from the formal resource. It can be understood that teachers who do not like to disclose themselves, who see a high expected benefit from government help, who do not have an acquaintance in foreign friends are less likely to seek help from the foreign resource. These teachers can be classified as a *Hesitator*, *Government preferer*, and *No-networker*.

Lastly, the results suggest a different path by a peculiar sign appeared at the variable of psychological problem in columns (a). It indicates that teachers who do not psychological problems are more likely to seek help. In the survey data, there were twelve teachers who perceived zero problems but wanted to seek help from foreign aid for all virtual problems. It indicates that there is a direct path apart from the step-by-step process. These teachers are then categorized as *Dependent*.

Figure 9 presents the illustration of teachers' help-seeking process in Mozambique. It consists of seven steps and includes nine types of teacher. The figure explains the need emergence continuum that needs exist first as latent, and then becomes explicit. In the descriptive statistics of help-seeking preference of Table 6, it showed that the teachers' preferences of help-resources are composed of 16 percent for 'Noboey,' 60 percent for 'Colleague,' 16 percent for 'Government,' and 5 percent for 'Foreign.' By applying these data to the Figure, the proportion for four groups can be added as 16 percent for 'No help-seeker,' 60 percent for 'Colleague resource seeker,' 16 percent for

‘Government resource seeker,’ and 5 percent for ‘Foreign resource seeker.’

Figure 9: Teachers' help-seeking process in Mozambique



(Source) Created by the author

5.2. Insights into understanding grassroots needs

Revealing the process of need emergence elicits several new insights into understanding the grassroots needs. Firstly, it provides a conceptual picture of the whole grassroots needs. Figure 9 describes the explicit and implicit grassroots needs that exist in various conditions for various reasons. The survey data for the case study implied that the previous literature might recognize only five percent of the whole or at most 21 percent (5 + 16 percent) when including the needs expressed to government and foreing resources. It means that foreign aid providers may be unaware of the remaining 76 percent (16 + 60 percent). The data also implicates that these unknown needs represent those of teachers who have a low level of education, are male, and are science teachers.

The second insight is that the implicit needs include two types of needs: the needs that teachers do not express and ones that teachers cannot express. The former implicit needs are the ones held by teacher groups including *High self-esteemer*, *Self-helper*, *Foreign aid disappointer*, and *Government preferer,* and the latter are the ones held by the *Innocent, Hesitator,* and *No-networkers* as described in Table 21. The former group's teachers do not express needs for foreign aid seemingly because they need to keep their self-esteem (High self-esteemer), they want to solve the problems by themselves (Self-helper), or they prefer the government's help (Government preferer). The decision of this group not-seeking-help would be positive or directed by preferences related to the national pride and self-help efforts. On the other hand, the latter group's teachers do not seek help because they do not recognize problems (Innocent), they do not wish to disclose themselves (Hesitator), or they do not know how to seek help (No-networker). This group's decision would be more negative and induced by no choice. Finding these two types of implicit needs suggests the importance of respecting grassroots people's self-effort rather than disproportionately questioning why the implicit needs are not expressed.

Table 21: Two types of implicit needs and teacher types

	To somewhere	To Formal resource	To Foreign resource
Need ARE NOT expressed by	***High self-esteemer***	***Self-helper*** ***Foreign disappointer***	***Government preferer***
Need CAN NOT be expressed by	***Innocent***		***Hesitator*** ***No-networker***

This insight about grassroots needs elicit a new approach in educational aid practice to ensure a better understanding of the grassroots needs. It suggests that there is a need to support the grassroots people, particularly the *Innocent*, *Hesitator*, and *No-networker*, to perform the appropriate help-seeking. It is their freedom to decide whether they express their needs or not, and to whom they express their needs. The problem would be that they cannot make a decision for help-seeking as they wish. For the *Innocent* teacher group, support to increase their needs-literacy would be needed. For the Hesitator, support to remove the psychological obstacles for seeking help would be suggested. For the Non-networker, support to connect to foreign aid would promote their help-seeking. In the previous approach to finding grassroots needs, efforts have been directed to how foreign aid providers accurately grasp grassroots needs. It is, of course, crucial that they try to identify needs, and without the effort, educational aid would not meet needs as evidenced by previous literature. However, as this study implies, expressing needs by grassroots people is also important, and with it lay the foundation for the third party to recognize. Following Ueno's (2011) argument that needs can become an explicit need by approving from both a person in need and a third party, grassroots people's efforts to express their needs requires being disserted in addition to aid provider's effort to identify needs for an accurate understanding of grassroots needs.

The third insight is that the explicit needs include the needs that are actually in need and the ones that are blindly requested. The former needs are the ones expressed by the *Foreign aid help-seeker*, and the latter expressed by the *Dependent*. This insight calls into question the previous literature as well as the current practices of foreign aid

responding to explicit needs without any systematic judgment about which explicit needs are the ones to which they should respond. Even though the needs are expressed, if grassroots people can solve them, or if they are blindly expressed, they do not require help from the foreign aid providers. This study reveals the national pride and self-help efforts of grassroots people, but the foreign aid should not ignore them. If the foreign aid providers keep helping them nevertheless, the help will become selfish aid. There is a risk that if the foreign aid blindly responds to all the explicit needs, it will result in promoting the proportion of the *Dependents* and will consequently disenable them. To appropriately judge whether the needs expressed to the foreign aid are the one that the foreign aid providers are supposed to respond to, a new framework is needed.

By illustrating the need emergence as a model, the study could visually demonstrate the process and the implicit needs that the previous literature has recognized merely conceptually. It further provided three new insights about grassroots needs and also produces two new practical approaches to be taken.

CHAPTER VI – Conclusion

This study revealed the process of need emergence by using a case of teachers in Mozambique and the concept of help-seeking and provided new insights to understand grassroots needs. The study first demonstrated the conceptual framework to understand grassroots needs by using a qualitative research approach. Then, it developed an analytical framework for the case of teachers in Mozambique and proved its validity by using a quantitative research approach. Lastly, the study developed a model which explains the process of need emergence of teachers in Mozambique. This last chapter overviews the examinations conducted, and the knowledge obtained in four central chapters and also considers some of the limitations which also can be interesting opportunities they provide for future research.

6.1. Examinations and knowledge obtained

This study started with a concern about the accurate understanding of grassroots needs, which has been assessed in the recent discussion on whether the educational aid meets the grassroots needs. The literature review showed that there is a deficiency of knowledge about the grassroots needs and that the past literature does not look at the process of need emergence. Therefore, this study set the objective to elucidate the process of need emergence. To achieve this objective, the study took the sample of teachers in Mozambique as an example of grassroots people and used the concept of help-seeking as a theoretical framework. The examination proceeded in four chapters. The knowledge obtained from them can be summarized in the following four points. These four points correspond to the guiding questions raised in chapter 1: (1) How do people seek help? (2) What are the help-resources and the factors related to teachers' help-seeking in Mozambique? (3) What is the process of teachers' help-seeking in Mozambique? and (4) What does it mean for understanding the grassroots needs?

First, this study reviewed the literature on the help-seeking concept and examined the applicability to the context of the educational sector in developing countries. The

literature showed that the concept had been applied for various educational actors and for various types of problems they face. The literature review also informed that teachers, in general, have several choices for help-resources such as a colleague, supervisor, principal, school counselor, online aid, and traditional places. Furthermore, it indicated that there are various factors which could affect teachers' help-seeking decisions and also that the factors affect decisions at different stages (Chapter 2).

Second, the study conducted interviews with ten teachers in Mozambique and built a preliminary framework to examine their help-seeking preferences. The findings showed that the teachers in Mozambique have various help-seeking preferences and that their help-resources include colleagues, teacher training organized by the government, and teacher training organized by foreign countries. It also found that the factors related to the teachers' help-seeking preference was suggested by way of twelve factors in four-factor groups: the perceived problem factors (pedagogical problems and motivational problems), the personality factors (self-esteem, public stigma, the expected benefit of help, and the image of help), the network characteristics factors (ability of English speaking, the previous experience of aid, and knowing someone in foreign aid), and the demographic characteristic factors (gender, age, and teaching subject). These findings suggested a series of hypotheses and constructed a preliminary framework to analyze the teachers' help-seeking in Mozambique (Chapter 3).

The study further conducted a survey of 296 teachers to perform two examinations: testing the validity of the suggested framework and identifying the specific factors that affect the help-seeking preferences that differ by the help-resources. The first examination considered the suggested framework and verified that the teachers in Mozambique have three help-resources and that there are fifteen factors that could relate to their help-seeking preference. The factors were gender, age, subject, education, location (as demographic factors), psychological problems, pedagogical difficulties (as perceived problem factors), self-esteem, self-disclosure, expected benefit from foreign help, expected benefit from the government (as personality factors), speaking English, acquaintances among foreign people, and previous

experience with foreign training (as network factors) (Chapter 4/Section 4.2)

Another examination considered the specific factors related to the help-seeking preference that differs by the three help-resources. The results show that the factors related to the decision to seek help comprised seven factors (age, education, psychological problems, pedagogical difficulties, self-esteem, self-disclosure, and experience of foreign training). The factors related to the decision to seek help from the formal resource included eleven factors (gender, age, subject, location, education, psychological problem, pedagogical difficulty, expected benefits from foreign aid and governmental help, foreign friends, and previous experience with foreign training). The factors related to the decision to seek help from the foreign resource included ten factors (gender, age, education, self-disclosure, expected benefits from the foreign aid and governmental help, speaking English, foreign friends, acquaintanced with foreign projects, and previous experience with foreign training) (Chapter 4/Section 4.3).

Third, this study illustrates the process of Mozambican teachers' help-seeking. Referring to Takagi's model, it first defined a process frame consisting of three blocks (first block including until the decision of seeking help, the second block until the decision of seeking help from the formal resource, and third block until the decision of seeking help from a foreign resource). Then, it explored the factors that fit to explain the process of each block. The result showed that the teacher's help-seeking process consisted of seven steps and included nine types of teachers who have a different preference for help-seeking (Chapter 5/Section 5.1).

Fourth, the study considered the implication derived from the process model for deeply understanding the grassroots needs. It produced three new insights about the grassroots needs, which are a picture of the whole grassroots needs, two types of latent needs (those which are expressed with intention and those which cannot be expressed), and two types of explicit needs (those which are expressed because they are really in need and those which are expressed regardless). The study further proposed two practical approach that help us better understand the grassroots needs of developing countries. They are to support the grassroots people to make appropriate help-seeking and to assess the nature of needs expressed to the foreign aid providers (Chapter

5/Section 5.2).

The contribution of this study is three-fold. First, this study demonstrated the application of the concept of help-seeking into the context of a developing country. The outcome model found that there is a new path that does not follow any steps in the process but directly goes to the decision of seeking help. The path was toward foreign help and taken by the *Dependent* teachers, indicating that some teachers, regardless of the problem recognition, seek help from foreign aid. In the previous literature based on the context of developed countries, similar types of people were recognized as willful or demanding (Nakanishi & Ueno, 2003). This study confirmed these types of teachers in a developing country, and also demonstrated the path they take in the model. In the field of educational development, this path would gain critical attention by the policymakers and thus need to be investigated further.

Second, this study provided an analytical framework to measure teacher's help-seeking in developing countries. In the previous literature, there was no appropriate framework to examine teacher's help-seeking preference in the context of developing countries. This study explored and validated the analytical framework which consists of three help-resources and fifteen related factors in the four-factor groups. This framework will be useful for future studies which examine teachers' or other educational actors' help-seeking in developing countries.

Third, this study serves to open up a discussion for understanding grassroots needs more rigorously in a time that the discussion of educational aid meeting grassroots needs is about to start. The previous literature, which has been focused on the country-level, may provide ready-to-use models to examine whether educational aid meets grassroots needs or not. However, the instant application of the country-level model to the grassroots-level would lead us to a false result and would consequently cause unexpected problems at the grassroots levels. The findings of this study suggest that there is a need to understand the grassroots needs thoroughly before the discussion for educational aid meeting grassroots needs starts.

6.2. Limitations of Study

With the insights gained from the four central chapters, the aims set for this study have been achieved. However, some issues remain to be further pursued. First, this study aimed to illustrate the help-seeking process as a model: thereby it ended up eliminating the slightly different help-seeking preferences depending on the types of needs. In the quantitative observation, the study examined the help-seeking preference for each of the twelve different problems as it recognized that the preferences changes depending on the problem. Although in the discussion of illustrating a process, it handled the different preferences as equivalent, disregarding the preferences and their factors as well as the differences between the preferences. Accordingly, when seeing the help-seeking preference for a certain problem, the process would not have some of the steps of the original model. The model produced in this study can be presented as a model which includes the least common multiple factors to understand the process of teachers in developing countries.

Second, adding more case studies from the educational sector in developing countries could strengthen the results of the empirical observations. Regarding the unit of analysis, the study examined teachers as an example of the grassroots actors, but other actors such as school principals, parents, and students, can be investigated to comprehensively grasp the emergence of needs at the grassroots level. Concerning the case country, another examination in different contexts such as different sociocultural values, beliefs, and different languages would bring additional evidence for exploring the framework produced in this study in a greater breadth as well as depth.

Lastly, the finding of this study needs to be tested by using different theories. This study employed the concept of help-seeking which focuses on the individuals who are in need, as it recognized that expressing needs are depended on the individual's preference to solve their problems. On the other hand, expressing needs can be also understood as they want to gain the opportunity of receiving foreign aid. For some cases such as a teacher training in the aid provider's country, there are very limited teachers who can participate and the teachers participated in the training are sometimes considered as privileged one. For these cases, educational aid can become

a competitive resource rather than development aid as it originally means. From this perspective, it would be useful to investigate the emergence of need with a theory that involves multiple individuals or interdependent action preferences in groups, such as in game theory or zero-sum theory.

References

Abdi, H., & Williams, L. J. (2010). Principal component analysis. *Wiley Interdisciplinary Reviews: Computational Statistics, 2*(4), 433-459. https://doi.org/10.1002/wics.101

Amemiya, J., & Wang, M. T. (2017). Transactional relations between motivational beliefs and help seeking from teachers and peers across adolescence. *Journal of Youth and Adolescence, 46*(8), 1743-1757. https://doi.org/10.1007/s10964-016-0623-y

Andersen, R., & Newman, J. F. (1973). Societal and individual determinants of medical care utilization in the United States. *Milbank Memorial Fund Quarterly. Health and Society, 51*(1), 95-124. https://doi.org/10.1111/j.1468-0009.2005.00428.x

Ashford, R., & Biswas, S. (2010). Aid effectiveness, transaction costs and conditionality in the education sector. *International Journal of Educational Development, 30*(5), 481-487. https://doi.org/10.1016/j.ijedudev.2010.03.007

Atkinson, D. R., & Gim, R. H. (1989). Asian-American cultural identity and attitudes toward mental health services. *Journal of Counseling Psychology, 36*(2), 209-212. https://doi.org/10.1037/0022-0167.36.2.209

Badenhorst, J. W., & Koalepe, L. J. (2014). How do we manage? Determinants of effective leadership in high-poverty schools. *Journal of Social Sciences, 39*(3), 243-256. https://doi.org/10.1080/09718923.2014.11893287

Barnett, M. A., Sinisi, C. S., Jaet, B. P., Bealer, R., Rodell, P., & Saunders, L. C. (1990). Perceived gender differences in children's help-seeking. *The Journal of Genetic Psychology, 151*(4), 451-460. https://doi.org/10.1080/00221325.1990.9914631

Barrera-Osorio, F., & Linden, L. L. (2009). The use and misuse of computers in education: Evidence from a randomized experiment in Colombia. *Policy Research Working Paper Series: Impact Evaluation Series* 4836. Washington D.C.: The World Bank.

Barrett, A., Sayed, Y., Schweisfurth, M., & Tikly, L. (2015). Learning, pedagogy and the post-2015 education and development agenda. *International Journal of Educational Development, 40*, 231-236.

https://doi.org/10.1016/j.ijedudev.2014.11.003

Ben Abdelkarim, O., Ben Youssef, A., M'henni, H., & Rault, C. (2014). Testing the causality between electricity consumption, energy use and education in Africa. *William Davidson Institute Working Paper* 1084.

Bennell, P., & Akyeampong, K. (2007). Teacher motivation in sub-Saharan Africa and South Asia. *Education Research* 71. London: Department for International Development, UK.

Bernard, H. R. (2002). *Research methods in anthropology: Qualitative and quantitative approaches* (3rd ed.). Walnut Creek, CA: Alta Mira Press.

Bernard, J. J. (1956). Can needs define educational goals? *Adult Education, 6*, 95-100.

Birchler, K., & Michaelowa, K. (2016). Making aid work for education in developing countries: An analysis of aid effectiveness for primary education coverage and quality. *International Journal of Educational Development, 48*, 37-52. https://doi.org/10.1016/j.ijedudev.2015.11.008

Boldero, J., & Fallon, B. (1995). Adolescent help-seeking: what do they get help for and from whom? *Journal of Adolescence, 18*(2), 193-209. https://doi.org/10.1006/jado.1995.1013

Bourdon, J., Frolich, M., & Michaelowa, K. (2010). Teacher shortages, teacher contracts and their impact on education in Africa. *Journal of the Royal Statistical Society, Series A (Statistics in Society), 73*, 93-116.

Cassity, E. (2010). New partnerships and education policy in Asia and the Pacific. *International Journal of Educational Development, 30*(5), 508-517. https://doi.org/10.1016/j.ijedudev.2010.03.015

Central Intelligence Agency. (2017). The World Fact Book: Mozambique. Retrieved 2017/10/9, from Central Intelligence Agency https://www.cia.gov/library/publications/the-world-factbook/geos/mz.html#

Chilale, H. K., Silungwe, N. D., Gondwe, S., & Masulani-Mwale, C. (2017). Clients and carers perception of mental illness and factors that influence help-seeking: Where they go first and why. *International Journal of Social Psychiatry, 63*(5), 418-425. https://doi.org/10.1177/0020764017709848

Christensen, Z., Homer, D., & Nielson, D. L. (2011). Dodging adverse selection: How donor type and governance condition aid's effects on school enrollment. *World Development, 39*(11), 2044-2053. https://doi.org/10.1016/j.worlddev.2011.07.018

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approach* (4th ed.). Thousand Oaks, CA: Sage Publications Inc.

Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage Publications Inc.

D'Aiglepierre, R., & Wagner, L. (2013). Aid and universal primary education. *Economics of Education Review, 37*, 95-112. https://doi.org/10.1016/j.econedurev.2013.09.001

DePaulo, B. M. (1983). Perspective on help-seeking. In B. M. DePaulo (Ed.), *New Directions in Helping* (Vol. 2 Help-Seeking, pp. 3-12). NewYork: Academic Press.

DeRenzio, P., & Hanlon, J. (2007). *Contested sovereignty in Mozambique: The Dilemmas of aid Dependence*. Oxford: Global Economic Governance Programme.

Done, E. J., & Murphy, M. (2016). The responsibilisation of teachers: A neoliberal solution to the problem of inclusion. *Discourse: Studies in the Cultural Politics of Education, 39*(1), 142-155. https://doi.org/10.1080/01596306.2016.1243517

Douma, J. C. H., Dekker, M. C., De Ruiter, K. P., Verhulst, F. C., & Koot, H. M. (2006). Help-seeking process of parents for psychopathology in youth with moderate to borderline intellectual disabilities. *Journal of the American Academy of Child & Adolescent Psychiatry, 45*(10), 1232-1242. https://doi.org/10.1097/01.chi.0000230167.31246.db

Dreher, A., Gehring, K., & Klasen, S. (2015). Gesture politics or real commitment? Gender inequality and the allocation of aid. *World Development, 70*, 464-480. https://doi.org/10.1016/j.worlddev.2014.07.016

Dreher, A., Nunnenkamp, P., & Thiele, R. (2008). Does aid for education educate children? Evidence from panel data. *World Bank Economic Review, 22*(2), 291-

314.

Drever, E. (1995). *Using semi-structured interviews in small-scale research: A teacher's guide* (Revised ed.). Glasgow: The SCRE Centre.

Duflo, E., Dupas, P., & Kremer, M. (2015). School governance, teacher incentives, and pupil-teacher ratios: Experimental evidence from Kenyan primary schools. *Journal of Public Economics, 123*, 92-110. https://doi.org/10.1016/j.jpubeco.2014.11.008

Easterly, W. (2006). *The white man's burden: Why the West's efforts to aid the rest have done so much ill and so little good*. New York: Penguin.

Embassy of Finland in Maputo. (2016). *FASE: Supporting quality education in Mozambique*. Maputo: Embassy of Finland in Maputo.

Evans, D., Kremer, M., & Ngatia, M. (2009). *The impact of distributing school uniforms on children's education in Kenya*. Washington D.C.: The World Bank.

Fischer, E. H., & Cohen, S. L. (1972). Demographic correlates of attitude toward seeking professional psychological help. *Journal of Consulting and Clinical Psychology, 39*(1), 70-74. https://doi.org/10.1037/h0033152

Fischer, E. H., & Turner, J. I. (1970). Orientations to seeking professional help: Development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology, 35*(1), 79-90. https://doi.org/10.1037/h0029636

Forrest, L. N., Smith, A. R., & Swanson, S. A. (2017). Characteristics of seeking treatment among US adolescents with eating disorders. *International Journal of Eating Disorders, 50*(7), 826-833. https://doi.org/10.1002/eat.22702

Fowler, F. J. (2013). *Survey research methods* (4th ed.). Thousand Oaks, CA: Sage publications Inc.

Fredriksen, B. (2010). Enhancing the allocative efficiency of education aid: A review of issues and options. *Journal of International Cooperation in Education, 13*(2), 11-29.

Garland, A. F., & Zigler, E. F. (1994). Psychological correlates of help-seeking attitudes among children and adolescents. *American Journal of Orthopsychiatry, 64*(4), 586-593. https://doi.org/10.1037/h0079573

Global Administrative Area. (2017). GADM database of Global Administrative Areas. Retrieved 2017/10/1, from Global Administrative Area http://gadm.org/home

Global Education Monitoring Report. (2017). *2017/8 GEM Report - Accountability in education: Meeting our commitments*. Paris: UNESCO.

Global Monitoring Report. (2015). *EFA Global Monitoring Report 2015: Education for All 2000-2015: Achievement and Challenges*. Paris: UNESCO.

Goldsmith, H., Jackson, D., & Hough, R. (1988). Process model of seeking mental health services: Proposed framework for organizing the research literature on help-seeking. In *Needs assessment: Its future* (Vol. DHHS Publication No. ADM 88-1550, pp. 49-64). Washington D.C.: Government Printing Office.

Goodman, S. H., Sewell, D. R., & Jampol, R. C. (1984). Ongoing to the counselor: Contributions of life stress and social supports to the decision to seek psychological counseling. *Journal of Counseling Psychology, 31*(3), 306-313. https://doi.org/10.1037/0022-0167.31.3.306

Halgin, R. P., Weaver, D. D., Edell, W. S., & Spencer, P. G. (1987). Relation of depression and help-seeking history to attitudes toward seeking professional psychological help. *Journal of Counseling Psychology, 34*(2), 177-185. https://doi.org/10.1037/0022-0167.34.2.177

Handley, G. (2009). Sector budget support in practice – Literature review. London: Overseas Development Institute and Mokoro.

Hanushek, E. A., & Woessmann, L. (2017). School resources and student achievement: A review of cross-country economic research. In M. Rosén, K. Yang Hansen, & U. Wolff (Eds.), *Cognitive Abilities and Educational Outcomes. Methodology of Educational Measurement and Assessment* (pp. 149-171). Cham: Springer International Publishing.

Hattori, H. (2009). Enhancing aid effectiveness in education through a sector-wide approach in Cambodia. *PROSPECTS, 39*(2), 185-199. https://doi.org/10.1007/s11125-009-9121-2

Hillman, A. L., & Jenkner, E. (2005). Educating children in poor countries. *Economic Issues* 33. Washington D.C.: International Monetary Fund.

Honda, M. (2015). *援助要請のカウンセリング:「助けて」と言えない子どもと親への援助 [Help seeking counselling: Help to children and parents who can not say "help"]*. Tokyo: Kaneko Shobo.

Hsu, S. (2005). Help-seeking behaviour of student teachers. *Educational Research, 47*(3), 307-318. https://doi.org/10.1080/00131880500287716

Ito, K., Masuda, T., Komiya, A., & Hioki, K. (2015). Seeking help from close, same-sex friends: Relational costs for Japanese and personal costs for European Canadians. *Journal of Social and Personal Relationships, 32*(4), 529-554. https://doi.org/10.1177/0265407514539780

Jensen, P., & Nielsen, H. S. (1997). Child labour or school attendance? Evidence from Zambia. *Population Economics, 10*, 407-424. https://doi.org/10.1080/00131880500287716

Kabeer, N., & Mahmud, S. (2009). Imagining the future: children, education and intergenerational transmission of poverty in urban Bangladesh. *IDS Bulletin, 40*(1), 10-21. https://doi.org/10.1111/j.1759-5436.2009.00003.x

Karabenick, S. A. (2004). Perceived achievement goal structure and college student help seeking. *Journal of Educational Psychology, 96*(3), 569-581. https://doi.org/10.1037/0022-0663.96.3.569

Kessler, R. C., Brown, R. L., & Broman, C. L. (1981). Sex differences in psychiatric help-seeking: evidence from four large-scale surveys. *Journal of health and social behavior, 22*(1), 49-64. https://doi.org/10.2307/2136367

Koolwal, G., & Van de Walle, D. (2010). Access to water, women's work and child outcomes. *Policy Research Working Papers* 5302. Washington D.C.: The World Bank

Kremer, M., Glewwe, P., & Ilias, N. (2010). Teacher incentive. *American Economic Journal: Applied Economics, 2*(3), 205-227. https://doi.org/10.1257/app.2.3.205

Leaf, P. J., Bruce, M. L., Tischler, G. L., & Holzer, C. E. (1987). The relationship between demographic factors and attitudes toward mental health services. *Journal of Community Psychology, 15*(2), 275-284. https://doi.org/10.1002/1520-

6629(198704)15:2<275::AID-JCOP2290150216>3.0.CO;2-J

Li, W., Dorstyn, D. S., & Denson, L. A. (2014). Psychosocial correlates of college students' help-seeking intention: A meta-analysis. *Professional Psychology: Research and Practice, 45*(3), 163-170. https://doi.org/10.1037/a0037118

Liu, S. H. (2017). Relationship between the factors influencing online help-seeking and self-regulated learning among Taiwanese pre-service teachers. *Computers in Human Behavior, 72*, 38-45. https://doi.org/10.1016/j.chb.2017.02.034

MacGonagle, E. (2013). Mozambique. In Oxford Bibliographies. Oxford: Oxford University Press. https://doi.org/10.1093/obo/9780199846733-0035

Marsland, R. (2007). The modern traditional healer: Locating 'hybridity' in modern traditional medicine, southern Tanzania. *Journal of Southern African Studies, 33*(4), 751-765. https://doi.org/10.1080/03057070701646845

Mau, W.-C., & Jepsen, D. A. (1990). Help-seeking perceptions and behaviors: A comparison of Chinese and American graduate students. *Journal of Multicultural Counseling & Development, 18*(2), 94-106. https://doi.org/10.1002/j.2161-1912.1990.tb00439.x

Michaelowa, K. (2001). Primary education quality in francophone Sub-Saharan Africa: Determinants of learning achievement and efficiency consideration. *World Development, 29*(10), 1689-1695. https://doi.org/10.1016/S0305-750X(01)00061-4

Michaelowa, K. (2004). Aid effectiveness reconsidered - panel data evidence for the education sector. *HWWA Discussion Paper* 264. Hamburg: Hamburg Institute of International Economics.

Michaelowa, K., & Weber, A. (2007). Aid effectiveness in the education sector: A dynamic panel analysis. In S. Lahiri (Ed.), *Theory and Practice of Foreign Aid: Frontiers of Economics and Globalization* (Vol. 1, pp. 357-385). Amsterdam: Emerald Group Publishing Limited.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook.* (2nd Ed.). Thousand Oaks, CA: Sage publications Inc.

Ministry of Education of Mozambique. (2017). *Evolução do número de escolas e*

alunos matriculados [Evaluation of a number of schools and classes enrolled]. Maputo: Ministy of Education of Mozambique.

Mizuno, H. (2017). *Psychology of help-seeking and its preference* (S. Nagai, M. Honda, T. Iida, & M. Kimura Eds.). Tokyo: Kaneko Shobo.

Mizuno, H., & Ishikuma, T. (1999). Help-seeking preferences and help-seeking behaviors: An Overview of Studies. *Japanese Journal of Educational Psychology, 47*, 530-539. https://doi.org/10.5926/jjep1953.47.4_530

Monette, M. L. (1977). The concept of educational need: An analysis of selected literature. *Adult Education, 27*(2), 116--127. https://doi.org/10.1177/074171367702700203

Morse, J. M. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing Research, 40*(2), 120-123.

Mulkeen, A. (2008). *Teachers for rural schools: Experiences in Lesotho, Malawi, Mozambique, Tanzania, and Uganda*. Washington D.C.: World Bank publications.

Nakanishi, M., & Ueno, C. (2003). *当事者主権 [Individual Autonomy]*. Tokyo: Iwanami Shoten.

Nam, S. K., Choi, S. I., Lee, J. H., Lee, M. K., Kim, A. R., & Lee, S. M. (2013). Psychological factors in college students' attitudes toward seeking professional psychological help: A meta-analysis. *Professional Psychology: Research and Practice, 44*(1), 37-45. https://doi.org/10.1037/a0029562

Nam, S. K., Chu, H. J., Lee, M. K., Lee, J. H., Kim, N., & Lee, S. M. (2010). A Meta-analysis of gender differences in attitudes toward seeking professional psychological help. *Journal of American College Health, 59*(2), 110-116. https://doi.org/10.1080/07448481.2010.483714

Nelms, L. W., & Gorski, J. (2006). The role of the African traditional healer in women's health. *Journal of Transcultural Nursing, 17*(2), 184-189. https://doi.org/10.1177/1043659605285411

Newman, R. S. (1990). Children's help-seeking in the classroom: The role of motivational factors and attitudes. *Journal of Educational Psychology, 82*(1),

71-80. https://doi.org/10.1037/0022-0663.82.1.71

Newman, R. S., & Goldin, L. (1990). Children's reluctance to seek help with schoolwork. *Journal of Educational Psychology, 82*(1), 92-100. https://doi.org/10.1037/0022-0663.82.1.92

Nielsen, R. (2010, 22-25 May). *Does aid follow need? Humanitarian motivation in aid allocation.* Paper presented at the Aid Transparency and Development Finance: Lessons from AidData, University College, Oxford

OECD. (2014). Aid fragmentation and aid orphans. Retrieved 2017/10/9, from Development Co-operation Directorate http://www.oecd.org/dac/aid-architecture/fragmentation-orphans.htm

Offer, D. M. D., Howard, K. I. P. D., Schonert, K. A. P. D., & Ostrov, E. J. D. P. D. (1991). To whom do adolescents turn for help? Differences between disturbed and nondisturbed adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry, 30*(4), 623-630. https://doi.org/10.1097/00004583-199107000-00015

Ogrodniczuk, J. S., Oliffe, J. L., & Black, N. (2017). Canadian men's perspectives of depression: Awareness and intention to seek help. *American Journal of Men's Health, 11*(4), 877-879. https://doi.org/10.1177/1557988316669617

Palme, M. (1999). Cultural ambiguity and the primary school teacher: lessons from rural Mozambique. In A. W. Little & F. E. Leach (Eds.), *Education, culture, and economics: dilemmas for development*. New York: Routledge.

Parker, S. W., Todd, P., & Wolpin, K. (2006). *Within-family program effect estimators: The impact of oportunidades on schooling in Mexico*. Paper presented at the Population Association of America 2007 Annual Meeting Program, New York. http://paa2007.princeton.edu/abstracts/70886

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Phillips, M. A., & Murrell, S. A. (1994). Impact of psychological and physical health, stressful events, and social support on subsequent mental health help seeking among older adults. *Journal of Consulting and Clinical Psychology, 62*(2), 270-

275. https://doi.org/10.1037/0022-006X.62.2.270

Razali, S., & Najib, M. (2000). Help-seeking pathways among Malay psychiatric patients. *International Journal of Social Psychiatry, 46*(4), 281-289. https://doi.org/10.1177/002076400004600405

Riddell, A., & Niño-Zaraza, M. (2016). The effectiveness of foreign aid to education: What can be learned? *International Journal of Educational Development, 48*, 23-36. https://doi.org/10.1016/j.ijedudev.2015.11.013

Rose, P. (2015). Three lessons for educational quality in post-2015 goals and targets: Clarity, measurability and equity. *International Journal of Educational Development, 40*, 289-296. https://doi.org/10.1016/j.ijedudev.2014.11.006

Rubin, H., & Rubin, I. (2005). *Qualitative interviewing: The Art of Hearing Data*. (2nd ed.). Sage Publications Inc. https://doi.org/10.4135/9781452226651

SACMEQ. (2007). Data archive. Retrieved 2017/10/8, from Southern and Eastern Africa Consortium for Monitoring Educational Quality http://www.sacmeq.org

Schonert-Reichl, K. A., & Muller, J. R. (1996). Correlates of help-seeking in adolescence. *Journal of Youth and Adolescence, 25*(6), 705-731. https://doi.org/10.1007/bf01537450

Seeberg, V. (2014). Girls' Schooling Empowerment in Rural China: Identifying Capabilities and Social Change in the Village. *Comparative Education Review, 58*(4), 678-707. https://doi.org/10.1086/677774

Smith, W. C. (2014). The global transformation toward testing for accountability. *Education Policy Analysis Archives, 22*(116), 1-34. https://doi.org/10.14507/epaa.v22.1571

Sorketti, E., Zuraida, N., & Habil, M. (2012). The traditional belief system in relation to mental health and psychiatric services in Sudan. *International Psychiatry, 9*(1), 18-19.

South, A. (2012). Rworldmap: A new R package for mapping global data. Retrieved 2017/10/13, from CRAN Repository http://cran.r-project.org/web/packages/rworldmap

Spradley, J. P. (1979). *The ethnographic interview*. New York: Holt, Rinehart &

Winston.

Srebnik, D., Cauce, A. M., & Baydar, N. (1996). Help-seeking pathways for children and adolescents. *Journal of Emotional and Behavioral Disorders, 4*(4), 210-220. https://doi.org/10.1177/106342669600400402

Steer, L., & Wathne, C. (2010). Donor financing of basic education: Opportunities and constraints. *International Journal of Educational Development, 30*(5), 472-480. https://doi.org/10.1016/j.ijedudev.2010.03.013

Sue, S., & Sue, D. W. (1974). MMPI comparisons between Asian-American and non-Asian students utilizing a student health psychiatric clinic. *Journal of Counseling Psychology, 21*(5), 423-427. https://doi.org/10.1037/h0037074

Sumida, S. (2017a). Donor's motivation of the educational aid. *International Journal of Educational Development, 55*(C), 17-29. https://doi.org/10.1016/j.ijedudev.2017.04.004

Sumida, S. (2017b). Obstructive and promotive factors for access to school and learning in primary school in Zambia. *International Journal of Comparative Education and Development, 19*(1), 2-19. https://doi.org/10.1108/IJCED-10-2016-0020

Surgenor, L. J. (1985). Attitudes toward seeking professional psychological help. *New Zealand Journal of Psychology, 14*(1), 27-33.

Takagi, O. (1998). *人を助ける心ー援助行動の社会心理学 [Mind of helping other - social psychology of help action]*. Tokyo: Saiensu-sha Co., Ltd. Publishers.

Tamura, S., & Ishikuma, T. (2001). 指導 ・援助サービス上の悩みにおける中学校教師の被援助志向性に関する研究:バー ンア ウ トとの関連 に焦 点 をあてて [Help-seeking preferences and burnout : Junior high school teachers in Japan]. *Japanese Journal of Educational Psychology, 49*(4), 447-448.

Tata, S. P., & Leong, F. T. L. (1994). Individualism-collectivism, social-network orientation, and acculturation as predictors of attitudes toward seeking professional psychological help among Chinese Americans. *Journal of Counseling Psychology, 41*(3), 280-287. https://doi.org/10.1037/0022-0167.41.3.280

Taylor, S. E., Sherman, D. K., Kim, H. S., Jarcho, J., Takagi, K., & Dunagan, M. S. (2004). Culture and social support: who seeks it and why? *Journal of Personality and Social Psychology, 87*(3), 354-362. https://doi.org/10.1037/0022-3514.87.3.354

Tedeschi, G. J., & Willis, F. N. (1993). Attitudes toward counseling among Asian international and native caucasian students. *Journal of College Student Psychotherapy, 7*(4), 43-54. https://doi.org/10.1300/J035v07n04_04

Thiele, R., Nunnenkamp, P., & Dreher, A. (2007). Do donors target aid in line with the Millennium Development Goals? A sector perspective of aid allocation. *Review of World Economics, 143*(4), 596-630. https://doi.org/10.1007/s10290-007-0124-x

Tijhuis, M. A. R., Peters, L., & Foets, M. (1990). An orientation toward help-seeking for emotional problems. *Social Science & Medicine, 31*(9), 989-995. https://doi.org/10.1016/0277-9536(90)90108-5

Tikly, L., & Barrett, A. M. (2011). Social justice, capabilities and the quality of education in low income countries. *International Journal of Educational Development, 31*(1), 3-14. https://doi.org/10.1016/j.ijedudev.2010.06.001

Tsigebrhan, R., Hanlon, C., Medhin, G., & Fekadu, A. (2017). Help seeking and suicidality among people with epilepsy in a rural low income country setting: cross-sectional survey. *International Journal of Mental Health Systems, 11*(44). https://doi.org/10.1186/s13033-017-0151-5

Turrent, V., & Oketch, M. (2009). Financing universal primary education: An analysis of official development assistance in fragile states. *International Journal of Educational Development, 29*(4), 357-365. https://doi.org/10.1016/j.ijedudev.2008.10.002

Ueno, C. (2011). *ケアの社会学：当時は主権の福祉社会へ [Sociology of care: social welfare with individual autonomy]*. Tokyo: Ota Shuppan.

Ulas, H., Binbay, T., Kirli, U., Elbi, H., & Alptekin, K. (2017). The epidemiology of alcohol use in Izmir, Turkey: drinking pattern, impairment and help-seeking. *Social Psychiatry and Psychiatric Epidemiology, 52*(7), 887-899.

https://doi.org/10.1007/s00127-017-1345-5

UNESCO Institute for Statistics. (2017). Mozambique. Retrieved 2017/10/8, from UNESCO Institute for Statistics database http://uis.unesco.org/en/country/mz

UNESCO International Bureau of Education. (2012). World Data on Education: 7th edition 2010-2011. Retrieved 2017/10/10, from UNESCO International Bureau of Education http://www.ibe.unesco.org/en/document/world-data-education-seventh-edition-2010-11

Vermeersch, C., & Kremer, M. (2005). School meals, educational achievement and school competition: Evidence from a randomized evaluation. *Policy Research Working Paper* 3523. The World Bank

Wakimoto, R. (2008). Influence of level and instability of self-esteem on help-seeking orientation and help-seeking. *The Japanese journal of experimental social psychology, 47*(2), 160-168. https://doi.org/10.2130/jjesp.47.160

Watkins, R., & Kavale, J. (2014). Needs: Defining what you are assessing. In *Needs assessment: Trends and a view toward the future: New Directions for Evaluation* (pp. 19-31). Danvers: Jossey-Bass.

Weiss, R. S. (1994). *Learning from strangers: The art and method of qualitative interview studies*. New York: Free Press.

Westbrook, J., Durrani, N., Brown, R., Orr, D., Pryor, J., Boddy, J., & Salvi, F. (2013). Pedagogy, curriculum, teaching practices and teacher education in developing countries. *Education Rigorous Literature Review* London: EPPI-Centre, Social Science Research Unit, Institute of Education, University of London.

Whitaker, K. L., Ghanouni, A., Zhou, Y., Lyratzopoulos, G., & Morris, S. (2017). Patients' preferences for GP consultation for perceived cancer risk in primary care: A discrete choice experiment. *British Journal of General Practice, 67*(659), E388-E395. https://doi.org/10.3399/bjgp17X690905

Winter, R. I., Patel, R., & Norman, R. I. (2017). A Qualitative exploration of the help-seeking behaviors of students who experience psychological distress around assessment at medical school. *Academic Psychiatry, 41*(4), 477-485. https://doi.org/10.1007/s40596-017-0701-9

World Bank. (2017). Mozambique. Retrieved 2017/10/19, from The World Bank https://data.worldbank.org/country/mozambique

Appendix 1: Questions used for qualitative research

Inquérito sobre a procura de ajuda pelo professor por Sumida, Universidade de Hiroshima

Portuguese ----------

Preguntas

1 Você já envolvidos/recebeu ajuda externa projeto ou programa?
2 O que é o projeto ou o programa?
3 Como você começou a envolver no projeto ou o programa? Qual era a sua posição?
4 Você tem alguns amigos estrangeiros?
5 Você tem algum problema que você enfrenta na escola agora?
6 Você procura ajuda para alguém com os problemas?
7 Em caso afirmativo, para quem?
8 Por que (ou não) você procura ajuda no lugar / pessoa?
9 O que você acha sobre a ajuda externa geralmente? (Imagem boa ou má imagem?)
10 Voce acha que há diferença se o projeto ou o programa foi fornecido pelo governo?

English ----------

Questions

1. Have you ever been involved in or received external aid for a project or program?
2. What was the project or program?
3. How did you get involved in the project or the program? What was your position?
4. Do you have any foreign friends?
5. Do you have any problems that you face at school now?
6. Do you seek out someone to help with the problems?
7. If so, to who?
8. Why do (or not) you seek help from the place/person?
9. What do you think about foreign aid? (Good image or bad image?)
10. Do you think there is a difference if the project or program was provided by the government?

Appendix 2: Questionnaire used for quantitative research (Portuguese) (front page)

Inquérito sobre a procura de ajuda pelo professor por Sumida, Universidade de Hiroshima

Questionários para Professores

Muito obrigado por participar da inquérito

PARTE 1: Perguntas sobre você

Dia de hoje		**Nome da Escola**	
Gênero	Homem / Mulher		
Grupo de idade	18-24 / 25-34 / 35-44 / 45-64 / 64 +		
Seu assunto/disciplina	Letras / Ciências / Otras ( )		
Nível de educação	Escola Secundária / IMAP, IFAP / Universidade / Otras ( )		
Província de origem	Maputo / Gaza / Inhambane / Manica / Nampula Niassa / Sofala / Tete / Zambezia / Cabo Delgado		

PARTE 2: Problemas percebidos pelo professor

	Totalmente concordo	Concordo	Não tenho certeza	Discordo	Totalmente Discordo
1 Alguns dos meus alunos não estão aprendendo bem	1	2	3	4	5
2 Quero melhorar minha habilidade de ensino	1	2	3	4	5
3 Não consigo explicar bem os conteúdos do livro escolar	1	2	3	4	5
4 Quero aprender a usar o quadro mais eficazmente	1	2	3	4	5
5 Enfrento dificuldades em manter meus alunos quietos	1	2	3	4	5
6 Perco confiança sobre o meu metodo de ensino	1	2	3	4	5
7 Tenho dificuldade em incentivar os alunos abaixo do aproveitamento	1	2	3	4	5
8 Sinto estresse quando estou ensinando	1	2	3	4	5
9 Me sinto impotente para meus alunos	1	2	3	4	5
10 Perdi motivação para ensinar	1	2	3	4	5
11 Quero que meu aluno seja mais ativo na minha classe	1	2	3	4	5
12 Perdi minha confiança como professor	1	2	3	4	5

PARTE 3: Preferência de receber apoio

	Ninguém	Consulta com colegas	Formação por Governo	Treinamento por país estrangeiro
13 Se sentir que alguns de meus alunos não estão aprendendo bem, iria para	1	2	3	4
14 Se quiser melhorar minha habilidade de ensino, iria para	1	2	3	4
15 Se sentir que não estou explicando bem o conteúdo do livro, iria para	1	2	3	4
16 Se quiser aprender a usar o quadro de forma eficaz, iria para	1	2	3	4
17 Se enfrentar dificuldades para manter minha classe em silêncio, iria para	1	2	3	4
18 Se perder confiança sobre o meu ensino, iria para	1	2	3	4
19 Se tiver dificuldade em encorajar os alunos abaixo do aproveitamento, iria para	1	2	3	4
20 Se sentir estresse sobre o meu metodo de ensino, iria para	1	2	3	4
21 Se me sinto impotente com meus alunos, iria para	1	2	3	4
22 Se perder minha motivação para o ensino, iria para	1	2	3	4
23 Se quiser que meu aluno seja mais ativo na minha aula, iria para	1	2	3	4
24 Se perdesse minha confiança como professors, iria para	1	2	3	4

PARTE 4: Perguntas sobre sua rede para país estrangeiro

25 Você fala inglês?	Nada / Muito pouco / Sim, algum / Sim, fluentemente
26 Quantos amigos estrangeiros, vocês têm?	( )
27 Você conhece alguém que esteja trabalhando no projeto de um país estrangeiro?	Sim / Não
28 Alguma vez você já participou de treinamento de professores que foi organizado por país estrangeiro?	Sim / Não

(back page)

Inquérito sobre a procura de ajuda pelo professor por Sumida, Universidade de Hiroshima

PARTE 5: Perguntas sobre a atitude em relação à procura de ajuda

	Totalmente concordo	Concordo	Não tenho certeza	Discordo	Totalmente Discordo
30 Geralmente, o apoio aos professores não é suficiente	1	2	3	4	5
31 Precisamos de mais oportunidades para obter treinamento para melhorar o meu ensino	1	2	3	4	5
32 Recomendo aos meus colegas que façao um curso de formação de professores	1	2	3	4	5
33 Num futuro próximo, eu quero ter um conselho sobre o meu metodo de ensino	1	2	3	4	5
34 Acho que posso resolver a maioria dos meus problemas sozinho	1	2	3	4	5
35 Quando tenho um problema na escola, gostaria de receber conselhos profissionais	1	2	3	4	5
36 Prefiro resolver meus problemas sozinho	1	2	3	4	5
37 Procuro ajuda somente depois que eu tente sozinho	1	2	3	4	5
38 Admiro uma pessoa que pode lidar com problemas sem recorrer a ajuda	1	2	3	4	5
39 A pessoa deve procurar resolver seu próprio problema e optar por ajuda é um último recurso	1	2	3	4	5
40 A formação de professores ajuda-me a melhorar o meu ensino	1	2	3	4	5
41 Não acho que a formação de professores vai me ajudar muito	1	2	3	4	5
42 Gosto de aprender inglês porque posso me comunicar com pessoas de países estrangeiros	1	2	3	4	5
43 Quero saber coisas que ainda não sei	1	2	3	4	5
44 Me sinto confiante depois de me ter juntado a um treinamento de especialista estrangeiro	1	2	3	4	5
45 Treinamento oferecido pelo governo é melhor do que um por país estrangeiro	1	2	3	4	5
46 Os funcionários do governo sabem o que eu preciso para melhorar meu qualitade de ensino	1	2	3	4	5
47 O governo deve ser responsável pelo apoio aos professores	1	2	3	4	5
48 Eu prefiro receber apoio de meu governo em vez de estrangeiros	1	2	3	4	5
49 Eu me sinto confiante depois de participar de um treinamento pelo governo	1	2	3	4	5
50 Professor que recebe treinamento de país estrangeiro melhorar o qualidade de ensino	1	2	3	4	5
51 Especialistas estrangeiros me dão boa habilidade para resolver o meu problema	1	2	3	4	5
52 Se um especialista estrangeiro me oferece um treinamento, mesmo que eu não tenha problema, aceitaria	1	2	3	4	5
53 A informação vinda de país estrangeiro é melhor do que a informação vinda de do meu governo	1	2	3	4	5
54 O apoio de país estrangeiro é geralmente bom	1	2	3	4	5
55 Sinto-me inquieto pedindo ajuda de pessoas estrangeiras por causa do que outras pessoas pensariam	1	2	3	4	5
56 Receber ajuda de um estrangeiro é uma vergonha vida de uma pessoa	1	2	3	4	5
57 Se receber ajuda de um estrangeiro, outras pessoas poderão ter inveja de mim	1	2	3	4	5
58 Participar de um treinamento por um especialista estrangeiro é algo honroso	1	2	3	4	5
59 O governo sempre me apoia para o meu problema de ensino	1	2	3	4	5
60 Geralmente, falo sobre meus problemas pessoais com outras pessoas	1	2	3	4	5
61 Para qualquer problema, tendo a esconder o fato de que tenho um problema	1	2	3	4	5
62 Gostaria de chamar a atenção de todos, se for a enfrentar dificuldades na minha vida	1	2	3	4	5
63 Geralmente não gosto de falar sobre o meu problema com outras pessoas	1	2	3	4	5
64 É difícil falar sobre mim especialmente com pessoas de países estrangeiros	1	2	3	4	5

Muito obrigado pelo seu tempo.
Se você tiver dúvidas, entre em contato comigo na sumidasugata@hiroshima-u.ac.jp

Appendix 3: Questionnaire used for quantitative research (English) (front page)

Survey on Teacher's help seeking by Sumida, Hiroshima University

Questionnaires for Teachers

Thank you very much for participating the survey

PART 1: Questions about you

Date		**School Name**	
Gender	Male / Female		
Age group	18-24 / 25-34 / 35-44 / 45-64 / 65 +		
Your subject	English / Math / Science (Physics, Biology) / Music / Others		
Final education level	Secondary school / TVET / University		
Home province	Maputo / Gaza / Inhambane / Manica / Nampula Niassa / Sofala / Tete / Zambezia / Cabo Delgado		

PART 2: Teacher perceived problems

	Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
1 Some of my students are not learning well	1	2	3	4	5
2 I want to improve my teaching skill	1	2	3	4	5
3 Sometimes I cannot explain the textbook's contents well	1	2	3	4	5
4 I want to learn how to use a blackboard more effectively	1	2	3	4	5
5 I face difficulty keeping my class quiet	1	2	3	4	5
6 Sometimes I lose confidence about my teaching	1	2	3	4	5
7 I have difficulty encouraging underachievers	1	2	3	4	5
8 I feel stress when I am teaching	1	2	3	4	5
9 Sometime I feel helpless to my students	1	2	3	4	5
10 Sometime I lost my motivation for teaching	1	2	3	4	5
11 I want my student to be more active in my class	1	2	3	4	5
12 Sometime I lost my confidence as a teacher	1	2	3	4	5

PART 3: Preference of receiving support

	Nobody	Consultation with colleagues	Training by Government	Training by Foreign country
13 If I feel some of my students are not learning well, I would go to	1	2	3	4
14 If I want to improve my teaching skill, I would go to	1	2	3	4
15 If I feel I am not explaining the textbook's contents well, I would go to	1	2	3	4
16 If I want to learn how to use a blackboard effectively, I would go to	1	2	3	4
17 If I face difficulty keeping my class quiet, I would go to	1	2	3	4
18 If I lose confidence about my teaching, I would go to	1	2	3	4
19 If I have difficulty encouraging underachievers, I would go to	1	2	3	4
20 If I feel stress about my teaching, I would go to	1	2	3	4
21 If I feel helpless to my students, I would go to	1	2	3	4
22 If I lost my motivation for teaching, I would go to	1	2	3	4
23 If I want my student to be more active in my class, I would go to	1	2	3	4
24 If I lost my confidence as a teacher, I would go to	1	2	3	4

PART 4: Question about your network to foreign country

25 Do you speak English?	Not at all / Very little / Yes, some / Yes, fluently
26 How many friends who is from foreign country, do you have?	( )
27 Do you know anyone who is working in foreign country's project?	Yes / No
28 Have you ever participated in teacher training which was hosted by foreign country?	Yes / No

(back page)

Survey on Teacher's help seeking by Sumida, Hiroshima University

PART 5: Question about attitude toward help seeking

		Strongly Agree	Agree	Not sure	Disagree	Strongly disagree
30	Generally, support for teachers is not enough	1	2	3	4	5
31	We need more opportunity to get training for my teaching	1	2	3	4	5
32	I recommend for my colleagues to taking a teacher training	1	2	3	4	5
33	In the near future, I want to have an advice about my teaching	1	2	3	4	5
34	I think I can solve most of my problems by myself	1	2	3	4	5
35	When I have a problem at school, I would welcome professional advice	1	2	3	4	5
36	I prefer solving my problems by myself	1	2	3	4	5
37	I seek for help only after I tries by myself first	1	2	3	4	5
38	I admire a person who can cope with problems without resorting to seek help	1	2	3	4	5
39	A person should work out his own problem and getting help is a last resort	1	2	3	4	5
40	Teacher training helps me to improve my teaching	1	2	3	4	5
41	I don't think teacher training will help me so much	1	2	3	4	5
42	I like learning English because I can communicate with foreign people	1	2	3	4	5
43	I want to know things that I don't know yet	1	2	3	4	5
44	I feel confident after I join training by foreign experts	1	2	3	4	5
45	Training hosted by government is better than one by a foreign country	1	2	3	4	5
46	The government officers know what I need to improve my teaching	1	2	3	4	5
47	The government should be responsible for supporting teachers	1	2	3	4	5
48	I prefer getting support from my government rather than a foreign country	1	2	3	4	5
49	I feel confident after I join a training by government	1	2	3	4	5
50	A teacher who receive training from a foreign country improved his teaching	1	2	3	4	5
51	Foreign experts give me good skill to solve my problem	1	2	3	4	5
52	If a foreign expert offers me a training, even though I do not have problem, I would accept it	1	2	3	4	5
53	Information from foreign country is better than my government	1	2	3	4	5
54	Support from a foreign country is generally good	1	2	3	4	5
55	I feel uneasy asking a help from foreign people because of what other people would think	1	2	3	4	5
56	Receiving a foreigner's help is a shame on a person's life	1	2	3	4	5
57	If I receive a foreigner's help, other people might be jealous on me	1	2	3	4	5
58	Participating in a training by a foreign expert is an honorable thing	1	2	3	4	5
59	The government always supports my teaching problem	1	2	3	4	5
60	Generally, I talk about personal problems with other people	1	2	3	4	5
61	For any problem, I tend to hide the fact that I have a problem	1	2	3	4	5
62	I would like to get attention, if I face to difficulties in my life	1	2	3	4	5
63	I usually do not like talking about my problems with other people	1	2	3	4	5
64	It is difficult to talk about myself especially with foreign people	1	2	3	4	5

Muito obrigado pelo seu tempo.
Se você tiver dúvidas, entre em contato comigo na sumidasugata@hiroshima-u.ac.jp

Appendix 4: Result of PCA for perceived problem questions

Variable	Descriptions	Comp1	Comp2	Unexplained
PR1	My students not learning	0.1529	0.4182	0.5916
PR2	Improve teaching skill	0.0327	0.6057	0.366
PR3	Cannot explain textbook	0.3468	-0.0323	0.4394
PR4	Want to learn effective blackboard use	0.214	0.274	0.6586
PR5	Difficulty to keep class quiet	0.2924	0.0572	0.5974
PR6	Lose confidence for teaching	0.3712	0.0549	0.3548
PR7	Difficulty to encourage underachievers	0.3426	0.042	0.4516
PR8	Feel stress	0.341	-0.1851	0.4011
PR9	Feel helpless	0.3391	-0.092	0.4512
PR10	Lose motivation	0.3393	-0.1903	0.4032
PR11	Want students more active	0.0389	0.5282	0.5146
PR12	Lose confidence as a teacher	0.3477	-0.1274	0.4105

Appendix 5: Result of PCA for personality characteristics items (page 1)

Variable	Description	Comp1	Comp2	Comp3	Comp4	Unexplained
CH1	Generally, support for teachers is not enough	0.034	0.083	-0.068	-0.246	0.834
CH2	We need more opportunity to get training for my teaching	-0.052	0.143	0.030	-0.179	0.852
CH3	I recommend for my colleagues to taking a teacher training	-0.021	0.165	-0.081	0.159	0.838
CH4	Shortly, I want to have advice about my teaching	-0.077	0.290	-0.117	0.138	0.622
CH5	I think I can solve most of my problems by myself	0.301	0.115	0.028	-0.212	0.503
CH6	When I have a problem at school, I would welcome professional advice	-0.030	0.198	0.135	0.146	0.775
CH7	I prefer solving my problems by myself	0.295	0.020	-0.047	-0.242	0.528
CH8	I seek help only after I try by myself first	0.056	0.186	0.289	-0.055	0.654
CH9	I admire a person who can cope with problems without resorting to seek help	0.227	0.114	0.225	-0.064	0.617
CH10	A person should work out his problem and get help is a last resort	0.162	0.211	0.281	-0.147	0.502
CH11	Teacher training helps me to improve my teaching	-0.181	0.254	0.218	0.088	0.519
CH12	I do not think teacher training will help me so much	0.217	-0.146	-0.142	-0.098	0.674
CH13	I like learning English because I can communicate with foreign people	-0.079	0.294	-0.003	0.122	0.654
CH14	I want to know things that I do not know yet	-0.130	0.285	0.083	0.008	0.645
CH15	I feel confident after I join training by foreign expert	0.027	0.132	-0.141	0.109	0.863
CH16	Training hosted by government is better than one by a foreign country	0.197	-0.172	0.265	0.157	0.519
CH17	The government officers know what I need to improve my teaching	0.197	0.008	0.294	0.084	0.613

Variable	Description	Comp1	Comp2	Comp3	Comp4	Unexplained
CH18	The government should be responsible for supporting teachers	0.030	0.215	0.103	0.070	0.805
CH19	I prefer getting support from my government rather than a foreign country	0.221	-0.066	0.173	0.176	0.653
CH20	I feel confident after I join a training by government	0.164	0.018	0.207	0.347	0.532
CH21	A teacher who receives training from a foreign country improved his teaching	0.133	0.285	-0.192	0.078	0.552
CH22	Foreign experts give me good skills to solve my problems	0.185	0.240	-0.243	0.100	0.502
CH23	If a foreign expert offers me training, even though I do not have problem, I would accept it	0.070	0.238	-0.188	0.143	0.659
CH24	Information from foreign country is better than my government	0.183	0.121	-0.340	0.052	0.520
CH25	Support from a foreign country is generally good	0.109	0.173	-0.176	0.051	0.769
CH26	I feel uneasy asking help from foreign people because of what other people would think	0.255	-0.152	-0.174	0.244	0.464
CH27	Receiving a foreigner's help is a shame on a person's life	0.283	-0.143	-0.134	0.101	0.549
CH28	If I receive a foreigner's help, other people might be jealous of me	0.278	0.095	0.002	0.042	0.662
CH29	Participating in training by a foreign expert is an honorable thing	0.108	0.178	0.134	0.049	0.798
CH30	The government always supports my teaching problem	0.135	-0.158	0.153	0.266	0.638
CH31	Generally, I talk about personal problems with other people	0.039	-0.017	0.036	0.264	0.845
CH32	For any problem, I tend to hide the fact that I have a problem	0.211	0.051	0.036	-0.291	0.635
CH33	I would like to get attention if I face difficulties in my life	0.183	-0.076	-0.128	0.089	0.790
CH34	I usually do not like talking about my problem with other people	0.151	0.084	-0.016	-0.328	0.661
CH35	It is difficult to talk about myself especially with foreign people	0.129	0.029	0.140	-0.150	0.835