

ACCESS AND EQUITY IN HIGHER EDUCATION IN INDONESIA

A Case Study into the Role of Social Factors for Low SES Students



MEGAWANTI

Propositions

1. Social support is the most important factor for access to and equity in higher education.
(this thesis)
2. Parents play a negative role in the academic careers of low socio-economic status (SES) students.
(this thesis)
3. Universities underprioritize their social role in society.
4. Disagreeing with your supervisors is the best part of the PhD journey.
5. Every organization struggles with providing and receiving clear information and communication.
6. Walking in a green area not only gives fresh air but also fresh ideas.

Propositions belonging to the thesis, entitled

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Megawanti

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ACCESS AND EQUITY IN HIGHER EDUCATION IN INDONESIA
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ACCESS AND EQUITY IN HIGHER EDUCATION IN INDONESIA
A Case Study into the Role of Social Factors for Low SES Students

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Thesis

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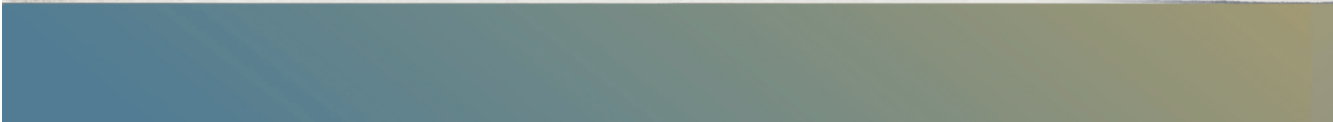
People are key

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Chapter 1.

General Introduction



1.1. Introduction

Why are access to and equity in higher education important? A personal experience

This study proceeds from the author's teaching experience in several places in Indonesia. The author saw that many talented students, especially those from backgrounds characterised by low socioeconomic status (SES), struggled to obtain high-quality education. To her, the gap between rich and poor students was most obvious at the level of higher education. Students from wealthy backgrounds could easily move to other Indonesian islands or other cities to attend university. Continued studies at the university level were an option for these students because their parents supported and facilitated them. For example, parents paid for tutoring to prepare for university entry, and they covered academic and non-academic fees for the university. For students who were not accepted to public universities, affluent parents still paid for programmes at private universities, which are even more expensive than public universities.

In contrast, for students from disadvantaged backgrounds, gaining access to university education was often not an option, if they had even considered the possibility of attending university at all. The author noted that these students often believed that university studies were only for rich families. In most cases, they looked for jobs with their diplomas from secondary school or moved to larger cities to find jobs. Based on the author's observations, fewer students from low SES backgrounds who had the capacities necessary to pursue higher education succeeded in continuing their studies at the university level. Those who did succeed in enrolling at university subsequently faced the challenge of surviving at the university, due to a lack of information and support from those closest to them (e.g. their parents), who often had no experience with university education. Some of the author's students contacted her to seek guidance for applying to university or tips for obtaining university scholarships. Based on this experience, she felt a need to do something about this situation. When presented with the opportunity to continue doctoral studies, therefore, she expressed the desire to enhance understanding concerning 'access to

and equity in higher education for students with low SES in Indonesia' and decided to conduct a study to help improve the situation.

Why access to and equity in higher education are important in general?

Having more students in higher education provides benefits from several perspectives. Institutions of higher education are a key factor for cultural, economic, social and sustainable development within an increasingly knowledge-based society (Paletta & Bonoli, 2019). Higher education is very important, given the major role played by universities in the growth and development of scientific, cultural and human resources (Chalaris et al., 2014). It is important to increase the number of students who not only enter higher education institutions, but also complete their undergraduate and graduate degrees (Engle & Tinto, 2008). This is because of the substantial impact that a university degree can have on an individual's personal and professional growth, as well as on growth at the national level.

Access to higher education

Access to higher education is one of the targets of Sustainable Development Goal (SDG) 4, which states that everyone will have equal access to affordable and quality higher education by 2030. Increasing access to higher education has been a significant challenge for many individuals and countries. Developed countries have traditionally been more successful in providing access to higher education than developing countries have been. In 2018, developed countries had a gross enrolment ratio (GER) of 79.7% for higher education (UNESCO, 2019). The GER refers to the total number of students enrolled in higher education, regardless of age, divided by the population eligible for it. The five countries with the highest GER were South Korea, Japan, Canada, the United States and the United Kingdom (UNESCO, 2019).

Developed countries have invested heavily in higher education to increase access and improve quality. Various initiatives (e.g. government-supported grants, scholarships, student loans and tax exemptions) have expanded the pool of students who can afford tertiary education. For example, in Germany, tuition fees were abolished for public universities, and

students pay only an administration fee (DAAD, 2019). Similarly, Denmark offers free higher education for all students, including international students (Danish Ministry of Education, 2019).

Access to higher education is lower in developing countries, due to a variety of reasons, including poverty, gender inequality, geographical distance to higher education institutes and inadequate infrastructure (e.g. number of institutions of higher education). According to UNESCO, the GER (gross enrolment ratio) for developing countries was 37.3% in 2018 (UNESCO, 2019). The five countries with the lowest GER are the Central African Republic, South Sudan, Chad, Angola and Niger (UNESCO, 2019). One of the most populous developing countries, Indonesia had a higher-education GER of 34.57% (Kemdikbud, 2020), which was below the average for developing countries from UNESCO. The focus on Indonesian context in the present study is discussed further in the next section.

Developing countries have taken a number of notable initiatives to increase access to higher education. For example, the government of Bangladesh has implemented stipends for women students who may not be able to afford tertiary education (Rahman et al., 2019). In Rwanda, the government launched a project to build a state-of-the-art university to expand access to higher education (Kirenga, 2020). Despite these and other promising initiatives, however, access to higher education remains a challenge for developing countries (UNESCO, 2019). Studies have consistently demonstrated that students with low SES have fewer opportunities to enter university, as compared those with high SES (Jury et al., 2017). The most important determinants of whether students will or will not attend higher education are social group and poverty, followed by location (Borooah, 2017). Access to higher education is obviously influenced by many other factors as well. This topic is explored further in the first study of this dissertation.

Equity in higher education

The second aspect discussed in this dissertation is equity, which plays an important role in relation to education access. Expanding access to education, and particularly to institutions of higher education, does not automatically result in greater equity in education (OECD, 2018). As defined by Ainscow (2016), equity is a concept of fairness and inclusion that can be used to guide

the process of strengthening the capacity of an education system to reach all learners in the community. In the current study, equity refers to equal chances for all students throughout the entire range of university education.

This study focuses particularly on students from low SES backgrounds, as they often experience greater difficulty adjusting to higher education (Frieswyk, 2019), and there is some evidence that they might be less successful at university (Craft, 2019). For example, in the United States, the gap in higher-educational attainment between students with lower and higher SES is currently wider than it was in the 1970s (U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System, 2017). In 1970, individuals from families with high SES were six times more likely to obtain an undergraduate degree than those from low SES families. In 2013, students from high SES families were eight times more likely to obtain an undergraduate degree by the age of 24 years than those from low SES families (Cahalan & Perna, 2015).

Researchers have found that low SES students is less likely to attend higher education, is more likely to attend less selective institutions when they do enroll, and has unique higher education college choice processes (Astin, 1975, 1993; Hearn, 1984, 1990; Hossler, Schmit, & Vesper, 1999; Karabel, 1972; McDonough, 1997; Paulsen & St. John, 2002; Tinto, 1987, 1993). Additionally, their likelihood of continuing their education or pursuing graduate studies is diminished (Walpole, 2003).

The most likely time for students to leave the university is after the first year (Zembrodt, 2021). Equity in higher education is thus important for promoting equitable chances in educational activities, as well as for reducing social and economic inequality and preparing individuals for the workforce. According to a report by the Lumina Foundation (2020), achieving equitable outcomes in higher education is a critical national priority for boosting educational attainment and reducing inequality in the United States. The report highlights that, despite progress made in increasing educational participation rates, gaps persist in both access and equity for underserved populations, including individuals with low income, people of colour and first-generation college students.

Despite the attention that has been devoted to the importance of equity, the issue is not limited to the national or university level. Teachers play a

role in this regard as well. For example, they should learn about pedagogical practices that involve equity (Banks & Banks, 1995), in addition to being aware of and using a wide range of multicultural resources, while ensuring that they possess the proper substantive knowledge (which can be quite sophisticated in some cases). Such curricular and pedagogical development should be conducted across all categories of the cultural diversity the students bring to the classroom, as well as according to economic diversity (given the many overlaps between these two types of diversity) and across all disciplines.

This dissertation explores factors that influence equity in higher education, with the objective of enhancing the learning success of students with low SES in higher education. Most previous studies and practices relating to access and equity in higher education have been conducted in developed countries. In contrast, the current study was conducted in Indonesia, as a representative of developing countries.

1

Students with low SES background

Given the importance of SES in this study, it is important to give careful consideration to the identification of students with low SES background. In previous studies, SES has been operationalized in terms of family income and the presence of financial issues (Devlin & McKay, 2018). This dissertation applies the definition of ‘household economic status’ used by Statistics Indonesia (2022). This definition is based on monthly expenditures, assuming that higher expenditures are associated with higher income. Household economic status is classified into five quintiles, with Quintiles 1 and 2 representing the lowest economic status, Quintiles 3 and 4 representing middle economic status and Quintile 5 representing the highest economic status. Students from low SES backgrounds are defined as being from households falling into Quintiles 1 and 2, thereby encompassing about 40 % of the population.

The Indonesian context

In this section, we discuss the system of higher education in Indonesia, along with efforts the government has taken to improve access and equity, and the need for further study of the Indonesian context. In Indonesia, higher

education is provided through a series of diploma courses (D1, D2, D3 and D4) and undergraduate degree programmes (S1). Higher education also includes graduate programmes (S2) and doctoral programmes (S3). Open universities (e.g. Universitas Terbuka, or UT) provide distance-learning education programmes. As stipulated by Education Law No. 20 of 2003 and Higher Education Law No. 12 of 2012, there are five types of higher education institutions in Indonesia. The first category consists of academies (*Akademi*) and community colleges (*Akademi Komunitas*), which offer only one or a limited number of fields of study. The second category comprises polytechnical institutes (*Politeknik*), which offer vocational education or practical skills development, and the third comprises advanced schools (*Sekolah Tinggi*) exist, which provide academic and vocational education in specific disciplines. In the fourth category are institutes (*Institut*), which consist of several faculties or departments pertaining to particular disciplines. The fifth category consists of universities (*Universitas*), which offer academic studies across multiple disciplines, as well as professional education.

The social context and social policies of a country have a major influence on whether individuals will or will not attend university (Reay, David, & Ball, 2001). Based on the decentralization legislation of 1999 and the Education Law 20/2003, the Indonesian government has designed specific strategies and programmes to implement education policy through three strategic pillars: (1) ensuring expanded access and equity; (2) improving quality and relevance; and (3) strengthening governance, accountability and the public image (MoNE, 2007). Widening access to higher education has become a top priority for governments at the local, regional and national levels in Indonesia. These objectives have been pursued in numerous ways, including through an increase in government investment and the number of both public and private providers of higher education (Purnastuti & Izzaty, 2016). As evidenced by the country's GER (UNESCO, Institute for Statistics, 2019), however, there is still a substantial need for efforts to increase access to and equity in higher education for students with low SES (Cardak et al., 2022).

As noted above, UNESCO reports a higher-education GER of 37.3% for developing countries in 2018 (UNESCO, 2019), in contrast to a GER of 36% for Indonesia. This indicates that only one third of the relevant age group in Indonesia has access to higher education. In terms of SES, the GER for the

highest quintile (the wealthiest 20% of the population) was 68.9% in 2018, while the GER for the lowest quintile (the poorest 20% of the population) was only 5.1% (UNESCO, 2019).

Bidikmisi

Indonesia's low GER (as noted above) highlights the importance of improving access to higher education. One of the policies that the government has implemented with the objective of improving access for students (particularly those with low SES) is the Bidikmisi programme. Under this programme, tuition-fee subsidies are allocated selected new students who possess excellent academic capabilities yet are facing economic difficulties due to poor economic conditions (for themselves or their families). The Bidikmisi programme has been conducted annually since 2010 (Wasahua, Koesmaryono, & Sailah, 2018). At first, the scholarships were given only to students with low SES in public universities. In 2012, it was expanded to include those in private universities as well (Wasahua, Koesmaryono, & Sailah, 2018).

While situations have improved considerably, in part due to Bidikmisi and similar initiatives, Indonesia continues to struggle with its objective of increasing the participation rate and the opportunity to learn (Purnastuti & Izzaty, 2016). For example, as argued by Moeliodihardjo (2000), the rapid expansion of higher education institutions has not been accompanied by appropriate planning and funding mechanisms. According to some, the higher education system has suffered from internal inefficiency and poor initiatives, due to its centralised structure (Moeliodihardjo, 2000). In addition, the bureaucratic dependency on a central authority is regarded as having made institutions of higher education (particularly public ones) unable to respond to external changes or receive appropriate support (Nizam, 2006). This highlights the need for further studies exploring factors affecting access to and equity in higher education in Indonesia, especially with regard to the Bidikmisi programme.

1.2. Problem statement and aim of the PhD project

The issue of access to and equity in higher education is often discussed in terms of improving the chances of disadvantaged students. In 1970, fewer than 1 in 10 people in Indonesia were enrolled in higher education, even though they accounted for 40% of the relevant age cohort in 2017 worldwide (Salmi & D'Addio, 2021). In 2018, the GER for higher education in Indonesia was 36% (UNESCO, Institute for Statistics, 2019), meaning that only about one fourth of the relevant age group (typically 18–23 years) were enrolled in higher education.

Higher-education policymakers have devoted major effort to promoting and supporting diversity (Pippert, Essenburg, & Matchett, 2013; Smith, 2015; Smith & Ota, 2013). Despite these efforts, however, most students enrolled in higher education still come from wealthier segments of society (Marginson, 2016; Salmi, 2020). Even when they do gain access to higher education, students from under-represented and traditionally excluded groups (e.g. those from low-income families, women, minority groups, and students with disabilities) tend to have lower rates of completion (Salmi, 2020). Increasing the completion rates of these groups requires the availability of ample resources for both students and the higher education institutions in which they enrol (Ma, Pender, & Welch, 2016).

Many governments create excellence programmes and investment schemes to improve access to and equity in higher education. As indicated above, most existing studies on this topic have been conducted in developed countries (Wanti et al., 2022). Given that different factors may affect access and equity in developing countries, however, the need to address this situation was one reason behind the choice to conduct the studies in this dissertation. For example, in 2010, only 2.5% of those enrolled at a higher education institution were from the poorest 20% of the households as compared with 64.7% of the student body coming from the wealthiest 20% of Indonesia's households (MOEC, 2013). Second, students with low SES are least likely to gain access to higher education in Indonesia (World Bank, 2014b).

Although the Law 12/2012 includes a provision mandating that 20% of all students enrolling in higher education institutions should be from disadvantaged backgrounds, in its current form, the Bidikmisi programme is not able to help large numbers of poor students attend and complete higher education (World Bank, 2014a).

In contrast to previous studies, which have tended to focus on only one of these aspects, this study considers both access and equity. By investigating process-related factors that determine both access and equity, the focus extends beyond the actual numbers (inflow and outflow of students). This study also explores factors related to access and equity at different levels: from national to local. Finally, the study is based on data collected from the perspectives of a variety of stakeholders—students, lecturers, university managers and staff. This dissertation is thus aimed at generating insight into how various social actors and factors either support or hinder access to and equity in higher education for students with low SES within the Indonesian context.

There are several reasons why it is important to conduct research on access to and equity in higher education. First, most of the research on this topic to date has focused primarily on two areas: policy and quantitative data (Jia & Ericson, 2017; Leach, 2013). Second, previous studies on this topic have been scattered across countries, based on criteria defining disadvantaged students or on policies or programmes that governments have implemented to support disadvantaged students (Wanti et al., 2022). To date, we have found no studies that simultaneously address access to and equity in higher education. We regard these concepts as interrelated and worthy of being studied together.

Alongside the issues outlined above, higher education in Indonesia faces a problem of a more practical nature. Although policies have been adopted and initiatives implemented, they have yet to be successful, and their effects have been studied to only a limited extent. This study is intended to provide more insight into the Indonesian context, specifically with regard to a particular initiative: the Bidikmisi programme. While financial initiatives are necessary, such incentives alone are insufficient to ameliorate existing disadvantages. In the current study, we consider other actors and factors that are important to supporting access to and equity in higher education.

Our objective is to enhance understanding concerning how different actors and factors provide support to students with low SES in the Bidikmisi programme, as well as how this can be facilitated.

1.3. Conceptual framework

The conceptual framework of this study consists of several parts. First, it draws and elaborates on a distinction between the concepts of access and equity, as introduced in the introduction. Second, we study access and equity according to the CIPP model (context, input, process and product), which encompasses a specific group of support-related factors. By applying this model, this dissertation further explores the various roles of social-support actors (family, peers, teachers, lecturer), along with the functions of each type of actor. Each of these elements is discussed briefly below.

Access and Equity

Within the context of higher education, access and equity are critical concepts aimed at creating a fair and inclusive academic environment for all students. Access and equity focus on increasing the proportion of disadvantaged groups in higher education (Gidley et al., 2010). In this study, we apply the definition of *access* proposed by Neubauer and Tanaka (2011), with access to education being the extent to which educational facilities and opportunities are accessible to all people who are in need of education.

Equity in education means that schools and education systems provide equal learning opportunities to all students (OECD, 2018). Based on this definition, equity is used in this study to refer to the learning process in education. The concept of equity can be used to guide the process of strengthening the capacity of an education system to reach all learners within a community (Ainscow, 2016). We further investigate factors that determine access to and equity in higher education by means of a literature review.

The CIPP model

This study aims to identify factors that are relevant in determining access to and equity in higher education by structuring them according to the CIPP model. This model provides a holistic view, while also considering multiple

angles for each stakeholder (Almayah et al., 2020). We apply the CIPP model to review research on the Bidikmisi programme in Indonesia. This model was selected because of its comprehensive approach to evaluation, which extends from programme planning to programme outcomes and the fulfilment of core values (Joseph, 2021). In addition, the model provides a comprehensive view of access and equity by evaluating context, input, process and output (Aziz, Mahmood, & Rehman, 2018).

Drawing on the CIPP model applied by Stufflebeam (2003) to explore factors relating to access and equity, as they are addressed in literature on the Bidikmisi programme. In this study, *context* includes the goals, objectives, history and background of the institute studied—in this case, the Bidikmisi programme. *Inputs* refer to material, time, physical and human resources needed for the effective operation of the programme. *Process* includes all teaching and learning processes involved in the programme, and *product* focuses on the quality and usefulness of teaching and learning, as well as their potential benefits to society (Stufflebeam, 2003). In this study, the evaluation of these four elements entails collecting, checking and categorizing the factors identified in the literature review into each CIPP element to identify any patterns that might be revealed.

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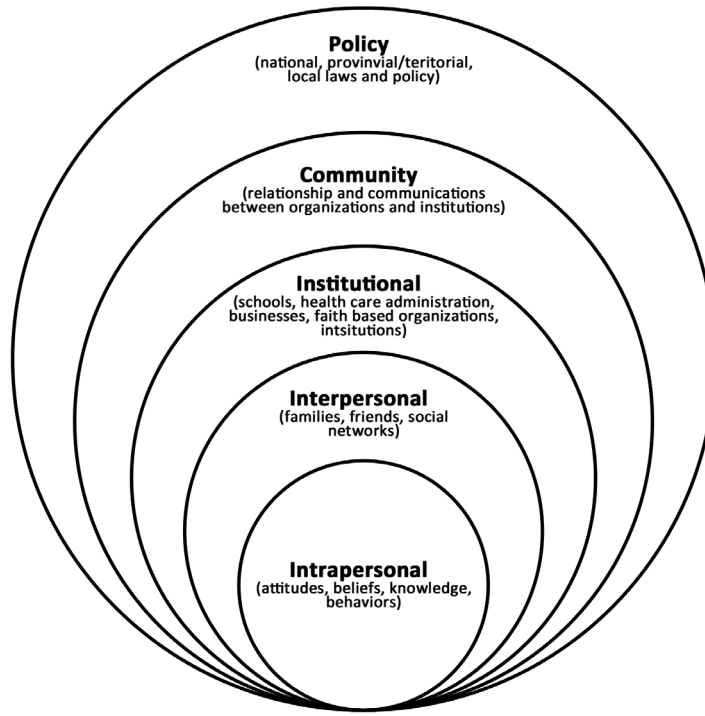
Supporting actors for students with low SES

For students from low SES backgrounds, social factors (including familial, ethnic and religious affiliations, as well as friends and faculty members) play an important role in academic achievement (Mishra, 2020). The role of family support is present in the form of advice or guidance, motivation, a high value assigned to education or expectations of academic success and persistence (Boveda, 2017; Gofen, 2009; Guillory & Wolverton, 2008; O'Shea, 2016; Roksa & Kinsley, 2018; Storlie, Moreno, & Portman, 2014; Strom & Savage, 2014). For example, students from high SES backgrounds might have parents who have completed higher education and who are therefore able to provide motivation, information and guidance concerning university studies. Students with low SES are likely to have to seek other sources of such information and guidance, as their parents often have no experience with university education. Social support from family and friends has been shown to have a substantial impact on the emotional, social and academic

performance of university students (Awang et al., 2014). The presence of a closest friends might therefore play a significant role, as they can encourage and support each other during life at the university.

To emphasize and investigate the roles played by various social actors and factors in access to and equity in higher education, we apply social capital theory and the social ecological model (Figure 1.1). Social capital is defined as ‘the aggregate of the actual and potential resources, which are linked to possession of a durable network’ (Bourdieu, 1986). It can be translated to refer to a person’s social relationships and networks, otherwise known as bonding and bridging ties (Putnam, 1999).

The social ecological model suggests the existence of various interrelated factors at different levels that can have an impact on access to and equity in higher education. In this study, therefore, we adopt a multifaceted perspective that has previously been used to explore access to health services, including at the intrapersonal, interpersonal, institutional, community and policy levels (Ma, Chan, & Loke, 2017). At the intrapersonal level, we refer to the attitudes, beliefs, knowledge and behaviour of students with low SES that could affect their journey to higher education. The interpersonal level is understood in terms of family, friends and the social network as factors supporting students with low SES. In this study, the institutional level refers to the actors contributing to the education of students with low SES before they enter university and university life. The community level refers to organizations, clubs or hobbies in which students with low SES are involved and that play a role throughout life in secondary school and university life. Finally, policy refers to governmental or university regulations that support students with low SES in their efforts to study at university.



1

Figure 1.1.
The Social Ecological Model. Source: Center for Disease Control and Prevention (CDC).
(The Social-Ecological Model: A Framework for Prevention [Violence Prevention|Injury
Center|CDC]. Retrieved 16 July 2022).

Most studies on access to and equity in higher education focus solely on either the student perspective or aggregate student-perception data related to the role of social factors (Jury et al., 2017; McKay & Devlin, 2016; Li & Carroll, 2017). In addition to the student perspective, the present study also includes the perspectives of university lecturers and support-staff members. These three types of stakeholders are important, given that they are the main actors within the university context who are involved in the implementation of scholarships for students with low SES (e.g. through the Bidikmisi programme).

Social-support functions

Resilient adolescents with low SES but higher academic success often perceive having greater support from parents, peers and teachers, as well as closer ties to their schools, higher academic expectations and greater self-

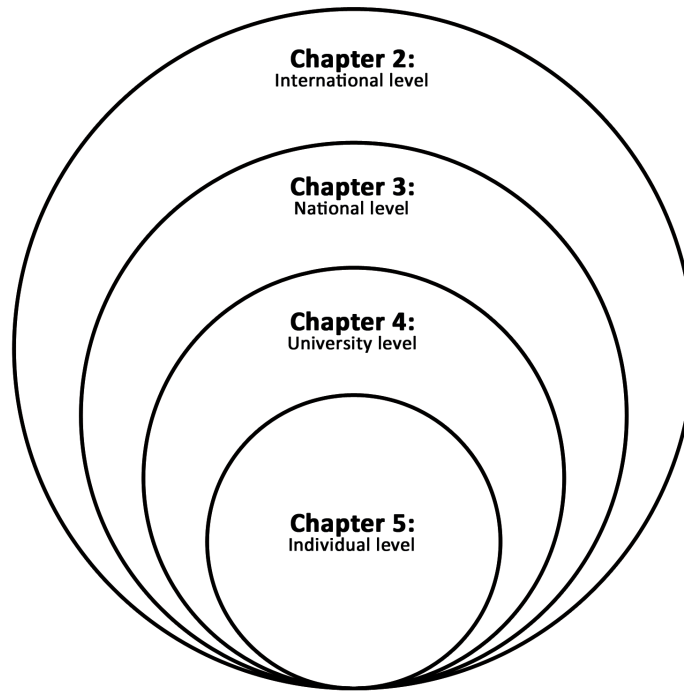
efficacy (Esen-Aktay, 2010). Social support plays a major role in their higher education trajectories of these students. Knowledge concerning how social networks can provide social support and benefits concerning access to and equity in higher education is important for students with low SES. To this end, Rodriguez and Cohen (1998) identify three functions of social support: instrumental, informational and emotional. *Instrumental* support involves providing material aid (e.g. financial assistance). *Informational* support refers to providing relevant information intended to help an individual cope with current difficulties (e.g. in the form of advice or guidance). *Emotional* support involves the expression of empathy, caring, reassurance and trust. It provides opportunities for emotional expression. This study adopts the approach to social support developed by Rodriguez and Cohens to analyse the role of social factors in supporting access to and equity in higher education for students with low SES. These categories could help to deepen understanding concerning the role of social factors for Bidikmisi recipients with low SES in Indonesia.

1.4. Research questions and set-up of the individual studies

The general research questions of this dissertation are as follows: (I) ‘Which actors and factors that are important to support access to and equity in higher education for students with low SES in Indonesia?’ (II) ‘How do the various actors and factors provide support to students with low SES in Indonesia?’

Answering these general questions requires first having general knowledge of factors that determine access and equity (Study 1: systematic literature review) and policies and financial aid programmes that have been used in Indonesia, as well as their effects (Study 2: Bidikmisi in Indonesia). Based on the knowledge generated by these studies, we then investigate what various actors perceive as important social (or other) factors for access and equity within the context of Bidikmisi (Study 3) and what alumni perceive as important actors and factors for access and equity within the context of Bidikmisi (Study 4). In the following sections, we provide a brief description of each study. The content presented in Chapter 2 and Chapter

4 of this study draws upon articles published in the “Equity in Education and Society Journal.” As a result, each of these chapters includes an abstract, distinguishing them from the other chapters in the text (see figure 1.2).



1

Figure 1.2.
Overview of this dissertation.

Chapter 2: Determinants of access to and equity in higher education: A systematic review

Access to and equity in higher education are determined by many factors. This first study explores these factors in greater depth. Most previous studies on this topic have focused on statistical data or on the implementation of new policies or programmes. The literature thus does not provide a comprehensive overview of university access and equity. In addition, most previous studies have discussed either only access or only equity. In contrast, the present study reviews research on both access and equity. To our knowledge, this is the first systematic overview of factors contributing to access to and equity in higher education to be published. As described in Chapter 2, this review provides an encompassing and contemporary overview of positive

and negative factors affecting access to and equity in higher education at an international scale. The study examines the following research questions: (i) ‘Which factors influence access to higher education?’ (ii) ‘Which factors influence equity in higher education?’ In all, 33 peer-reviewed articles were selected for further analysis in this review. We divided the factors identified in the literature into those related to access and those related to equity. Based on the conceptual framework described above, we distinguish between factors at the national or governmental level, at the university level, relating to pre-university education and at the student level. The results from this study are used as a foundation for the subsequent studies.

Chapter 3: Analysis of the Bidikmisi programme for students with low SES in Indonesia in terms of factors relevant for access to and equity in higher education

Access to and equity in higher education in Indonesia are hampered by the disparities existing in socio-economic circumstances (Giridharan, 2021). To address this issue, the Indonesian government launched a financial assistance programme (Bidikmisi) in 2010 for students with low SES who meet academic criteria, so that they can pursue studies at higher education institutions. This programme includes tuition fees and a monthly living allowance for four years (the usual duration of undergraduate programmes). Chapter 3 provides an analysis of research on the Bidikmisi financial aid programme in Indonesia as a context for stimulating access to and equity in higher education for students from low SES backgrounds. The main research question for this study is as follows: ‘Which factors are relevant to access and equity for students with low SES, based on Bidikmisi programme within the context of universities in Indonesia?’ The analysis is based on empirical reports (journal articles, conference papers, books) on the programme found in the literature by searching Google Scholar, Scopus and Web of Science. We structured results from nine studies according to the CIPP model (context, input, process, product) and assigned them to access, equity or both. We then determined whether each factor was either supporting (+) or hindering (-).

Chapter 4: The role of social factors in access to and equity in higher education for students with low socioeconomic status: A case study from Indonesia

University support services for students with low SES play a significant role in their success (Devlin et al., 2022). When these students enter university, they may encounter a mismatch between their own social and cultural capital and that of the middle to upper-class environment of higher education (Greenbank, 2006). Research on university students with low SES can provide important insights to advance examination of the experiences of related stakeholders with regarding access to and equity in higher education. In line with the results of our previous studies, the study presented in Chapter 4 was set up at a large public university in Indonesia. The study entails a closer examination of the experiences of respondents (e.g. Bidikmisi recipients) concerning which and how social roles support access to and equity in higher education at that university. As noted previously, most existing studies on this topic have focused solely on the student perspective. The present study is based on data collected from three other relevant types of stakeholders: lecturers, managers and university staff managing the Bidikmisi programme.

The main research question for Chapter 4 is as follows: ‘Which roles do social factors play in access and equity for students with low SES (Bidikmisi recipients) within the Indonesian university context?’ We investigated this question according to the following sub-questions: (i) ‘What do students, lecturers and support staff perceive as the most prominent or relevant social factors for access to university and equity once there?’ (ii) ‘How does each factor work (i.e. what is the underlying mechanism)?’ (iii) ‘What differences and similarities can be identified in the experiences of students, lecturers and support staff with regard to these factors?’

To identify factors affecting access to and equity in higher education, we performed several steps of data analysis. First, we classified all responses collected as either social factors or other factors, based on the literature review (Study 2). We then calculated percentage scores for each factor for each subgroup (students, lecturers and support staff). These scores were used to determine overall differences and similarities in the reports of students, lecturers and support staff with regard to these factors. To explore the working of the factors, we read the answers carefully and distilled the

mechanisms behind them. A second reviewer (research assistant) then checked the coding for each respondent. To validate the answers from the respondents, representative participants were invited for focus-group discussions.

Chapter 5: Further insight into social factors affecting access to and equity in higher education for students with low SES: Experiences of alumni in Indonesia

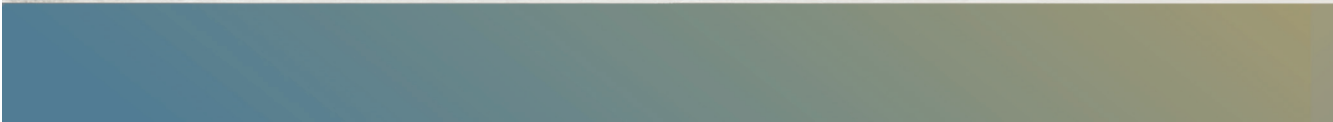
As strongly argued by Kirst (2007), socio-economic background is a determining factor in students' access to and participation in higher education. The study presented in Chapter 5 therefore discusses factors that either support or hinder students regarding access to and equity in higher education, based on the experiences of alumni who received Bidikmisi scholarships. The experiences of these alumni are important, as they provide a more complete picture of access to and equity in higher education, given that these respondents were able to look back on their prior experiences at the university. This study maps alumni experiences about access to and equity in higher education with regard to three phases: pre-university life, university life during the admission period and learning processes at the university.

The purpose of this study is to determine which and how social actors and factors influence access to and equity in higher education for students from low SES backgrounds in Indonesia based on the experiences of alumni. The main research questions for this study are as follows: (i) 'What roles do social factors play in access and equity for students with low SES (Bidikmisi alumni) within the Indonesian university context?' (ii) 'What do the experiences of successful Bidikmisi alumni reveal about the role of social factors?' Proceeding from a qualitative approach, we conducted narrative interviews to explore the experiences of six alumni from different study programmes in one large-scale university, who had received financial aid during their studies. University staff members who managed the financial aid were contacted to find potential respondents who had successfully completed their studies at the university. We made summaries or key notes of respondents' answers throughout each interview, and we then confirmed

them at the end of interview. The results demonstrate how various actors had provided different support functions to the alumni.

Chapter 6: General Discussion

Chapter 6 provides a general discussion based on the results reported in this dissertation and places the results in a broader, integrated perspective. The discussion includes the role of social factors, including peers, secondary school teachers, university lecturers, and administrative staff members both in secondary school and at the university, along with their social support, in relation to access to and equity in higher education. The chapter closes by presenting limitations of the present study, possible directions for future research and implications for policy and educational practice.



Chapter 2.

Determining factors of access and equity in higher education: A systematic review

This chapter was published in adapted form as:

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Abstract

This literature review study aims to provide an overview of influencing factors of access to and equity in higher education. In this way, the research offers insight into specific factors that support or hinder access and equity, respectively. Forty factors from thirty-three peer-reviewed articles, mostly from three continents: Europe, Australia, and America, published between 2014 and 2018, were selected for further analysis. The articles were analysed into four organizational levels: government, university, pre-university education, and student. Most findings on this topic discuss government policies and financial support. In addition to financial support, the significance of this paper discusses social support influence (by peers, by family, by teachers, by university officers, and via programmes) to improve access and equity in higher education. Social support emerged as crucial for both access and equity. This study alerts researchers, teachers, administrators at the university level, and policy-makers at the national level to focus more on social relations between peers, students, and lecturers, support by the managerial level, and establishing programmes that provide basic academic skills to disadvantaged groups.

2.1. Introduction

Higher education (HE) has important implications for nations' economic, political, and social-cultural development, sustainability, and global competitiveness (Eggins, 2010). HE benefits a country in general and a university graduate individually. Therefore, access and equity in HE is essential both individually and on a larger scale. This relevance is stressed by the Sustainable Development Goal "Quality Education" (SDG 4), as this goal includes a target (4.3) that, by 2030, equal access for all to affordable and quality technical, vocational, and tertiary education, including university, needs to be realized. These goals are an international agreement of the United Nations and that all members, amongst them Indonesia, commits itself to reach the targets by 2030 to eventually work on a more sustainable world.

In most nations, social class is the single most reliable predictor of the likelihood that individuals will participate in HE at some stage in their lives. This is particularly true in developing countries, where poorer students have little chance of gaining entry into HE. Still, it is also true in the most developed countries, where the people from low SES backgrounds who reach HE are less likely to find places in the most prestigious institutions and fields of study (James, 2007).

There are several reasons to review access and equity in HE research. First, most of the research on this topic to date has mainly focused on two areas: policy and quantitative data (Jia and Ericson, 2017; Leach, 2013). Second, previous research about this topic has been scattered among countries, based on disadvantaged student criteria and policy or programmes that the government had to support disadvantaged students. So far, we have found no studies covering both access and equity in HE simultaneously, while we consider that the concepts are interrelated and worth being studied together.

This review aims to (a) provide the most up-to-date information about the influencing factors of access and equity in HE and (b) identify the most critical factors influencing access and equity. It is crucial that this research addresses the limitations as mentioned above relating to previous research

to obtain a more comprehensive view on what stimulates (or hinders) both access and equity at the same time.

Access to higher education

Access is defined as a phase wherein a student can register for the programme and pay the initial fee (Walker, 2019). Walker assumed that access is more than an individual need, shaped by objective conditions (economic conditions, government policy, and structures of gender and race) and subjective biographies (such as hard work at school or encouragement to succeed from a family member). For example, in India, the most significant contributors to whether or not students receive HE institutions are social groups (caste) and poverty, followed by location, with a very small contribution by gender (Borooah, 2017). Based on Walker's opinion above, then we define access as all factors that relate to students before they get accepted into the university.

There is significant problem inaccessibility to HE, which is primarily determined by gender, rurality, and ethnic or linguistic status (World Bank, 2014). Students least likely to gain access to HE in Indonesia are those of low SES (World Bank, 2014). The status also intersects with geographical location, ethnic and linguistic status, and gender to produce even higher levels of educational exclusion. Exclusion refers to exclusion from the system (the issue of access to HE) and from learning (the issue of quality, the institution itself, and the knowledge gained). In other words, students' educational experiences and future life chances differ greatly based on the intersections of many forms of exclusion— and these lead to severe inequities in access to and success in HE.

The problems as mentioned earlier are in sharp contrast with the SDG 4, which advocate equal access by gender to all forms of HE and to eliminate disparities and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous people, and children in vulnerable situations. The OECD (2018) has reported increased access to tertiary institutions over the past 10 years. Unfortunately, most of the increase occurred only in developed countries. The OECD also provided data on the percentage of the population that received tertiary education per country. In most of the developed countries, more than 60% of the population has received HE institutions, as is visible in, for example,

Switzerland (69%), New Zealand (67%), and the Netherlands (64%). In developing countries such as Indonesia, India, and South Africa (the bottom three), less than 20% of the population has received HE institutions.

Equity in higher education

Previous studies related to educational equity have predominantly focused on economic and statistical terms. Nevertheless, the issue of inequity in education has been examined from various perspectives, including inputs, processes, outputs, and outcomes, within a multitude of contexts (e.g., educational systems, providers, and learners) (Alcott et al., 2018). For the purposes of this study, we define equity as all factors related to the retention and successful completion of university-level studies. It is imperative to consider equity in light of student diversity. As noted by Thatcher (1999), a team or group's diversity does not always lead to favourable outcomes; in fact, it often gives rise to dissatisfaction and, to some extent, yields negative results. Furthermore, Dan and Mino (2016) emphasize that challenges such as misunderstandings, communication gaps, and cultural disparities undeniably manifest within interactions among diverse students.

To avoid or limit the problems that occur due to student diversity, it is considered necessary to see what factors play a role when students from various backgrounds do their learning activities at the university. From the lecturer's perspective, they need to deal with the learning process that involves students from different backgrounds. The lecturer might minimize students' learning difficulties by identifying conceptual difficulties and providing links between theory & practical applications, lecture and tutorial or laboratory sessions and assessments.

The lecturer might address problems of students' learning by ensuring clear explanations, course goals, creating linkages between learning sessions and assessments, and encouraging students at risk to consult the instructor as soon as they encounter learning (Alauddin et al., 2016). Ainscow (2016) considers equity to be concerned with inclusion and fairness. According to him, it is a concept that can be used to guide the process of strengthening the capacity of an education system to reach out to all learners in the community. This means that it must be seen as an overall principle that guides all educational policies and practices, starting from the belief that

education is a fundamental human right and the foundation for a more just society.

Most previous studies on access and equity involved policies (and practices) and support for all students in general and disadvantaged student groups in particular. Earlier studies regarding equity often focused on certain programmes for underprivileged groups, specific disadvantaged groups, and their struggle to get access to university (e.g., Astin and Oseguera, 2004; Devlin, 2009; Harper et al., 2009; Morley, 2010). However, this study tries to get a more comprehensive understanding of what to get access to and have learning success in HE.

Determining factors of access to higher education

One of the first studies about access to HE was conducted in 1963 by the Robbins Committee on Higher Education in the United Kingdom (Menon, 1998). The committee considered family background, economic and employment prospects associated with different educational levels, and institutional variables relating to the provision of primary and secondary education as the most critical factors influencing entry to HE. Since then, many studies have described determinants of access to HE. Research on access to HE has increased, but the research that discusses post-access treatment (e.g., equity) still seems limited.

This study systematically reviews research related to factors affecting access and equity in HE. This paper reflects the latest research about access and equity, looking at supporting and inhibiting factors. This study aims to provide insight into both access and equity factors, while most present studies only discuss HE access. The findings can help institutes and policy-makers further shape their practices and other researchers to identify factors that consistently (or adversely) affect concepts and conduct further studies (Table 2.2).

2.2. Research questions

Many studies have shown the importance of access and equity in HE, and there are many studies related to either one of the topics. Nevertheless,

a systematic overview of the factors contributing to access and equity in HE has not yet been published. Therefore, based on a systematic review, this research will answer the following research questions: which factors influence access to HE? and which factors influence equity in HE?

2.3. Method

A systematic literature review was used to discover the structure and patterns in existing research and identify gaps filled by future research (Staples and Niazi, 2007). Systematic reviews search a wide range of literature to build as “complete” a picture as possible with the available resources and reduce the possibility of individual error or subjectivity (Moher et al., 2009). The literature search and analysis will be described more in detail in the following sections.

Literature search

Keywords

Besides “access,” “equity,” and “higher education,” the keywords used in the literature search included several synonyms relevant to the topics. Synonyms were identified by searching between 10 to 20 relevant articles. A large body of research used the terms “participation” and “enrolment” instead of “access.” Similarly, the terms “diversity” and “inclusion” have often been used for “equity.” It was found that the terms “higher education,” “university,” and “tertiary education” have been used interchangeably.

This broader set of keywords was used to ensure that all research articles related to access and equity in HE were included, even if the authors used different terms. We added OR in a keyword search for the main keywords. We also added NOT in a keyword search for irrelevant keywords. Specific details about the keywords can be found in Appendix 2.1 and 2.2.

Results were obtained from Scopus (579 results) and Web of Science (478 results). We also limited the search criteria by using a time frame (5 years: 2014–2018), language (English), and publication type (peer-reviewed journal articles). The 5-year search period was chosen to ensure that the most current information related to this topic was found. In total, 1058 articles were found and were screened for relevance based on five steps.

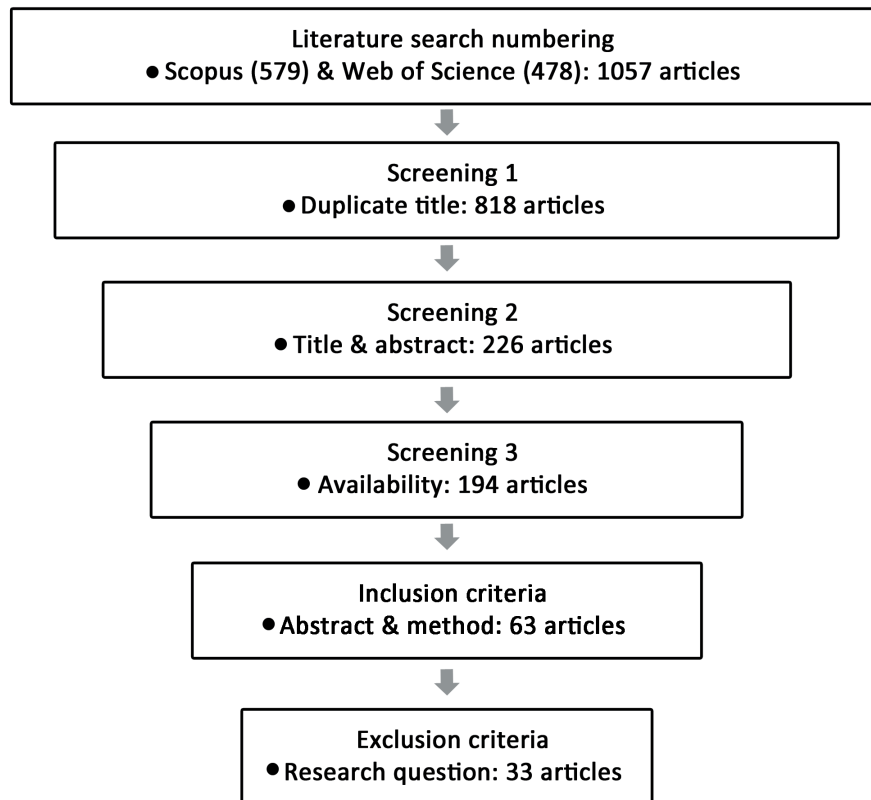


Figure 2.1.
Screening process.

Screening 1: Duplicate titles.

Duplicate titles from Scopus (579) and Web of Science (478) were first removed; the resulting number of articles was 818.

Screening 2: Screening titles.

The titles were screened for their relevance to the research questions. This step obtained a brief description of each of the published studies. From the remaining 818 articles, 592 (almost 70%) were removed. The many irrelevant articles identified with this step mainly were related to politics and technology. The remaining number of articles was 226 at this stage.

Screening 3: Availability of the articles.

The university library website and Google Scholar were used to obtain the full articles. If the article could not be found with these sources, a request form was sent to the university library, and the national library of the Netherlands was used as well. In total, 194 articles out of the 226 could be obtained.

Screening 4: Screening abstract.

Using the abstracts, articles were screened for including empirical data. Another 131 papers were excluded because they were not based on empirical research; 63 papers remained after this step.

Screening 5: Full paper.

The remaining 63 articles were entirely read for a final screening. A further 30 articles were deemed irrelevant. For example, articles needed to be excluded because they discussed programme evaluations or introduced new programmes. The result was a final set of 33 papers that focused on determining factors for access and equity in HE (Table 2.2). Papers that used questionnaires or interviews with students, teachers, and staff were considered relevant.

Table 2.1 provides information on the criteria for each of the articles used in this review. These criteria include the type of analysis (quantitative and qualitative), focus (access, equity, and access & equity), characteristics of subgroups of students studied including disabilities, ethnicity, region or location, gender, SES (social-economic status), and refugee status. A complete description of the number of articles and the percentage of articles from on each criteria can be seen on table 2.1.

Table 2.1.
Quantitative data description of the reviewed papers.

Category	Number of papers	Percentage
<i>Type of analysis</i>		
Quantitative	4	12%
Qualitative	13	39%
Mixed	16	49%
<i>Focus</i>		
Access	22	67%
Equity	8	24%
Access and equity	3	8%
<i>Focus on student characteristics</i>		
Disabilities	1	3%
Ethnicity/race	4	12%
Area/location/geography	10	30%
Gender (women)	6	18%
Low SES	14	42%
Refugee status	1	3%
<i>Year</i>		
2014	7	21%
2015	9	28%
2016	7	21%
2017	6	18%
2018	4	12%

Analysis of literature

Analysis followed the method described by Aveyard (2010), in which the first step comprised an inventory of the characteristics of the studies. Second, each article was read carefully and subjected to in-depth exploration. Third, findings were analysed beyond the individual studies. An additional step was followed to analyse the articles: (1) mapping the factors based on access or equity and categorizing the factors as either having a positive or negative influence on access and equity in HE; (2) categorizing the factors in terms of organizational level (national, university, education before university, and student); (3) grouping similar factors under overarching groups (e.g.,

financial support, financial aid, and funding support were grouped as financial support factors); and (4) having a second coder to check the first 20 articles and the analysis result. From 33 papers, this review found 40 factors that determine access and equity in HE (Table 2.1).

The origin of each paper might influence the study results by, for example, creating a bias or limiting the scope of the results. Out of the 33 papers, most were from Europe (9), Australia (9), and America (9) (see Figure 2.2). Therefore, it might be correct to assume that the results of this review were mainly influenced by policies, programmes, or conditions in these three regions. This could limit the applicability of the review outcomes to under-represented nations.

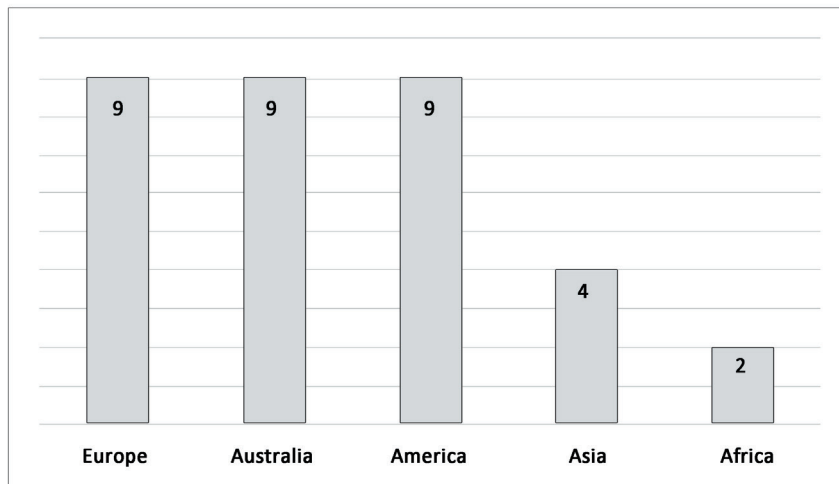


Figure 2.2.
Articles by continents.

2.4. Results

This section is divided into the following parts: an overview of determining factors on access and equity in HE (summarized in Table 2.2); a more in-depth discussion of factors influencing access to HE; and factors that affect equity in HE.

The results in this review are divided over four different levels: government, university, pre-university (e.g., secondary) education, and student. Only (positive) factors for access and no factors for equity were found at the government level. So, this means that all initiatives in the field of access at the governmental level up until now have positive consequences. The same holds for pre-university education. At the university level, there are factors reported for both access and equity. At the level of 'education before university,' there are only (positive) factors related to access. At the student level, positive and negative factors appeared for both access and equity.

Table 2.2.
Determining factors on access and equity in higher education in four institutional levels based on their positive or negative influence.

Level	Access		Equity	
	Positive	Negative	Positive	Negative
Government	<p><i>Policy to support disadvantaged students</i></p> <p><i>Programmes to improve confidence and academic skills</i></p> <p>An education system with <i>compulsory education</i> until the age of 16</p> <p>A sufficient <i>number of HE institutions</i></p>	n.a.	n.a.	n.a.
University	<p><i>Financial support for disadvantaged students</i></p> <p><i>Mentoring and pathway programmes</i></p> <p>Academic entrance requirements</p> <p>Presence of an admission policy</p>	<p>Uneven financial and institutional support</p> <p>A difficult enrolment process</p> <p>Unclear or low-quality communication by the university</p>	<p><i>Peer support for students</i></p> <p>Support of students by <i>teachers</i></p> <p>The teaching of basic academic skills</p> <p>Teaching and learning strategies for students from disadvantaged backgrounds</p> <p><i>Services and programmes</i> for students</p> <p>University support: infrastructure and student accommodation</p>	<p>Low academic achievement at high school</p> <p><i>Approving</i> the correct type of disadvantaged student</p> <p>'<i>Rejection</i>, exclusion, and invisibility'</p> <p>Narrow <i>framing</i> of 'gender'</p> <p>Respective departments were not very <i>welcoming</i></p>

Table 2.2. Continued

Level	Access		Equity	
	Positive	Negative	Positive	Negative
Education before university	The role of <i>teachers</i> Enrolment guidance from <i>adults</i> School view about debt	n.a.	n.a.	n.a.
Student	<i>Family support</i> High-SES <i>family background</i> Highly educated <i>parents</i> Financial support from <i>extended family</i> Student <i>anxiety</i> about debt <i>Community role</i>	Lack of money Student negative view about HE Lack of <i>motivation</i> Insufficient <i>information</i> about HE pathways Low-SES family First-in-family to attend university <i>Self-doubt</i>	<i>Engagement</i> , reflection, learning impediments Performance in high school	n.a.

Factors influencing access to higher education based on the organizational level

As one can read in Table 2.2, many positive and negative factors for access and equity at different levels could be identified. This section describes the other factors and provides some background about their role in access and equity. We start with the factors for access at the national level.

National level - Positive factors

Four factors were reported in studies that affected access at a national level: policies to support disadvantaged groups; programmes to improve confidence and academic skills; an education system with compulsory education until the age of 16 years; and the number of HE institutions.

A *policy* to increase the enrolment of minorities students in the USA in 1995 had successfully improved the number of qualified aboriginal student applications (Teplitzky & Uswak, 2014). The present literature review found several successful programmes that improved access to universities. These included the Twenty-First Century Scholars Programme (Zerquera & Smith, 2015) in the USA and the Affirmative Action Programme (Alon & Malamud, 2014) in Israel. For example, through the Affirmative Action Programme, which implemented admission quotas based on the SES of students, participation of public school graduates in universities increased by 51% within the first year of the programme.

Student qualification is the main driver for university participation. The *education system* in the UK requires students to attend compulsory education until 18 years of age, which has the benefit that a larger potential group of students has sufficient qualifications to enter university (Jerrim & Vignoles, 2015). The rapid expansion of HE worldwide has resulted in increasing student access to HE.

One study stated that the increase in the *number of HE institutes* in Turkey also somewhat helped increase access to HE, at least quantitatively (Gök, 2016). No factors were identified that negatively affected access at the national level.

University level - Positive factors

The review suggested four positive factors at the university level: financial support, mentoring and pathway programmes, academic requirements, and university policy. Two of the four factors seemed to have a more substantial impact: providing financial support from the university and the availability of mentoring programmes.

Students from a low SES often need financial support from their university to support their studies. For example, in the USA, students from a low SES preferred universities that had *financial assistance* over universities that offered student loans (Monks, 2018).

Mentoring programmes also have a crucial effect on improving access to HE. In Australia, one participant stated that she was able to continue her studies in higher education due to the support of mentors in the refugee mentoring program, who provided her with access to *pathway programmes* closely connected to mentoring initiatives. In Australia, these programs offer an alternative entry option for disadvantaged students who might not otherwise have access to university education. They typically include a combination of ‘academic skills’ and ‘discipline-focused subjects’ (Thomas, 2014).

Academic requirement, referring to entrance test scores provided by the university, also plays an essential part in access to HE. This review found that test scores were one of the most critical information for determining students’ academic merit. One study in Australia stated that high university access rates among students could be attributed to their superior test scores in education before HE (Jerrim & Vignoles, 2015).

Admission policies provided by universities affected access to HE. In Portugal, for example, one study (Dias, 2015) indicated that a new (admission) policy provided greater flexibility in admissions and access to HE, widened the recruitment pool, and made it possible to reverse the decline in student numbers observed during recent years. That same study showed that, in 2007–2008, approximately 14% of students enrolled in HE were using this access route.

University level - Negative factors

Three negative factors at the university level deal one way or the other with administrative processes: uneven financial and institutional support, a complicated enrolment process, and unclear or low-quality communication by the university.

Several studies pointed towards minimal *financial and institutional support* by universities, citing a lack of funding at the campus level (Zerquera & Smith, 2015). Second, in some studies, the *process of navigating enrolment* appeared to be marked by difficulty, misinformation, unhelpful personnel, and unclear processes (Negrón-Gonzales, 2017). This could be due to complicated registration bureaucracy systems and a lack of information about the registration process from the side of the university. Third, administrators felt that challenges in reaching scholars created a barrier to assisting. They described *communication* from the institute towards students as being difficult, varied, and repetitive (Zerquera & Smith, 2015).

2

Education before university - Positive factors

Factors that were of positive influence in the education before university merely focuses on persons who contributed significantly to the navigation and encouragement of the future student. The role of teachers, enrolment guidance from adults, and school view about debt were essential factors for access in the pre-university period.

First, the *teacher's role* at secondary and primary schools seemed to play a vital part in motivating students to continue their studies into HE (Tuomi et al., 2015). Secondly, guidance provided to students by adults in the process of university enrolment, including high-school counsellors, volunteers, and high school teachers, significantly contributed to improving access to higher education (Negrón-Gonzales, 2017).

One study in the UK stated the differing ways in which schools (teacher and staff) *responded to the issue of debt* are essential (Evans & Donnelly, 2018). On the one hand, the discourse of 'debt as normative' apparent in one school, and promoted by at least one teacher, could have benefited many young people at this school who were fearful of debt by not amplifying a notion in their minds that debt is a deterrent to university study. In other

schools, debt, and finance that could heighten any fears young people already have were emphasized. How schools deal with debt issues could affect young people's attitudes towards HE (Evans & Donnelly, 2018).

Student level - Positive factors

Six positive factors in the literature influenced access to HE at the student level: family support; high SES family background; highly educated parents; financial support from extended family; student anxiety about debt; and community role.

One study stated that students had more success in entering university because of the *support of their family*, who gave them the confidence to aspire and achieve HE (Whiteford, 2017). The analysis of socio-economic indicators showed that the *origin of a student's family* had a strong influence on access to HE (Dias, 2015). Those with *highly educated parents* were significantly more likely to enter university than students from middle- and low-income groups (Jerrim & Vignoles, 2015).

One study from South Africa stated that financial support from extended family is the most critical factor enabling the students to construct an educational pathway to university (Wilson-Strydom & Okkolin, 2016). Next, *students' anxiety about debt* was relevant. The majority of students in one study stated that they did not worry about the prospect of debt. It meant that they did not conceive debt as a barrier to entering HE life (Evans & Donnelly, 2018).

In one study, students stated that 'proving' that they (students) were different from their communities was particularly important (Wilson-Strydom & Okkolin, 2016). For them, they were coming from a poor neighborhood that did not always value education as enabling, as it served as a motivator for them (and sometimes their families) to be different, while for others, community connections, role models, and support were enablers during schooling as well as enablers in aspirations for HE (Wilson-Strydom & Okkolin, 2016).

Student level - Negative factors

Several negative factors were found that affected access at the student level: lack of money; student negative view about HE; lack of motivation; insufficient information about HE pathways; low SES family; first-in-family to attend university; and self-doubt.

Besides supporting access to HE, financial factors can also be an obstacle in determining the path to HE. Young people, especially those residing in low SES districts, reported lacking money, particularly when upfront fees were required (Kearney & Glen, 2017).

Students' negative views about HE as not being a realistic option were also mentioned as one of the negative factors. Students had self-censored the idea of university education, quite apart from the practical difficulty of the limited number of HE institutes and opportunities available in the community in which they lived and worked (Teplitsky & Uswak, 2014). Therefore, changing these negative student views on HE is crucial to promoting access to HE. In this respect, teachers in secondary education fulfill a crucial role in order to convince students of their qualities and potential.

Specific majors such as Science, Technology, Engineering, and Mathematics (STEM), many students' lack of motivation to do STEM courses were concerned. In one of the reviewed studies, seven participants spoke of their lack of motivation to undertake a STEM major as a 'fancy degree' (David, 2016). Furthermore, the same study stated that *insufficient information* about STEM pathways made it clear that early marketing of STEM courses was essential.

Students with *low SES family* backgrounds have less chance of continuing their HE studies. One study in Australia found that disadvantaged students were more likely to leave school as soon as possible and less likely to be in full-time post-secondary study. This is because they relied on their families or their resources to fund their study upfront as required (Kearney & Glen, 2017).

Students from a *first-in-family* (FIF) group were less likely than those from a non-FIF group to be advised by other family members and many friends to continue with HE. This is because of the family or friends' lack of understanding about accessing HE (Kearney & Glen, 2017).

Students who have doubts about their decision also influence the opportunity to continue their studies to HE. In one study, *self-doubt* was expressed by three participants who mentioned that they did not feel that they were not smart enough to undertake a STEM major (Christie, O'Neill, Rutter, Young, & Medland, 2017).

Factors influencing equity in higher education

This section describes the other factors and provides some background about their role in equity in higher education.

University level - Positive factors

Positive factors for equity at the university level can be summarized as either additional programmes or supportive peers and teachers. The same factors were peer support for students, support of students by teachers, the teaching of basic academic skills, teaching and learning strategies for students from disadvantaged backgrounds, services and programmes for students, learning support programmes for students, mentoring programmes for students, and university support including infrastructure and student accommodation.

One study in Turkey found that all students stated that they were highly appreciative of the course experience and highlighted *peer support* as a critical factor in their academic progress (Elliott, 2018). One study from Tanzania showed that the essential features in the university for disadvantaged students were the encouragement and *support of teachers* trained to meet the needs of all their students (Tuomi et al., 2015).

Teaching *basic academic skills* such as reading, writing, or speaking to students was fundamental to success. The students stated that once teachers explained skills and gave strategies on how to write a research essay, students felt able to produce an essay and knew what to do the next time around (Alauddin et al., 2016).

Universities may need to consider *teaching and learning strategies* for students from disadvantaged backgrounds. For example, students from low SES backgrounds could be supported through group work with

mixed groups in terms of SES. Moreover, specific additional tailor-made educational activities could be organized to address their specific needs. Thomas (2014) stated that there is a need to recognize that students from low SES backgrounds are different from students from middle- and high SES backgrounds. Thomas explained that many universities had internationalized their curriculum to acknowledge the different understandings of the world that those international students bring. In his view, it was not just a language issue but also a cultural issue that must be understood to teach international students well. Furthermore, he explained that many universities had not yet worked out how to translate the learning about teaching international students to students from low SES backgrounds. He also explained how universities viewed students from low SES backgrounds as different would shape the strategies developed to respond to the challenges they imagined these students faced.

Services and programmes for students were sometimes offered; these include summer orientations, mathematics and writing laboratories, tutoring (the informal conversations—just talking), supplementary instruction (finding academic, emotional, social, and cultural support), and learning communities (Charleston et al., 2014). Several of these programmes had positive effects on equity in HE. For example, the *Central Learning Support Programme* in Australia was offered to all participating universities, either face-to-face or online (Thomas, 2014). This programme provided simple trouble-shooting websites for new students, and others offered extensive support and or programmes to help students develop academic or study skills. In addition, *mentoring programmes* were referred to in several studies, either to raise the aspirations of students in schools or to provide support for students from under-represented groups once they enrolled at universities (Thomas, 2014).

University support in the present review refers to infrastructure and student accommodation. One study from Tanzania confirmed by students (from lower-income families) that a campus with an accessible *infrastructure* and proper equipment is essential for their learning success (Gök, 2016). Finding accessible *student accommodation* proved to be the next challenge. In an example from the Czech Republic, in one university, the only accessible room in all the institution's residences was made available to one of the

disadvantaged students, but only after some effort. This accommodation was costly and non-affordable; however, the costs were halved due to the director of residences (Biewer et al., 2015).

University level - Negative factors

Five negative factors influenced equity in HE: low academic achievement at high school; approving the 'right type' of the disadvantaged student; 'rejection, exclusion and invisibility; narrow framing of 'gender'; and respective departments were not very welcoming.

Student *academic achievement at high school* contributes to their performance at university. One study that collected data from 22 universities in the UK reported that prior attainment (high school) is a crucial correlate of success at university (Wyness, 2016). Further, Wyness stated that students who are likely to perform worst at university are disadvantaged students with weak prior attainment.

The struggle to be accepted in the university environment will be more challenging for disadvantaged students. In South Africa, for disadvantaged students, especially black students, approving the 'right type' refers to the power networks within the university field. It depends on who you have close ties with within your department and the institution (Booi, Vincent, & Liccardo, 2017). The same study stated that their familiarity carefully identifies the 'right type' of candidates with the university's existing 'way of doing things and whether their embodied dispositions reflect the dominant white middle-class institutional cultures. However, the 'approved' candidates who embody the dominant dispositions are also made to feel *excluded, rejected, and invisible* when they attempt to interrupt the dominant institutional culture of the university.

Chairpersons' conception of gender equality was found, in one study (Wyness, 2016), to be derived from their understanding of gender as a concept. To these chairpersons, 'gender' was taken as a synonym of 'women' and 'gender inequality' as the disadvantages female students face. These responses reflected a *narrow framing of 'gender'*, as 'gender' is not 'women'. All participants in one study from the USA expressed how the computer science culture in their *respective departments was not very welcoming* to women, and even less so to African American women (Pitman, 2016).

Student level - Positive factors

Four factors influenced equity at the student level: engagement; reflection; learning impediments; and high school performance.

One study in Australia (Alauddin et al., 2016) used three dimensions – engagement, reflection, and learning impediments – as determinant factors in student study practices in HE. *Engagement*, which refers to the formal teaching and learning process. University entry score positively affected engagement, and students aged 20–25 years were more engaged than those younger than 20 years.

The *reflection* focused on students' inclination towards reflection on probable causes that might have made a difference in their academic performance or learning outcomes. Upper undergraduates demonstrated a lower propensity towards reflection than lower undergraduates.

Learning impediments in terms of language difficulty and the theoretical or conceptual underpinning of application to study. Disadvantaged students from a non-English-speaking background faced higher learning impediments than students from an English-speaking background.

High school performance was shown to significantly influence key dimensions of students' study habits well into their university years. One study stated that the performance at grade level 12 had significant influences on crucial dimensions of students' study habits well into their university years (Alauddin et al., 2016).

2.5. Discussion

This review aimed to provide a more comprehensive overview of the factors influencing either access or equity in HE. In general, more factors were reported by studies affecting access rather than equity. In analyzing and structuring these factors, this study complemented a study by Jensen (2011) that analyzed access to HE in terms of student retention. He identified factors under three levels: individual, institutional, and social or external. This study divided the factors into four levels: government, university; education before university; and individual. Based on 40 factors in this review, the most factors

are at the university level (eighteen factors), student level (fifteen factors), national level (four factors), and the fewest factors are at the education before university level (three factors).

We need to highlight that the results presented in this study are (not only) from European, America and Australian countries (82%). So this article presents universal findings from western countries. Moreover, there are other papers which are less in number (18%) from Africa and Asia countries. Several reasons may be that western (developed) countries may have more pre-existing policies and programmes than developing countries to increase access to higher education. Developed countries generally have a fairly strong capital both in terms of funding and infrastructure.

The results of this study that presents structured factors (from government, university, pre-university, individual level) are in line with the concept of Bourdieu who provides a conceptual framework that stands to contribute important insights into the mechanisms underlying educational inequality.

Bourdieu (1986) delineates three fundamental forms of capital: economic capital, which is readily convertible; social capital, which is comprised of 'social obligations' or 'connections'; and cultural capital or 'cultural competences', which can be embodied (internalized and intangible), objectified (cultural products), and institutionalized (officially accredited). Bourdieu (1986) sees the forms of capital as mutually constitutive in that economic capital affords the time and resources for investment in the development of children's cultural capital, which is associated with future educational and occupational success and, in turn, contributes to the accumulation of economic capital.

Habitus is the learned set of preferences or dispositions by which a person orients to the social world. It is a system of durable, transposable, cognitive 'schemata or structures of perception, conception and action' (Bourdieu, 2002). Habitus is rooted in family upbringing (socialization within the family) and conditioned by one's position in the social structure. Bourdieu termed it 'socialized subjectivity' or subjectivity conditioned by structural circumstances. Habitus shapes the parameters of people's sense of agency and possibility; it entails perceptual schemes of which ends and means are reasonable given that individual's particular position in a stratified society.

It is striking that many of the factors seem to be related to the role of social support (by peers, by family, by teachers, by university officers, and via programmes). Social support emerged as crucial for both access and equity. Most of the previous research, especially large-scale quantitative studies on access and equity, did not emphasize this factor in their findings. This review found the social support factor at three levels: the pre-university education level; the university level; and the student level. At each level, peers, teachers (including tutors and counsellors), and family support (including external family members) played a significant role in giving students motivation, encouragement, guidance, and financial support.

Our conclusions are related to the outcomes of the “What works” project, involving 22 higher education institutes in the UK, which aimed to facilitate an effective transition to higher education. “What works” identified the importance of student engagement and belonging. Student engagement enables belonging through supportive peer relations and meaningful interactions with staff, thus developing knowledge, confidence, and identity of students as successful HE learners and providing an HE experience relevant to students’ interests and future goals (Thomas, 2013).

According to Tinto (1994), a successful transition from one educational level to the next depends on whether students manage to connect to the new educational environment. This conclusion corresponds with reasons provided by students themselves for their drop-out. Tinto’s integration model describes the transition of secondary to higher education. In his opinion, students’ behaviour after this transition mainly depends on whether students manage to adapt to the new environment. In this respect, he makes a distinction between “academic integration” and “social integration”. The importance of both factors and especially social integration is found in our study as well. The key to effective retention of students is in a strong commitment to quality education and the building of a strong sense of inclusive educational and social community and cultural capital on campus (cf. Tinto, 1994).

It was striking that only a few studies on equity emerged in our review. There might be several reasons why there seemed to be more attention for access than equity. First, there may be more policy interest for access than equity so far (Jia & Ericson, 2017; Leach, 2013): the priority may have been

getting disadvantaged student groups from pre-university education into the university. This could explain the emphasis on factors for access at the government and the pre-university education level. Later, the focus switched to how different groups are treated in the university itself, leading to more attention for equity factors at the university and the student level.

Thomas (2014) stated that despite the initiatives to improve access to HE, it is less clear how the teaching and learning challenges and opportunities created by increased numbers of students from disadvantaged backgrounds are being managed. Furthermore, he stated that if these challenges are not addressed effectively, the benefits produced by the initiatives mentioned above may be lost if university teaching alienates students from disadvantaged backgrounds. To overcome this, perhaps the university should consider using a Universal Design for Learning (UDL) that prioritizes the needs of all potential users from the start. The UDL approach to instruction includes three principles: (a) multiple means of engagement, (b) multiple means of representation, and (c) multiple means of action and expression; UDL is designed to meet the unique needs of all learners through challenging instruction that is both flexible and varied (Hitchcock, Meyer, Rose, & Jackson, 2002; Rose & Strangman, 2007; Rose, Gravel, & Domings, 2010). In addition, the lecturer also needs to consider Inclusive Practice as a teaching approach is also needed to recognize the differences between students and use this to ensure that all students can access educational content and participate fully in their learning.

Moreover, much research on access and equity in HE might be more practical, contextual, or local and related to evaluating education policies or programmes at the national or institutional levels (Childs & Stromquist, 2015; Thomas, 2014; Wyness 2016). Part of the research is likely to be reported in the grey literature (e.g., national reports, policy documents), which was not part of this review but might have delivered additional factors influencing access and equity at the different levels. In addition, research on access often focused at all levels distinguished in our review (as shown by the findings mentioned above). In contrast, equity research seemed to focus on the primary process (and less at the policy level): it was often conducted at either the university level or individual level or a combination of both levels.

2.6. Limitation and further research

As said, there were limited studies in this review that discussed both access and equity at the same time (8%), while in contrast, 67% of the sources focused on access. Therefore, it is hard to make specific links between or draw conclusions across both topics. That 8% (three articles) that did include both reflected on the findings discussed in this article (Booi et al., 2017; Thomas, 2014; Tuomi et al., 2015). Hence, future studies should focus on access to HE and equity and ideally include both topics, for example, by following students from the entrance to the university up to and including their graduation.

Several characteristics or variables may refer to students from disadvantaged backgrounds. Most of the articles reviewed in this study referred to one specific group of students. Therefore, it may be exciting and relevant to follow a disadvantaged group during their trajectory of entering and going through the HE process, so the complete journey from secondary school until the university can be captured. In addition, it might be relevant to include both quantitative and qualitative data in such a study, as many of the studies in the review typically used only one type of data, leading to a less complete picture of the processes in equity and access.

The focus of our research has been on factors that have been proven to support or hinder access and equity, respectively. Factors that had a neutral impact were not taken into account explicitly. We suggest having research that focuses on factors that have a neutral impact on future research.

Articles that we discussed in this study encompassed the period between 2014 until 2018. After 2018, several important events occurred that potentially affected access and equity to higher education in different countries, such as the covid-19 pandemic and Brexit. Therefore, for the future we suggest to conduct a review on this topic, including the period post 2018.

The results of this study are limited to results from three continents, namely Europe, America, and Australia. Therefore, we suggest having a study that compares more deeply the differences between countries in the continent.

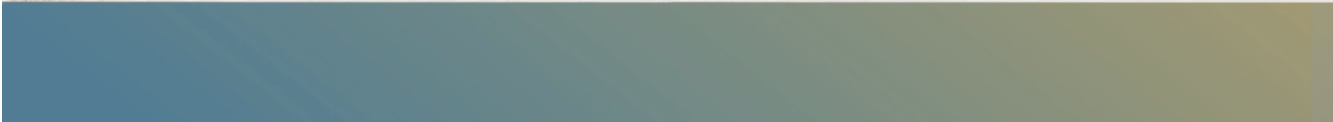
In general, most factors (66.7%) relate to access than equity. Financial factors still seem to be the main obstacle to continuing their studies in higher education, this factor appears at several levels in the access part. Two factors that appear in both access and equity are academic achievement and the role of teaching staff (including teachers, lecturers, and mentors). It seems that if a student has good academic performance in pre-university education, they are more likely to do well in university as well. For the role of teaching staff, because this research related to access was carried out with some background of the disadvantaged student, the role of teaching staff becomes very crucial in both access and equity. Students need the help of these teaching staff both to continue their studies in university and to successfully study in university.

2.7. Recommendations

Based on the fact that social support seemed to be an overarching factor across levels in our study and both equity and access, it is recommended that national policy and institutional policy focus more on improving the opportunity for student learning success at the university. Mentoring programmes could follow these policies. Knowing that social support is significant, it is wise to create a support system that includes several actors, such as students, teachers, managerial level, and university administrative staff.

2.8. Implications

The implication of the location (origin of the article) is that developed countries, in general, already have policies and programmes to increase access to higher education. This may be because developed countries have sufficient capital to support policies and programmes to increase access to higher education.



Chapter 3.

**The Bidikmisi programme
for students with low SES in
Indonesia: Analysis in terms of
factors relating to access and
equity in higher education**



3.1. Introduction

Higher education is of benefit to university graduates individually, as well as to a country in general. First, individuals who have completed higher education are more likely to be employed and to earn more than others. Second, higher education is associated with greater access to healthcare and retirement plans, and people with higher levels of education are more likely to engage in healthy behaviours. Third, individuals with higher education tend to be active and engaged citizens, as well as to be in a position to provide better opportunities for their children (Ma, Pender, & Welch 2016). For a country, higher education may help to improve overall economic and social development (Salmi, 2020). This relationship is emphasized by the Sustainable Development Goal on 'Quality Education' (SDG 4). This goal includes a target (4.3) of realizing equal access for all to affordable and quality technical, vocational and tertiary education—including university education—by 2030.

The Sustainable Development Goals are an international agreement of the United Nations, and all member states, including Indonesia, have committed to reaching the targets by 2030, with the ultimate objective of building a more sustainable world. At present, however, most students enrolled in higher education continue to come from wealthier segments of society (Marginson 2016; Salmi 2020). Furthermore, the students who are least likely to gain access to higher education in Indonesia are those of low socio-economic status (SES) (World Bank, 2014). Even when they do gain access to higher education, students from under-represented and traditionally excluded groups tend to have lower completion rates (Salmi, 2020). Increasing completion rates requires the availability of sufficient resources for both students and the higher education institutions in which they enrol (Ma, Pender, & Welch 2016).

Many governments have created excellence programmes and investment schemes to improve access to and equity in higher education. Through the Directorate General of Higher Education (DGHE), the Indonesian government has launched several programmes to improve access to and equity in higher education. Examples include the BBM programme (Bantuan Belajar Mahasiswa or Student Study Assistance), the PPA programme

(Peningkatan Prestasi Akademik or Academic Achievement Improvement) and the Bidikmisi programme (bidik refers to target, misi refers to mission). Whereas the PPA programme is specifically intended for students who have outstanding achievements in academic, sports or the arts, the BBM programme is specifically aimed at students with low SES in their second year of university studies.

The present study focuses specifically on the Bidikmisi programme, as it provides tuition fees and living allowances for four years to students with low SES. In doing so, it aims to affect both access to and equity in higher education. The main research question in this study is as follows: Which factors are related to access and equity for students with low SES, based on Bidikmisi programme within the Indonesian university context?

Study aim

The present study aims (1) to provide a brief description of the context of access and equity in higher-education policy in Indonesia by reporting on various policies and programmes, and (2) to examine in greater depth one programme (i.e. Bidikmisi) that encompasses access and equity, in addition to analysing existing evidence on this programme according to the CIPP (context, input, process, product) model. This holistic analysis is likely to reveal factors that are important to the success and future of students with low SES.

Study approach

Before discussing the approach on which this study is based, it is necessary to define the terms ‘access’ and ‘equity’. Within the context of higher education, both access and equity are critical concepts in the quest for a fair and inclusive academic environment for all students. This study proceeds from the definition of *access* formulated by Neubauer and Tanaka (2011), with *access to education* referring to the extent to which educational facilities and opportunities are accessible to all people who are in need of education. We adopt this definition based on the belief that everyone has the right to education, alongside awareness that not every student currently receives education up to the higher levels.

Equity in education means that schools and education systems provide equal learning opportunities to all students (OECD, 2018). Based on this definition, for the purposes of this study, equity refers to the learning process in the higher education level, and it can be used to guide efforts to strengthen the capacity of an education system to reach out to all learners in the community (Ainscow, 2016). Previous studies have addressed educational equity in economic and statistical terms, while the issue of inequity in education has been examined from a variety of angles (e.g. inputs, processes, outputs and outcomes), as well as in a variety of contexts (e.g. education systems, providers and learners) (Alcott et al., 2018).

To investigate factors relating to access to and equity in higher education for students with low SES in Indonesia, this study draws on data in the form of existing academic and applied research on a specific programme (Bidikmisi) according to the CIPP model (additional information on this model is provided in Section 3.2). All relevant sources appearing after the introduction of the programme in 2010 have been taken into account.

Education system in Indonesia

A full understanding of the functioning of the Bidikmisi support programme for students with low SES can be enhanced by learning more about the education system in Indonesia, which extends from kindergarten through the post-graduate level. The system is presented schematically in Figure 3.1, and a more elaborate explanation is provided in the following section.

Age		School/Education Level			Out-of-School Education	
					Nonformal	Informal
>22	School/Education Level				Courses	Family Education
19-22	Higher Education/Islamic Higher Education					
16-18	Senior Secondary School			Apprenticeship		
	General		Vocational	Packet C		
	General Senior Secondary School	Islamic General Senior Secondary School	Vocational Senior Secondary School			
13-15	Junior Secondary School		Islamic Junior Secondary School	Packet B		
7-12	Primary School		Islamic Primary School	Packet A		
4-6	Kindergarten		Islamic Kindergarten	Play Group		
0-3				Day Care Center		

Figure 3.1.
Education system in Indonesia, Ministry of National Education (2007).

In Indonesia, education starts with kindergarten (4–6 years of age) and is followed by primary school (7–12 years of age), junior secondary school (13–15 years of age), senior secondary school (16–18 years of age) and, finally, higher education (19–22 years of age). At each level, there is an Islamic alternative school, which is managed by the Ministry of Religion. In the Islamic schools, Islamic subjects are taught as basic subjects, amounting to at least 30% in addition to general subjects. These schools are managed by the Ministry of Religion, because most citizens in Indonesia are Muslim, and Islamic parties developed them as part of the broader education system. Non-Islamic schools are under the auspices of the Ministry of Education, Culture, Research and Technology.

As stated in Higher Education Law 12/2012, each university in Indonesia is autonomous with respect to its management. Autonomy in education is implemented selectively, based on performance evaluations conducted by the Minister of Education for public universities. For private universities, management is determined by the university organizers, in accordance with the regulations that have been adjusted to the needs of each university. In 2015, the government launched a 12-year compulsory education programme, starting from primary school and proceeding through senior secondary school. After senior secondary school, students can continue their studies into higher education.

3.2. Policy, Current Status and Programmes relating to Access and Equity

Overall, this section aims to provide a comprehensive overview of the policies, current state, and programs related to access and equity in higher education in Indonesia.

3

Policies on access to higher education

Several policies have been formulated to increase access to higher education in Indonesia. As described in the introduction to this chapter, the current study focuses on a variety of specific policies (see Appendix 1) that address access to higher education for students from low SES backgrounds.

The first policy was the National Education System Law, which was passed in 2003. In general, this legislation guarantees the right to tuition assistance for all students who have high academic achievement and whose parents are not economically capable of paying for their education. This policy addresses all levels of education, and not specifically higher education.

The second initiative was the Government Regulation of 2008. This policy calls for the central and local governments to provide tuition assistance for students from low SES backgrounds with high academic achievement. The emphasis of this policy is on the funding providers (i.e. central and local governments), and it was not directed exclusively at higher education.

Third, there was the Law on Educational Legal Entities from 2009. This legislation requires educational institutions to recruit and accept Indonesian citizens who have academic potential and who are from economically disadvantaged background amounting to at least 20% of the total number of new students. It also requires educational institutions to allocate tuition assistance to Indonesian citizens who have academic potential and who are from economically disadvantaged backgrounds amounting to at least 20% of the total number of students.

Fourth, there was the Higher Education Law of 2012, which entails substantial changes relative to previous policies. This policy is specifically aimed at higher education, and it explicitly mentions that public universities must search for and recruit prospective students.

Policies on equity in higher education

In this section, equity refers to policies that support the learning process in higher education, especially for students with low SES. In general, policies at the national level focus primarily on the management of higher education. Most policies aimed at supporting the student learning process occur at the university level. Two central policies nevertheless do address equity in terms relevant to this study: the Higher Education Law and the Law on Educational Legal Entities (see Appendix 2).

The Law on Educational Legal Entities of 2009 requires education institutions to allocate tuition assistance for Indonesian citizens who have academic potential and who are from economically disadvantaged backgrounds amounting to at least 20% of the total number of students.

The Higher Education Law of 2012 requires central and local governments and higher education institutions to provide support to help students with low SES to complete their studies by granting or waiving tuition fees, or by providing interest-free loans that must be repaid after graduation or obtaining employment. This legislation further dictates that higher education institutions must coordinate study-financing payments to the financial capacities of students or their parents.

These policies provide a guarantee that students with low SES will be able to complete their studies (either through grants, waivers or interest-free loans) and they specify that universities should have a budgets for

students with low SES. This policy is meant to alleviate a major concern for both students and their parents: how to pay the costs needed in order to complete their studies after having been admitted to a university.

The policies mentioned above (Sections 2.1.1 and 2.1.2) are those underlying the implementation of the Bidikmisi programme. Each year, the Ministry of Education issues a Bidikmisi implementation guidebook. In 2014, through the Minister of Education and Culture, the government launched Regulation 96 concerning the implementation of Bidikmisi education cost assistance. This regulation discusses the objectives of the Bidikmisi programme, the financing components that it covers, the criteria and requirements for recipients of Bidikmisi funding, the period for granting the funding, and the monitoring and evaluation of the programme.

Access to and equity in higher education: Current status

All data presented in section 2.2 was taken based on reports from Statistics Indonesia (*Badan Pusat Statistik*) that retrieved from Badan Pusat Statistik (bps.go.id) from 2019 to 2021.

Access to higher education in Indonesia: Trends and figures

Indonesia has a particularly impressive record of expanding primary education. In the case of higher education, however, although there has been considerable improvement, the country continues to struggle with its objective of increasing the participation rate and opportunity to learn (Purnastuti & Izzaty, 2016). To overcome this problem, the government has been working to expand access to higher education. In this regard, this study examines trends in school enrolment from primary school to higher education (see Figure 3.2) from 2019 until 2021.

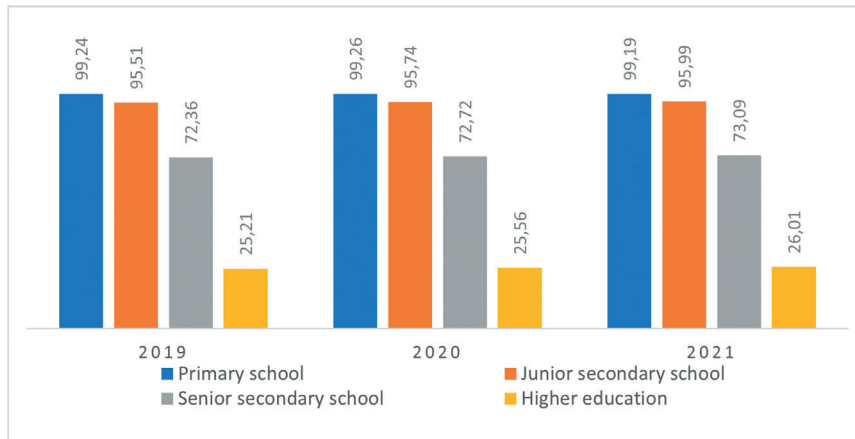


Figure 3.2.
School enrolment participation rate by education level, 2019–2021 (Statistics Indonesia, 2019 – 2021a).

As shown in Figure 3.2, from 2019 until 2021, almost all students (99%) in Indonesia were enrolled in primary education. Enrolment in junior secondary school increased from 95% in 2019 to almost 96% in 2021, although this trend was not statistically significant. There was a very small increase in secondary-school enrolment from 72% in 2019 to 73% 2021. Enrolment in higher education also increased slightly, from 25% in 2019 to 26% in 2021). As demonstrated in Figure 3.2, there has been no significant change for any type of education in the past two years. Enrolment in higher education is clearly much lower than it is in primary and secondary education.

In the following section, we present school enrolment rates according to student economic status from 2019 until 2021, based on reports from Statistics Indonesia (BPS or Badan Pusat Statistik) in Indonesia. As shown in Figure 3.3, economic status is divided into five categories of household expenditures: Quintile 1 (Q1; households with the lowest expenditures) to Quintile 5 (Q5; households with the highest expenditures).

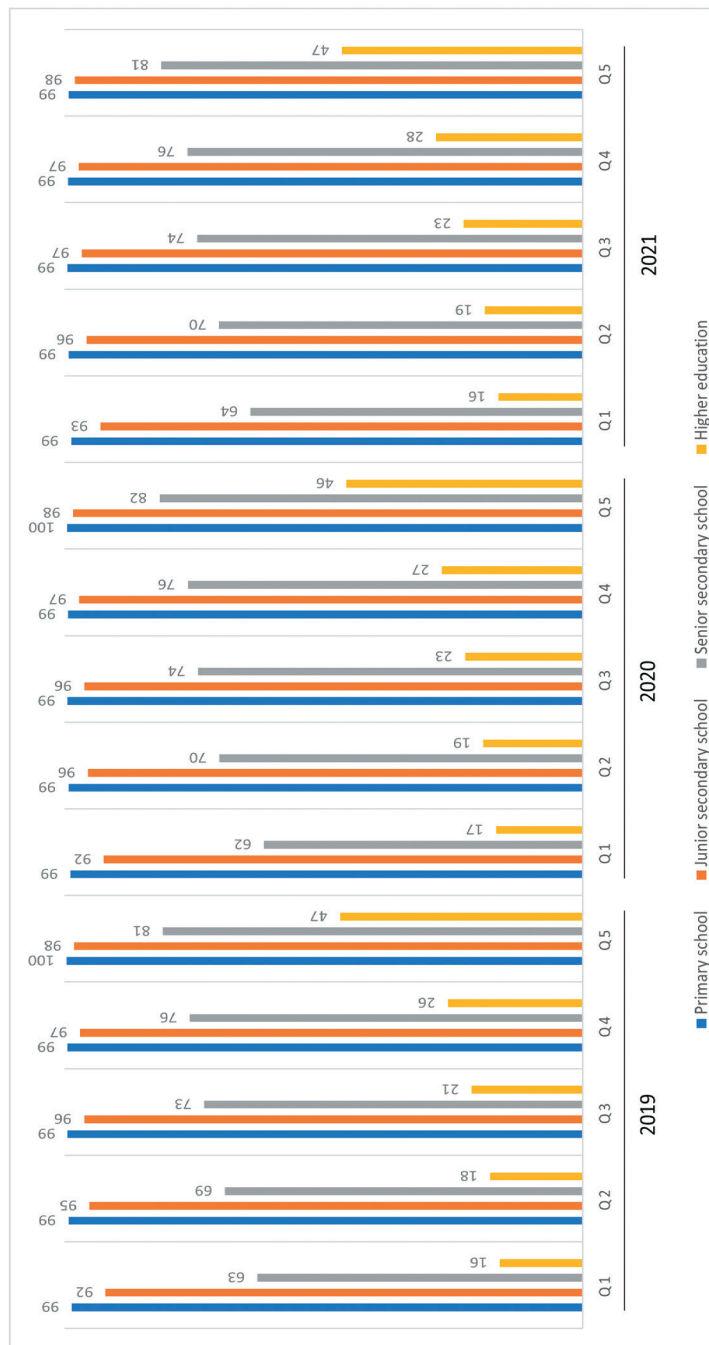


Figure 3.3. School enrolment rate by type of education types, based on economic status from 2019 until 2021. Source: Statistics Indonesia (2019 – 2021b).

Between 2019 and 2021, almost all students (99%–100%) from households in all five categories completed primary education, whereas a somewhat smaller share (92%–98%) completed junior secondary school. For students from the poorest households (Q1), the completion rate decreased significantly from the junior secondary school to the senior secondary level. Students from the poorest households had the lowest rates of enrolment in higher education (16% in 2019, 17% in 2020 and 16% in 2021). In contrast, students from the most affluent households (Q5) had the highest rates of enrolment in higher education (47% in 2019, 46% in 2020 and 47% in 2021). In general, these students had the highest enrolment rates from primary school to higher education. As indicated by these trends, school-participation rates increase along with economic status.

The trends depicted in Figure 3.3 provide justification for the provision of financial support to students with low SES. Improvements are needed in both governmental and university policies and programmes aimed at increasing access to institutions of higher education for students from low SES backgrounds. In addition to financial aid, students with low SES also need social support from their families, peers, teachers and lecturers (Wanti et al., 2022).

Equity in higher education: Current status

In this study, equity refers to the successful completion of studies at the university level. Ideally, all new students who are accepted to university would graduate within four years (the nominal duration for the completion of an undergraduate in Indonesia). In this section, we present data on the number of students enrolled, new entrants and graduates (based on student reports from 2019, 2020 and 2021) (see Figure 3.4). Enrolled students refer to the total number of students, including first-year, second-year, third-year and fourth-year students, as well as those not completing their studies. The number of new entrants refers to the number of new students enrolling in the new academic year. The number of graduates refers to the number of students completing their studies. Due to the limited data available, the figures presented in Figure 3.4 refer to students in general, and not

specifically to those from low SES backgrounds. In addition, the enrolment data are not linked to the graduation data.

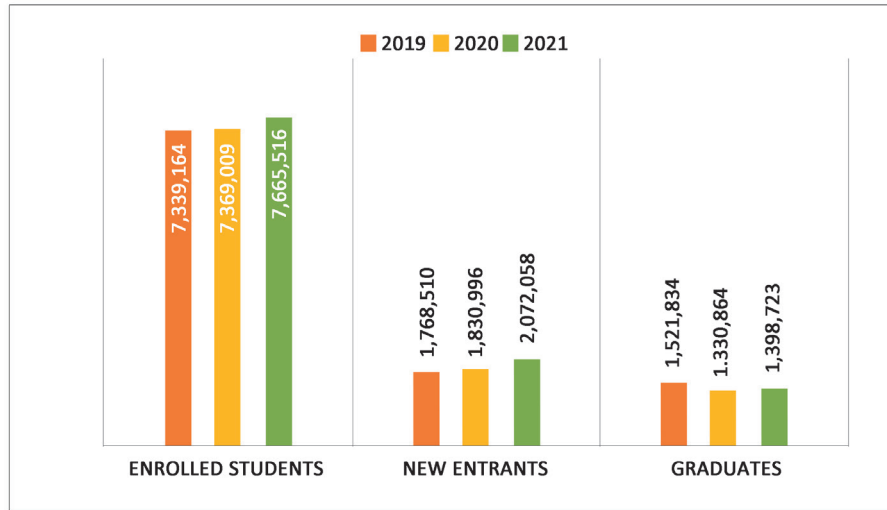


Figure 3.4. Number of enrolled students, new entrants and graduates in higher education institutions, from 2019 until 2021, (Statistics Indonesia, 2019 – 2021c).

Although there is an increasing trend in the number of students enrolled and the number of new entrants, the number of graduates from institutions of higher education exhibits a slight decrease. These figures may reflect the effects of the COVID-19 pandemic occurring in 2020. More specifically, students may have experienced obstacles in the shift from face-to-face instruction to online learning systems. This may also have led to delays in thesis completion. Although there is no connection between enrolment and graduation figures, and although there is no clear explanation for the declining trend in graduation figures, these trends raise questions concerning whether equity was maintained throughout this period.

Data on students from low SES backgrounds during and after university are limited. It could be that this information might exist within the relevant ministries but has not yet been shared with the public. Research on equity for students with low SES in Indonesia is also limited. Taken together, the information presented here raises questions concerning factors relating to access and equity for students with low SES based on the Bidikmisi programme within the Indonesian university context. In the next section we introduce the methods used in this study, followed by the results. Finally, we

organize our findings according to the CIPP model, as also explained in the Methods section,

3.3. Methods

To analyse how the Bidikmisi programme has affected access and equity for students with low SES in a broader sense, this study comprises a review of the literature on the programme. The findings are structured according to the CIPP (context, input, process, product) model.

Literature Review

This literature review is based on research papers on the Bidikmisi programme, with a focus on access to and equity in higher education for students from low SES backgrounds in Indonesia. It was conducted according to several search criteria and in several steps.

First, the search was based on a combination of two keywords in both English ('Bidikmisi evaluation') and Indonesian ('evaluasi Bidikmisi'). To ensure the inclusion of all research articles related to the programme, publications in both English and Indonesian were allowed, even if the authors used different terms. This choice to include 'evaluation' as a keyword was intended to ensure that the search would identify results from evaluation studies on the Bidikmisi programme.

Second, because the Bidikmisi programme started in 2010, the search period was limited to 2010–2021.

Third, diverse literature sources (e.g. journal articles, conference papers and book chapters) were collected from the databases most relevant to the objective of this study: Google Scholar, Scopus and Web of Science.

Fourth, to confirm the relevance of the sources to the study, the title and abstract were checked first. Several studies were excluded as irrelevant to the study (e.g. research focusing on methods used for selecting Bidikmisi recipients, the Bidikmisi information system, flood survivors, the use of online games for education and entrepreneurship), as they were unrelated to either access or equity.

Fifth, titles were scanned to avoid including the same study multiple times, due to its appearance in multiple databases.

Sixth, only manuscripts that could be obtained were included.

In all, this search strategy yielded six articles, one book, one conference paper and one dissertation for further analysis. These nine sources were classified as relevant to 'access', 'equity' or 'both access and equity' and were categorized according to the terms of the CIPP model. A full explanation with detailed information for each article is presented in the Appendices.

CIPP Model

This study is intended to identify factors relating to access to and equity in higher education based on research on the Bidikmisi programme, according to the CIPP model. Originally designed based on the creator's experience with curriculum evaluation in the Chicago school system (Stufflebeam, 2003), the CIPP model provides a holistic view of programmes, while also considering multiple angles for each stakeholder and enabling evaluators to formulate questions for specific components (Almayah et al., 2020).

The CIPP Model was selected for several reasons. First, it has been recognized as a pioneering approach to management-oriented evaluation, thereby helping managers be able to make appropriate decisions about programmes (Worthern, Sanders, & Fitzpatrick 1997). Second, the model's comprehensive approach to evaluation can be applied throughout the entire process of a programme, from planning to outcomes and the fulfilment of core values (Joseph, 2021). Third, the model provides a comprehensive view of a programme by evaluating its context, input, process and output from each and every angle (Aziz, Mahmood, & Rehman, 2018).

Context includes the goals, objectives, history and background of a programme; *inputs* refer to materials, time, physical and human resources needed for the effective operation of the programme. *Process* includes all teaching and learning processes, and *product* focuses on the quality of teaching, learning and their usefulness and potential to benefit society (Stufflebeam, 2003). Within the context of this study, the evaluation of these elements consisted of identifying, verifying and classifying the factors from the literature review into each CIPP element to detect any patterns.

After collecting literature on the Bidikmisi programme, the next step consisted of reading each of the nine articles individually. Each article discussed different factors relating to access, equity or both. Each of these factors was then classified as relating to context, input, process and/or product (according to the CIPP model) and designated as addressing access, equity or both. After this step, we determined whether each factor was supporting (+) or hindering (-). A complete description of each factor is provided in Table 3.1.

3.4. Results: Factors on Access to and Equity in Higher Education for Students with Low SES in the Bidikmisi Programme

This section begins with a description of the ‘product’ element, as it entails the achievement of programme objectives and relates to both access and equity. This is followed by a discussion of the elements of context, input and process. In general, most (67%) of the Bidikmisi studies identified discuss student academic achievement or grade point average (GPA) as an outcome. Most of the factors categorized under the ‘process’ element relate to student academic achievement (GPA) and student social activity. More of the factors identified in the studies relate to equity than to access. Only two factors relate to both access and equity.

Table 3.1.
Literature review on the Bidikmisi programme, according to the CIPP model.

Context	Input	Process	Product
Access	Context 1: Lack of access due to low-quality K–12 schools (-); (Fadhil & Sabic-Rayess, 2021)	Process 1: Programme relies on the academic achievement rather than on the SES background of students (-); (Fadhil & Sabic-Rayess, 2021)	
	Context 2: Challenges in access to higher education (-); (Purnastuti & Izzaty, 2016)	Process 2: Improvement needed in terms of the rate of accuracy in identifying target recipients (-); (Fauzi & Samsuruhuda, 2019), (Dhara & Rahaju, 2020)	
	Context 3: Lack of policy or standard procedure needed at the university level (-); (Fadhil & Sabic-Rayess, 2021)		
	Context 4: The supportive role of private higher education institutions (+); (Purnastuti & Izzaty, 2016)		

Table 3.1. Continued

Context	Input	Process	Product
Equity	Input 1: <i>Learning interest</i> has a positive effect on student achievement (+); (Anfas et al., 2017)	<i>Student activity</i> Process 3: Student participation in social and religious activities (+); (Aliyyah, Rosyidi, & Yazid, 2019)	<i>Student academic achievement (GPA)</i> Product 1: in terms of GPA, most recipients was above the average standard (+); (Fauzi & Samsuruhuda, 2019), (Dhara & Rahaju, 2020)
	Input 2: <i>Motivation</i> has a positive effect on student achievement (+); (Anfas et al., 2017)	Process 4: Poor self-management of living allowance by recipients (-); (Aminatul, 2021), (Wasahua, Koesmaryono, & Sailah, 2018), (Huda, 2010)	<i>Graduation time</i> Product 2: Only 50% students graduate on time (-); (Fauzi & Samsuruhuda, 2019)
	Input 3: <i>Hindering factors</i> (e.g. lack of coordination, information, monitoring and evaluation) in programme implementation (-); (Fauzi & Samsuruhuda, 2019), (Sadikin et al., 2020)	Process 5: Low <i>living allowance</i> per month (-); (Fauzi & Samsuruhuda, 2019)	
	Input 4: Support and encouragement from <i>parents and environment</i> can motivate students (+); (Wasahua, Koesmaryono, & Sailah, 2018)		Product 3: Bidikmisi programme can improve student <i>professional development</i> (+) (Aliyyah, Rosyidi, & Yazid, 2019; Sadikin et al., 2020)
			Product 4: Positive <i>impact of education</i> on academic and professional development in <i>Indonesia</i> (+); (Aliyyah, Rosyidi, & Yazid, 2019)
Both access and equity			

The Bidikmisi programme is one of the Indonesian government's flagship policies aimed at increasing access and learning opportunities in institutions of higher education for students who have good academic achievement and who are economically disadvantaged (Bidikmisi Guidebook, 2018). As stated on the Bidikmisi service website, the higher education institution (as a Bidikmisi organizer) is required to provide Bidikmisi recipients with living-expense assistance and exemption from tuition fees at the beginning of the study period. Other services—including accommodations and subsidies for books and learning tools (e.g. laptops) and other education-related costs—are optional and provided according to the considerations and facilities of the higher education institution.

In terms of achievement, Bidikmisi students demonstrated outstanding academic ability, with more than 87% having achieved a GPA above 3.0. These students thus contribute to improving the quality of education in each tertiary institution (Bidikmisi Guidebook, 2018). Results from a tracer study of Bidikmisi graduates at several higher education institutions yield the following profile of Bidikmisi graduates: 39% are currently participating in the teacher-education process; 26% are civil servants or employees of private or state-owned enterprises; 29% are entrepreneurs, and 6% have gone on to post-graduate studies in Indonesia or abroad (Bidikmisi Guidebook, 2018).

3

Product

Equity

According to studies on the Bidikmisi programme, the academic achievement (in terms of GPA) of *most Bidikmisi recipients was above the average standard* (higher than 3 on a scale of 1–4), and a small proportion qualified as *cum laude*. Only a small number of recipients scored below university standards (less than 2.75) and were advised to obtain special assistance to increase their GPA (Fauzi & Samsuruhuda, 2019). These findings suggest that the financial aid from the Bidikmisi programme does promote academic achievement.

According to one Bidikmisi study, the time needed for graduation was not in line with the nominal expected duration (four years or eight semesters). Of 1150 Bidikmisi recipients, the number *who graduated on time was 49.91%* (Fauzi & Samsuruhuda, 2019). It was noted that the financial aid

given to Bidikmisi recipients covers a period of four years (standard duration of studies for an undergraduate degree). Bidikmisi recipients who are unable to complete their studies within four years are required to pay their own tuition fees until they finish their degree programmes.

Both access and equity

According to one study, the Bidikmisi programme contributed to the *academic and professional development* of recipients. It was reported that Bidikmisi graduates worked well in governmental and private institutions, and it was thus concluded that the Bidikmisi programme helped to stimulate improvement in the productivity and competitiveness of human resources in Indonesia (Aliyyah, Rosyidi, & Yazid, 2019). The authors identify the payment of university fees as the main reason behind the success of students with low SES. Financial aid provided by the Bidikmisi programme to help students enter and stay at the university also enabled them to acquire university learning experiences, including academic and professional experience.

By providing financial aid for university studies to students with low SES, the authors argue that the Bidikmisi programme enhances academic development by providing opportunities for students to gain valuable experience and skills. The programme has also been shown to provide students with opportunities to gain knowledge and skills in their chosen fields. By facilitating their participation in research, inquiry and study, the Bidikmisi programme helped students develop a deeper understanding of their own fields, as well as the challenges and opportunities existing within these fields. The programme also helped students develop critical thinking and problem-solving skills, which are essential to professional development.

It has also been argued that the financial aid programme has had a *positive impact on education in Indonesia* (Aliyyah, Rosyidi, & Yazid, 2019). As claimed by university staff and Bidikmisi alumni, the programme has had a positive effect by helping students with low SES students to realize good academic achievement and continue their studies in institutions of higher education (Aliyyah, Rosyidi, & Yazid, 2019). In this sense, it has been argued that the Bidikmisi programme has an influence on the development of a skilled workforce that can drive economic growth and development. By enabling students to complete higher education, the grants ensure that

students are able to acquire the knowledge and skills necessary to enter professions that are in demand and that contribute to the growth of the economy.

Context

Access

One study discusses a *lack of access due to low quality in K–12 schools*. According to this study, the Bidikmisi financial aid policy requires recipients to come from high-quality schools. In practice, not all secondary schools are reported as being of high quality. These authors therefore argue that it is necessary to improve the quality of secondary schools in Indonesia (Fadhil & Sabic-El-Rayess, 2021). The authors therefore point to a possible need to consider other characteristics (e.g. SES, being the first in a family to attend university) in determining eligibility to receive Bidikmisi funding.

According to one study, *access to higher education is hindered by challenges within the Indonesian context*. The Indonesian government faces a number of challenges regarding access to higher education. These challenges include the very large population, social disparity, economic disparity, geographic disparity and limited capacity and equity of education services (Purnastuti & Izzaty, 2016). The authors further identify differences in student origin as another challenge to higher education, as most universities are located only on the island of Java, while students come from many different islands in the country.

According to another study included in the review, *policy related to Bidikmisi support at the university level* is in need of improvement. The Bidikmisi programme for students with low SES was established at the national level, but each university determines its own procedures, including the documents required as proof for entering the university, how students are selected and the methods used to decide who will receive Bidikmisi support. For university staff, the absence of standard regulations at the university level is quite confusing (Fadhil & Sabic-El-Rayess, 2021). This translates into inequalities for students with regard to the likelihood of entering different universities.

One study argues that *private higher education institutions play a positive role*. More specifically, they help to meet the need for higher education that has not been fulfilled by the government (Purnastuti & Izzaty, 2016). The large number of private institutions of higher education is needed in order to improve both access and equity. The Bidikmisi programme can be applied to students in either public or private universities. Whereas only a limited number of public universities exist in Indonesia, the large number of private universities also affects the number of students who are able study in institutions of higher education.

Input

Equity

According to one study, individual attitudes play an important role in determining the level of learning achievement of students who receive financial aid. A *positive learning attitude* that encourages serious study behaviour will affect academic performance. Attitudes develop because of interactions between individuals and their environments, both present and in the past (Anfas et al., 2017). Such attitudes arise from both internal and external factors. Internal factors include the drive for achievement, responsibility for and appreciation of tasks, and opportunities to develop character. External factors include the learning environment and the interpersonal relationships between students and teachers, as well as with fellow students (Anfas et al., 2017).

Learning motivation has been reported to have a significant positive effect on the academic achievement of students who have received financial aid. In terms of motivation, Bahri (2011) observes that the most important functions of motivation involve acting as a controller and as a driver of activity and work. According to Anfas and colleagues (2017), there is a need for information about the motivation to learn amongst prospective students who will be recruited to study at university. Collecting more information in recruitment interviews could clarify the image of the motivation that prospective students will have during their university studies. As demonstrated by the results reported by Anfas and colleagues (2017), attitudes towards and motivation for learning affect the academic achievement of financial aid recipients.

One study devotes particular attention to *hindering factors* in the implementation of the financial aid programme that affect equity, including *lack of coordination, lack of information management, lack of monitoring and evaluation, and lack of availability of public information*. One study points out differences in data on the number and names of recipients across related parties at the university (e.g. the finance office, the academic office, the student office and the IT office). Differences between the university-level data on recipients and the data contained within the system of the Ministry of Research, Technology and Higher Education indicate *a lack of coordination between managers and programme organizers* (Fauzi & Samsuruhuda, 2019).

The authors argue that coordination, communication and transparency between all units at the university with regard to data are in need of improvement, especially with regard to the offices that manage the financial aid programme. They further identify the existence of discrepancies in the data on recipients as a major concern for the student office, as they can have a negative effect on student opportunities in terms of access and equity. Such data incompatibilities are harmful to both the financial aid manager and the recipient, thereby leading to invalid reports from students to universities and, subsequently, to the Ministry of Education.

Researchers have also identified a *lack of information* (e.g. mechanisms for submission, fund disbursement and graduation) provided to new and ongoing recipients. According to recipients, the information provided by the financial aid manager is often unclear, and it has not been formally compiled. In some cases, the only information available is in the form of informal information disseminated through student social media, thereby resulting in a confusing stream of information (Fauzi & Samsuruhuda, 2019).

Bidikmisi students are expected to complete a monitoring and evaluation report at the end of the semester (one semester is equal to six months). If a recipient's GPA is lower than 3, the Bidikmisi administrator staff is expected to follow up on the case and decide whether the recipient should continue to receive the aid or whether it should be discontinued. In practice, some recipients may not be aware of the *monitoring and evaluation system*, and some perceive that the information provided by managers is unclear (Fauzi & Samsuruhuda, 2019).

According to one study, after the 10th year of the programme's implementation, improvements were still needed, including addressing the *lack of public information* about the provision of this programme (Sadikin et al., 2020). According to these authors, information that is not widely conveyed translates into a disadvantage for students with low SES. For this reason, the authors suggest that universities should provide the broadest possible socialization concerning the targeted recipients, the timetable for the registration and selection process and the documents required.

Both access and equity

Wasahua and colleagues (2018) mention the important role of *support and encouragement from parents*. Moral support and words of encouragement from family members can motivate students to attain the best academic achievement (Wasahua, Koesmaryono, & Sailah, 2018). Combined with trust, such encouragement has been shown to have a highly positive impact on students. In addition to encouraging and motivating Bidikmisi recipients, moral support from both parents improves their self-confidence in undertaking the education or facing any difficulties they might encounter during their university studies.

The second factor mentioned by the same authors was *support from the environment*. Support from the academic society and the surrounding community had a large, albeit indirect influence on students with regard to attaining the best possible performance in terms of both academic and non-academic achievement (Wasahua, Koesmaryono, & Sailah, 2018). This illustrates the importance of support from the academic society in improving and helping students to attain high academic achievement. Support from the academic society, lecturers and university administrators to encourage students in undertaking their education enabled them to complete their programmes within the prescribed timeframe. In that study, the community environment appeared to be more beneficial in helping Bidikmisi students to develop their capabilities, in addition to having a positive impact on their learning processes.

Process

In the CIPP model, process refers to potential sources that can lead to failure and that can explain what actually occurred. The literature review revealed five factors that affect the process of access to and equity in higher education for students with low SES in Indonesia.

Access

First, the efficacy of financial aid programmes in meeting the requirements of students from low SES has been found to be flawed (Fadhil & Sabic-El-Rayess, 2021). In many cases, these programmes *rely on the academic performance of students* as a determining factor. It is therefore imperative to enhance recipient-selection criteria by incorporating assessments that consider both the SES and the academic accomplishments of students.

Second, according to Fauzi and Samsuruhuda (2019), the selection process currently achieves an *accuracy rate of 95% in identifying target recipients*. It is nevertheless important to acknowledge that a small percentage (5%) of all recipients do not align with the intended target. It is therefore crucial to underscore the necessity of implementing a more rigorous selection process to ensure the precise and appropriate identification of recipients.

Equity

Third, according to one study, almost *all recipients devoted themselves to social and religious activities*, such as participating in religious organizations, collaborating to clean the environment, opening a learning park for children, providing counselling to rural communities (Aliyyah, Rosyidi, & Yazid, 2019). Being active in social and religious activities in university has been shown to have a positive impact on students, as it helps them build strong support networks. These networks can include friends, mentors and other individuals who are able to offer encouragement, advice and assistance to students throughout their academic and personal journeys. In addition, participation in social and religious activities often involves taking on leadership roles (e.g. organizing events, leading discussions, mentoring other students). These experiences help students develop valuable leadership skills that will be beneficial to their future academic and career pursuits.

Fourth, *poor self-management of living allowances has a negative effect*. Three of the studies included in the review discuss how students manage their monthly allowances. According to Aminatul (2021): (i) 28% of all students were solely dependent on financial aid, and 72% receive money from financial aid and other sources (e.g. parents, other family members, business profits and salary from work); (ii) 65% of all students had budget plans that they used as a guide for using the funds they received, and 35% did not; (iii) 53% of all students managed to carry out their planned budgets, meaning that they would not come into problems if unexpected events were to occur, as they had prepared for this possibility; and (iv) 55% of all students were able to supplement their income with savings. In addition, Huda (2010) reports that the financial aid provided was not applied optimally, as some recipients used it for non-academic purposes (e.g. sending money to parents and paying rent).

According to these studies, it is important for university students to manage their living allowances well, given the inherent expense of university life and the low SES background of most Bidikmisi recipients. Keeping track of expenses and creating a budget can help them to avoid financial difficulties and ensure that they will have enough money to cover their living expenses throughout the university learning process.

Fifth, *the living allowance received by students needs to be reconsidered*, as the amount was reported to be too low to cover the basic needs of students. Delays were also reported in the payment of monthly living allowances (Fauzi & Samsuruhuda, 2019). The authors of the study mentioned here therefore recommend improving the payment process for the living allowances and reconsidering the amount of these allowances to ensure that it suits the basic needs of students.

3.5. Discussion

The focus of this study is on Indonesia, where the government has enacted the Bidikmisi programme in order to improve access to higher education, especially for students with low SES. This study is intended to provide relevant findings concerning access to and equity in higher education

for these students with low SES within the framework of the Bidikmisi programme. In general, most of the studies reviewed identify supporting factors for both access and equity (in addition to the financial aspects), as well as hindering factors. The factors explored in this chapter concern students and universities, as well as parents and individuals within their broader environments. The research investigates various aspects that affect access to and equity in higher education, while also considering the roles and influences of key stakeholders.

Product

According to the findings of this study, as generated by a review of prior research on the Bidikmisi programme, the programme contributes to the *academic and professional development* of students (Aliyyah, Rosyidi, & Yazid, 2019). University fees have been identified as a primary factor determining the success of students with low SES. The financial aid provided by the Bidikmisi scholarships to help students enter and remain at the university also enables them to gain valuable learning experiences, including academic and professional experience.

It has been argued that the Bidikmisi programme enhances academic development by providing opportunities for students to gain valuable experience and skills, and that it has had a *positive impact on education in Indonesia* (Aliyyah, Rosyidi, & Yazid, 2019). This has been attributed to the programme's positive effects on helping students who have a good academic achievement but low SES to continue their studies in institutions of higher education. In this sense, it has been argued that the Bidikmisi programme contributes to the development of a skilled workforce that can drive economic growth and development. Through the process of completing higher education, students gain the knowledge and skills necessary to enter professions that are in demand and that contribute to the growth of the economy. As highlighted in the section on 'Context', there is a need for *clear policy at both the national and university levels*.

This finding is in line with previous research (Wanti et al., 2022) reporting that policies and programmes at the national level (in this case, from the Ministry of Education, as implemented by public and private universities) have a significant influence on access to and equity in higher

education. Improvements to existing policies and programmes could further contribute to developing the quality of education on a national scale. This finding supports Salmi and D’Addio (2021), who emphasize the importance of policies within the context of financial aid programmes (e.g. grants, loans) and non-monetary interventions (e.g. outreach, affirmative action, retention, specialized institutions). Policies thus have significant potential to eliminate barriers encountered by students from under-represented groups.

Input

The section on ‘Input’ highlights *obstacles to programme implementation*, as well as the significant influence of *parental involvement and environmental support* on student outcomes. The results draw attention to several obstacles that hinder the successful implementation of educational programmes. They also underscore the significance of parental involvement and the support from the student’s environment as pivotal factors that have a profound impact on student outcomes. Recognizing that educational initiatives are not immune to challenges, this section sheds light on barriers that can impede the effectiveness of programmes. Moreover, it emphasizes the critical role that parents play in shaping their children’s educational journeys, as well as the broader influence of the environments within which students operate. By highlighting these factors, the study establishes a strong argument for the necessity of addressing and leveraging parental involvement and environmental support to optimize student outcomes.

Process

The section on ‘Process’ focuses on *student activity*, as documented in a multitude of studies. It is crucial to note, however, that this study goes beyond previous research, which highlights the significance of financial aid for students from low SES backgrounds. By examining the impact of one specific form of financial aid (the Bidikmisi programme), our results yield a more comprehensive understanding of factors that contribute to the success of students with low SES. According to these results, while financial aid is important, social factors (e.g. parental support and the overall environment in which students exist) play crucial roles as well. The results of this study thus highlight the multifaceted nature of achieving success for students with

low SES, emphasizing the need to consider not only financial aid, but also the social dimensions that influence their educational journeys.

Obstacles to programme implementation

The implementation of the Bidikmisi financial aid programme has been hindered by a variety of factors that have adverse effects on equity. These obstacles include *a lack of coordination, ineffective information management, insufficient mechanisms for monitoring and evaluation, and the limited availability of public information*. One notable study reveals discrepancies in data regarding the number and identities of recipients across different university entities, including the finance office, the academics office, the student office and the IT office. Such inconsistencies have contributed to the inequitable distribution of financial aid resources and hindered the programme's goal of promoting equal access to educational opportunities. These findings underscore the importance of addressing such hindering factors in order to ensure the effective implementation of financial aid programmes and to foster equity in higher education.

3

The importance of family and environmental support

This study identifies and emphasizes the support provided by the families and surrounding environments of students as crucial factors contributing to academic success and study completion. The findings underscore the significant influence that familial support and the overall environment have on the educational journeys of students. Students who receive strong support from their families and who have a positive environment surrounding them are clearly more likely to achieve academic success and complete their studies. By highlighting these factors, this study underscores the importance of recognizing the role played by the family and the broader environment in nurturing and empowering students in pursuing their educational goals.

Our study supports the research done by Roksa and Kinsley (2019) which shows that family support from the state plays a crucial role in helping students do well in school and stay engaged. We found that students who receive strong support from their families tend to be more motivated, confident, and successful academically. This support can take different forms, like parents being involved in educational activities, creating a nurturing and

supportive home environment, and providing emotional encouragement and guidance.

According to Alyahyan and Düşteğör (2020), the support students receive from their environment significantly impacts their academic achievement. The environment comprises various components such as the educational institution, peers, faculty, staff, and the wider campus community. A positive environment plays a crucial role in providing students with resources, services, and opportunities that enhance their engagement, motivation, and personal growth. Additionally, it facilitates access to academic support services, mentorship programmes, collaborative learning spaces, and a sense of belonging and community.

This study highlights the crucial role played by social factors—including familial and environmental support—in determining access to and equity in higher education for students from low SES backgrounds. First, *family support* is a key social factor that can have a major influence on access to higher education for students with low SES. Supportive families can provide financial assistance, guidance and encouragement, all of which are essential to navigating the complex process of college admissions and enrolment. Moreover, family support can help to create a conducive environment for academic success and motivation.

Second, the environment plays a crucial role in supporting access to and equity in higher education for students from low SES backgrounds. The term ‘environment’ encompasses a variety of aspects (e.g. the educational institution, the community and peers) that influence the experiences and opportunities available to students with low SES. Within the educational institution, a supportive environment can provide essential resources and services to help students with low SES navigate challenges they are likely to encounter. Elements of such a supportive environment could include financial aid programmes, scholarships and grants specifically targeted towards supporting access to higher education for students with low SES. In addition, academic support services (e.g. tutoring, mentoring and counselling) can help these students to overcome academic obstacles, thereby ensuring their success.

3.6. Implications

This study emphasizes the critical need for a standardized policy or guidelines to govern the implementation of financial aid programmes at the university level. The hindering factors identified in the foregoing analysis underscore the lack of a cohesive framework that ensures the consistent and equitable distribution of financial aid. In the absence of a standardized policy, coordination issues, information-management challenges and discrepancies across different university departments will persist, ultimately compromising the goal of promoting fairness and equal opportunities through financial aid programmes. By highlighting the necessity of a standardized policy, this study advocates for the establishment of clear guidelines that outline procedures, responsibilities and data-management protocols to ensure a transparent and inclusive approach to the implementation of financial aid programmes. Such a policy would serve as a crucial step towards fostering equity and providing a level playing field for all eligible students seeking financial support for their education.

In addition to the factors identified at the governmental and university levels, the results of this study also indicate that the role of the family and the surrounding environment contributes to access to and equity in higher education. For this reason, there is a need for more detailed information on the role of the family and the environment and the role of social factors in supporting access to and equity in higher education. In addition to contributing to the academic success of students, family support enhances their overall well-being and socio-emotional development. Recognizing the critical importance of family support, educational institutions and policymakers should strive to create programmes and initiatives that encourage and facilitate parental engagement, strengthen family-school partnerships and promote a supportive environment that enables students to thrive academically. This will make it possible to foster a positive and empowering educational experience that lays the foundation for lifelong learning and success.

Recognizing the influence of these social factors is vital to addressing existing gaps in access to and equity in higher education for students with low SES. Institutions and policymakers should work towards implementing

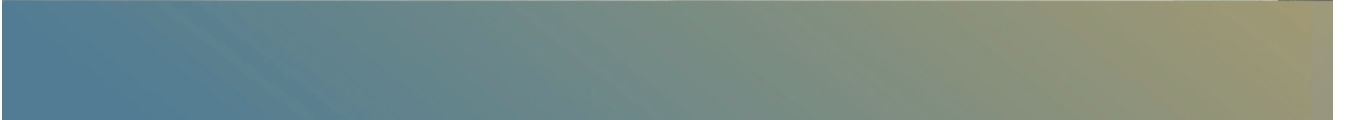
targeted interventions (e.g. financial aid programmes, mentorship initiatives and awareness campaigns) to mitigate the impact of hindering social factors and to create a more equitable educational landscape for these students.

3.7. Limitations and future research

One limitation to this study has to do with the limited literature utilized to collect data on factors affecting access to and equity in higher education through the Bidikmisi programme. To obtain more comprehensive results, future studies should incorporate a greater number of relevant literature sources.

Another limitation to this study is that its research method is based solely on a literature review. The findings could be enhanced by future studies that incorporate additional data-collection methods (e.g. questionnaires or in-depth interviews). The use of a broader range of data sources could yield a more comprehensive understanding of the subject matter.

Finally, the literature utilized in this study comprises a diverse range of sources, including journal articles, conference papers, books and dissertations. For future research, it is recommended to establish a more specific criterion (e.g. restricting the focus to journal articles), in order to ensure consistency in data sources and alignment in the research outcomes. This approach would enhance the coherence and comparability of the data, thereby strengthening the validity of the research findings.



Chapter 4.

The role of social factors in access to and equity in higher education for students with low socioeconomic status: A case study from Indonesia

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Abstract

This study investigates the role of social factors in the access to and equity in higher education (HE) for students with a low socioeconomic status (SES) in Indonesia, from multiple stakeholder perspectives. Semi-structured interviews were conducted with the students, lecturers, and support staff at a large Indonesian university. Focus group discussions were organised to validate the interview results. Family and mentoring programmes appear to play a major role in accessing HE, while lecturers and peers play a significant role in equity. This study highlights the importance of mentoring programmes that guide students to continue their study at the university level. The result provides insights into programmes at the university itself that should focus on developing social skills. This study illustrates the necessity of social support factors, including family, peers, mentoring programmes, teachers, and lecturers, in supporting access to and equity in HE.

4.1. Introduction

The United Nations Sustainable Development Goal ‘Quality Education’ states that, by 2030, everyone should have equal access to affordable and quality education, including at the university level; however, most nations are struggling to facilitate equal access to higher education (HE) (Atherton, Dumangane & Whitty, 2016). Globally, only 9.5% of students from low-income backgrounds enrol in HE, while as many as 75.6% of students from high-income backgrounds are enrolled (UNESCO, 2020). Moreover, many studies claim that realising equity for all students at the universities themselves remains an international issue (Martin, 2016).

Research has shown that students with a low socioeconomic status (SES) encounter a variety of cognitive and psychological barriers to learning (Johnstonbaugh, 2018); low SES students experience psychological disadvantages stemming from material disadvantages, including feelings of failure, inferiority and isolation (Calarco, 2014; Davidson, Kitzinger, and Hunt 2006). Many low SES students become disengaged, display unproductive behaviours and underperform academically (Goss & Sonnemann, 2017). While financial aid has been found to promote access to HE, the connection to student success once they are in college is less conclusive, suggesting that there may be much more than just financial need at play when it comes to student success (Zerquera & Smith, 2015). Students with high SES backgrounds arguably need less support than low SES students, prompting institutions to take these differences into account when distributing teaching and learning resources and support to promote equity in HE (Maringe & Sing, 2014).

Prior studies of access and equity in HE have therefore mainly focussed on access, discussing this subject from a student perspective and focussing on financial support (Wanti et al., 2022). The present study examines both access and equity in HE, involving students, lecturers and university support staff to gain a broader perspective, and investigates the role of social factors in the access to, and equity in, HE, especially for low SES students.

Access is defined as the phase in which a student is able to register for the programme and pay the initial fee (Walker, 2019). Equity addresses the fact that it might not be fair to provide all students with the same

resources and support for learning (Maringe & Sing 2014), because students from disadvantaged backgrounds, especially low SES students, need more guidance and support before and after they are accepted by the university. A literature review by Wanti et al., (2022) revealed that social factors are crucial for both HE access and equity, which we explore further in the present study. Our investigation of access is especially focussed on the social factors influencing students before they are accepted by the university, while our equity focus explores the role of social factors after students have been accepted and during their learning process at the university.

Context of the study

In many countries, national policies and university-level programmes have been established to improve access to and equity in HE, especially for low SES students. These policies and programmes typically aim to ensure a certain proportion of low SES students in HE institutions; for example, in 2010, the Australian government introduced the Higher Education Participation and Partnerships Programme (HEPPP), which provides funding to universities to undertake activities and implement strategies that improve access to undergraduate courses for people from low SES backgrounds and improve their retention and completion rates (Molla, 2021). Universities can use the HEPPP fund to tailor their programmes to address the low SES student population (Molla, 2021).

In the United States of America, the Path Ambassadors to High Success (PATHS) scholarship programme was aimed at promoting the academic success of low SES students at university (Camp, Liebe & Thiry, 2021). PATHS provides a successful model for recruiting, retaining and supporting academic and career pathways for diverse low-income undergraduates, boasting a high retention rate (91.7%), strong academic success (e.g., average grade point average (GPA) is 3.4 from 1 – 4 scale), high graduation rates, and strong employment outcomes (Camp & Thiry, 2021).

In Indonesia, the country in which the present study is carried out, the government launched the national scholarship programme Bidikmisi in 2010 to support students from low SES backgrounds. This aid provides tuition assistance for high school graduates with good academic abilities but economic limitations with the aim of helping students to access universities.

The number of recipients of Bidikmisi assistance has increased over time, from 199,408 students in 2014 to 339,348 students in 2017 (Lydiasari, 2018). Bidikmisi recipients showed excellent academic achievements in HE, with 82.83% obtaining a cumulative GPA of 3 or above on a 1–4 scale (Lydiasari, 2018). The mechanisms for selecting and guiding programme participants, as well as for monitoring, evaluating and reporting on the programme implementation, were reported to work quite well (Aliyyah et al., 2020). Based on these findings, the Bidikmisi programme appears to be successful.

Previous studies on the Bidikmisi programme mainly focussed on student outcomes or achievements related to GPA (Hendrayana, 2014; Inah & Khairunnisa, 2019; Yurnaliza, & Andayono, 2019) or the selection and admission process (Haryanti, Nasution, & Sukamto, 2016; Dahri, Agus, & Khairina, 2017; Suniantara & Suwardika, 2018). These studies showed that Bidikmisi students have relatively high university achievement and learning motivation levels; however, these studies do not provide insights into how this programme works after admission and beyond financial support. To better understand this, further research must explore the processes involved, especially the role of social factors in promoting access and equity for Bidikmisi students.

4.2. Theoretical framework

This study uses social capital theory and the Social Ecological Model to highlight the role of social factors in the access to, and equity in, HE. Social capital is defined as ‘the aggregate of the actual and potential resources, which are linked to possession of a durable network’ (Bourdieu, 1986). Social capital can facilitate or hamper development at the micro, meso and macro levels (Cummings et al., 2019). Essentially, at the micro level, bonding capital is found in family connections, bridging within horizontal networks of similar actors (peers), and linking to actors outside the horizontal network, which provides access to resources (vertical ties) (Cummings et al., 2019).

The Social Ecological Model indicates that there are various interrelated multilevel factors that can impact access and equity in HE. This study adopts a multifaceted perspective that was previously used to understand access to health services, including at the intrapersonal, interpersonal, institutional, community, and policy levels (Ma, Chan, & Loke, 2017).

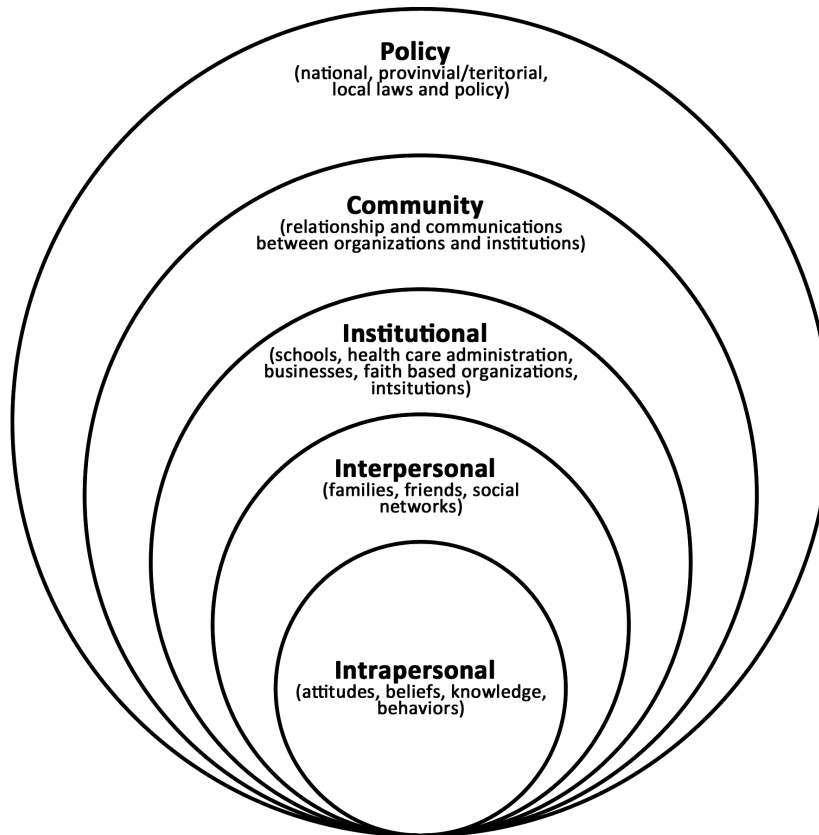


Figure 4.1.
The Social Ecological Model. Source: Center for Disease Control and Prevention (CDC).
(The Social-Ecological Model: A Framework for Prevention |Violence Prevention|Injury
Center|CDC). Retrieved 16 July 2022).

In the present study, the intrapersonal level concerned the low SES students themselves. The interpersonal level represents their interaction with family, peers and teachers. Institutional factors were their pre-university education, such as primary school and secondary school, while community relates to the current environment (family, teacher, peer) around the

students. The policies level includes policies of the central government, local governments, and policies at the university level. A complete picture of how all of these factors affect access and equity to HE is presented in our previous research (Wanti et al., 2022).

For students from low SES backgrounds, social factors, including family, ethnic and religious affiliations, friends and faculty, play an important role in academic achievement (Mishra, 2020). It therefore seems logical that these factors also affect access to HE, because achievement in secondary education partly determines access to HE.

The role of family support is present in the form of advice or guidance, motivation, high education-related values, or expectations of students' academic success and persistence (Boveda, 2017; Gofen, 2009; Guillory & Wolverton, 2008; O'Shea, 2016; Roksa & Kinsley, 2018; Storlie, Moreno, & Portman, 2014; Strom & Savage, 2014). Social support from family and friends has a substantial impact on the emotional, social and academic performance of university students (Awang et al., 2014).

A lack of social support can lead to mental health problems, including depressive symptoms among university students (Bukhari & Afzal, 2017; Safree & Dzulkifli, 2010), and has a negative impact on student quality of life (Dafaalla et al., 2016). The impact of academic stress, defined as frustrations, conflicts, pressures, changes and self-imposition on psychological well-being, can be influenced by the level of perceived social support from friends (Glozah, 2013). Social support factors also have a major impact on access and equity in HE, as we reviewed previously (Wanti et al., 2022), including factors such as teachers (or lecturers), mentoring programmes, family support (including extended family) and peers. These various actors can provide motivation and academic guidance to students.

Regarding access, the first major support factor are the *teachers* in secondary (i.e., pre-university) education, who provide motivation, guidance and information regarding the continuation of education in HE, which is very important for low SES students (Tuomi et al., 2015). In addition, other educational support staff can also greatly improve access to HE, particularly the high school counsellors and other staff who help students navigate the process of enrolling in university (Negrón-Gonzales, 2017).

In terms of equity at the university, the role of lecturers is crucial. The transition to university may be particularly difficult for students from disadvantaged backgrounds (Briggs et al., 2012). Student perceptions concerning the level of lecturer support were suggested by Richardson et al. (2007) to be precursors to course satisfaction, with students expecting their lecturers to be sympathetic, reassuring, helpful and friendly (Lowe and Cook, 2003).

The second major support factor is the use of a *mentoring programme*. Previous studies of access and equity in HE have emphasised the importance of mentoring programmes, both when the students were first accepted and during the transition period from high school to HE, as well as during the learning process at the university itself (Kuperminc et al., 2020; Coles, 2011). Mentoring programmes aim to provide inspiration, motivation and information about opportunities and the future.

In Australia, the HEPPP-funded projects included a mentoring programme addressing the needs of students from low SES backgrounds. This programme was used to provide support to students from under-represented groups once they enrolled at universities. Typically, student mentors were strategically matched up with student mentees to provide support, encouragement and inspiration. Some mentoring programmes involved regular face-to-face contact, while others took place entirely online. In each case, mentors were provided with training and support from either the equity or learning support office in the participants' universities. The mentoring programme was well received and valued by mentees, school administrators and academics alike (Thomas, 2014). Students (from disadvantaged backgrounds) felt they could continue their studies in HE because of the support of the mentors, who gave them confidence to aspire to and achieve HE and beyond, as well as providing them with a greater insight into the practical considerations for university entry and study (Lynch, Walker-Gibbs, & Herbert, 2015).

The third factor is *family support*. Family capital is defined as the systems in families that can aid and support individuals to achieve certain ends (Whiteford, 2017). Students had more success being accepted into a university (i.e., access) when they had the support of their family, providing courage, hope and confidence (Whiteford, 2017). In addition, family

(including extended family) may provide financial support, which is a critical factor enabling students to enter and remain at university (Wilson-Strydom & Okkolin, 2016).

The fourth factor is *peer support*, which plays a significant role in learning at the university and may influence academic outcomes (Mishra, 2020). During peer learning, more advanced students may provide support in, for example, clarifying and establishing goals and monitoring the learning process (Panadero et al., 2019). Many students also find emotional support to be important during their studies (Boud, 2014), but may also need informational support, which involves asking for advice from peers regarding study-related matters or coping with stressful situations (Räsänen et al., 2020). A study of the perspectives of high-achieving, low-income students regarding the factors that contribute to their academic success showed that all participants attributed their academic success to positive peer relationships, especially peer friendships, and the assistance gained through these relationships (Williams et al., 2017). These resilient students were part of school-oriented peer social networks that encouraged academic effort and achievement, and provided ongoing academic and social support (Williams et al., 2017).

Most studies on access and equity in HE have focussed solely on the student perspective or collected student perception data related to the role of social factors (Jury et al., 2017; McKay & Devlin, 2016; Li & Carroll, 2017). In addition to this student perspective, the present study adds two more perspectives, namely those of the lecturers and support staff in the university. These three types of stakeholders are important because, in the university context, they are the main groups of actors involved in the implementation of scholarships for low SES students, e.g., the Bidikmisi programme.

4.3. Research questions

The main research question of this study is as follows: *What roles do social factors play in access and equity for low SES (Bidikmisi) students in the Indonesian university context?* To answer this question, the following sub-questions were investigated:

- (i) What do students, lecturers and support staff perceive to be the most prominent or relevant social factors for access to university and equity once there, and how does each factor work (what is the underlying mechanism)?
- (ii) What differences and similarities in the reported experiences with these factors can be found between students, lecturers and support staff?

4.4. Method

In this study, a qualitative research method was used in the form of a case study in one large university in Indonesia. Data were collected by interviewing the participants (students, lecturers and staff). The interview results were validated for each group of participants in subsequent focus group discussions (FGDs).

Participants

First, permission to collect data was requested and obtained from the Vice-Chancellor of Academics, the Dean, and Head of the Food Technology department at the particular university, as well as the middle-level staff involved in the administration of the Bidikmisi programme. This department was chosen due to the relatively high competition for students to get into the Bidikmisi programme; thus, it was likely that access and equity were relevant issues in this department.

Students

On average, 60 students were enrolled in this department each year, of whom 20 students receive the Bidikmisi scholarship. We sent interview invitations via WhatsApp to two class groups consisting of first-year students (18 Bidikmisi students) and fourth-year students (20 Bidikmisi students). The students who agreed to be interviewed stated their interest via personal chat on WhatsApp. Of the 38 students who receive the Bidikmisi scholarship in these two year groups, 26 (68%; 11 first-year and 15 fourth-year students) agreed to participate in this study.

We surveyed first-year students to explore their perspectives about their experiences when starting to study at the university; in other words, first-year students represent the access to university experiences. In addition, we included fourth-year students to investigate their experiences with access to university and learning at this institution. Equity in this study emphasises students from low SES backgrounds.

Lecturers

Interview invitations were also sent to the lecturers via WhatsApp. Of the 50 lecturers in the study programme, invitations were sent to 16 people recommended by the Head of the department based on their teaching experience or seniority. These 16 lecturers (including two counsellors) all agreed to participate.

Support staff

Support staff members were selected for inclusion in this study based on recommendations from the Vice-Chancellor of Academics based on their job and its relevancy to the research topic. Support staff included people from the admissions office, academic office, university staff that managed Bidikmisi recipients, PPKU (general competency improvement programme, a mandatory programme for first-year students) staff, deans and vice-deans. In total, 11 support staff members appointed by the Vice-Chancellor of Academics (with different occupational backgrounds) participated in the study.

Interviews

Data were collected via semi-structured interviews to explore the participants' thoughts about the topic. The interview scheme was designed based on our prior review study (Wanti et al., 2022) about access and equity in HE. Several steps were followed to build the questions for the interviews:

- (i) creating an overview of the determining factors of access and equity in HE from our first study;
- (ii) changing these factors into questions to obtain clear statements from the respondents on whether they agree or disagree with the factors; for example, 'do you agree that family plays a role in access to HE?'. We

also added a follow-up question, e.g., ‘why do you agree (or disagree) that family plays a role in access to HE? Could you give an example based on your experience?’;

- (iii) piloting interview questions with potential respondents (three lecturers and four students, not included in the remainder of the study);
- (iv) improving the communication style of the interviewer based on feedback from the pilot interviews, e.g., using a more informal approach to start the interview with the respondents;
- (v) finalising the interview scheme.

Procedure

Before the interview, the first researcher briefly explained the purpose of the study to the respondent. After that, the researcher explained the interview process, then gave the informed consent form to the respondent to be signed. After informed consent was obtained, the researcher began to ask the interview questions and the answers were recorded in audio format. The interviewer asked about all the factors determining access and equity in HE, and whether the respondent agreed or disagreed that the factors played a role. The interviewer also asked for the respondents’ experience with the factor to illustrate how it played a role in their situation or tasks. After the interview, the voice recording was transcribed in Microsoft Word.

4.5. Data analysis

To understand which social factors affected access and equity in HE, several data analysis steps were performed. First, all the collected responses were classified as belonging to either social factors or other factors. Based on the previous review study (Wanti et al., 2022), social factors were distinguished in the role of teachers (or lecturers), mentoring programmes, family and peers. If a particular social factor was mentioned by the respondent, a score of ‘1’ was given; if not, it received a score of ‘0’. Next, percentage scores were

calculated for each factor for each subgroup (students, lecturers and support staff). The overall differences and similarities in the reported presence of factors between students, lecturers and support staff were determined.

To understand how these factors worked, the answers were read carefully and the mechanisms behind the factors were distilled. For example, if a student was asked why they agreed that lecturers played a role in HE, the answer might be that the lecturer acted as a role model, as a guest lecturer in another country, had an international research collaboration, or acted as a consultant in a big food company, which inspired the student. These explanations were then categorised (see Results section for corresponding examples).

Validity and reliability

A second reviewer (research assistant) checked the coding for each respondent. To validate the answers from the respondents, representative participants were invited for FGDs. Four FGDs were conducted in total, respectively comprising five first-year students, seven fourth-year students, 35 lecturers and seven support staff. The FGDs confirmed the results of the interviews.

4

4.6. Results

This section is divided into the following parts: a discussion of the percentages of respondents who agreed with the main categories of social support factors (research question 1), and explanations of how the social factors worked, according to the respondents (research question 2).

Table 4.1.
Percentages of respondents who agreed that each of these main categories of social support was a factor for access and equity in HE, as grouped by respondent type.

Respondent type	Access – support factors				Equity – support factors			
	family	peers	teacher	mentoring	family	peers	lecturer	mentoring
Student	100	57.7	84.6	92.3	0	80.8	100	61.54
Lecturer	81.3	18.8	31.3	68.8	25.0	81.3	93.75	0
Support staff	54.5	27.3	54.5	72.7	27.3	54.5	90.91	72.7

Table 4.1 provides an overview of the percentages of respondents who stated that each of the main categories of social support factors, in their experience, determined access and equity in HE. The family was the support factor considered most influential to access to HE by students and lecturers, while support staff considered mentoring to be the most important. Lecturers and support staff agreed that peers had less impact on access to HE, but 57.7% of students stated that peers played an important role. Teachers (including counsellors) were placed second (84.6%) after family (100%) by students, while 54.5% of the support staff agreed that teachers had an important role in access to HE. Almost all students (92.3%) agreed that mentoring played an important role in access to HE, while only 68.8% of lecturers agreed with this.

For equity, almost all respondents stated that lecturers were important. Peers were the second most accepted equity-promoting factor by students and lecturers. Only a small proportion of the lecturers (25%) and support staff (27.3%) stated that family influences equity, while no student said that family has a role in their learning process once they were at university. Most of the students (61.5%) and support staff (72.7%) agreed that mentoring programmes have an influence on HE, while none of the lecturers mentioned it.

Social factors affecting access

Family

Most respondents considered family (parents and older siblings) to be an important influence on access to HE. The respondents stated that the role of the family was to provide motivation, information and freedom to choose the field of study and the university. Lecturers stated that, even though they come from low SES backgrounds, student motivation by parents was considered crucial for encouraging the student to continue their studies at university. In addition, other family members (such as aunts, uncles or cousins) can also play vital roles in providing information about courses, universities and scholarships.

Mentoring

Most participants agree that mentoring programmes influence access to HE. Here, a mentoring programme refers to guidance on choosing a course and a university, as well as practicing answering university tests. The following quote illustrates the role of a mentoring programme provided in high school:

‘Every Friday afternoon, just this year, (we have) UTBK (ujian tulis berbasis komputer or ‘computer-based writing exam’). The programme introduced us to UTBK from the beginning, from semester one, and we even practiced the UTBK. Besides that, the school also holds seminars from top universities, such as Universitas Indonesia. Sometimes they invite guest lecturers from Japan (for example), and every week there is a different lecturer’ (student voice 091).*

Teacher (counsellor)

Here, the roles of teacher and counsellor are combined because most counsellors in Indonesian high schools also act as teachers (with the title *‘guru bimbingan konseling’* or ‘guidance and counselling teacher’). Most respondents stated that the role of teachers was to motivate students to continue their studies at university. In schools lacking a mentoring programme, some teachers volunteered to provide guidance on studying at university and on preparation for university entrance examinations.

Peers

Only a small proportion of the lecturers and support staff mentioned that peers influenced access to HE. By contrast, almost 60% of students mentioned that peers influenced access to HE. The interview results showed that peers act as motivators and provide information about the study programmes in HE, as mentioned by the students below:

‘My friend didn’t leave me when I failed; my friend told me that it’s not my fault and I’m not stupid. The point is, they gave me thousands of words of motivation, so I could try again’ (student voice 065).

'When I was in high school, I was confused about which course to take at university. Finally, I chose this major based on my friend's recommendation, because this course is the best in this university' (student voice 075).

Social factors for equity

Lecturer

Almost all respondents mentioned that lecturers support equity in HE in the following roles:

(i) Lecturer teaching style.

Lecturers who have an attractive and applicative teaching style are easier to understand, as mentioned by the student below:

'In my opinion, the most important role in the learning process is the lecturer's teaching style, because the more attractive the teaching style is, the easier it is to absorb knowledge and not be bored in learning... It's exciting when the lecturers can give a description of the application [of the subject matter] in everyday life' (student voice 050).

From the lecturer's perspective, their role is not just teaching but also becoming a facilitator of student learning.

(ii) Lecturer as a supervisor.

The role of supervisor appears when students have spent time with their lecturer on a more personal level, for example during laboratory or thesis work. As mentioned by a student, 'Thesis supervisors have an important role because they guide us to the goals we want; it feels like a close relationship, like our parents' (student voice 032).

From the lecturer's perspective, their role as a supervisor is crucial because it influences whether students finish their thesis on time and graduate.

(iii) Lecturer as a role model.

Some lecturers in this department also work as senior managers at food companies or food research centres. Because of this, the students admire them as role models.

(iv) Lecturer as an information source.

Most lecturers in this department have specific expertise. Even though extensive related materials are available on the internet, students like to learn from their lecturers directly.

(v) Lecturer as a counsellor.

In this university, lecturers also act as counsellors. Each department has two counsellors tasked with supporting students in dealing with academic (course, exams, thesis) and non-academic (family, financial, relationship) problems. All students stated that the role of the counsellor was not significant during the learning process in HE because they preferred to talk to their friends rather than a counsellor. From the lecturer and staff perspectives, the counsellor influences the learning process of the students.

'If there is a problem, we will help. If later there is a student affairs commission, a counsellor will be present because many non-academic cases have an impact on academics; for example, problems with parents, family or health can affect student learning and achievement' (staff voice 080).

Peers

Peers play several roles, such as motivators, reminders to learn, inspiration and a study partner with whom other students can prepare for exams and work together (on reports or lab work). Peers can play a crucial role as part of the inner circle during the student's learning process, as mentioned by the student below:

'There are four people in my group. We meet intensively when it comes to exams, and we always study and discuss the lesson' (student voice 032).

Mentoring programmes

Mentoring programmes focussed on equity in HE are quite different from those for access to HE; mentoring programmes targeting access provide guidance to continue one's education at university, while mentoring programmes provide equity support for student learning at university,

especially for courses that are difficult to pass. Students state that mentoring programmes can encourage them to study together, improve their academic achievement and enhance bonding between them.

The staff mentioned two types of mentoring programmes that have a positive influence on student learning:

a. PPKU programme (general competency improvement programme):

PPKU is a mandatory university programme for first-year students. The purpose of PPKU is that all students have the same ability in basic subjects. PPKU provides course clinics designed to address student problems with difficult topics, which are guided by senior students with excellent grades.

b. Senior students:

The role of senior students, especially seniors from the same hometown or region, is crucial. This hometown background creates a very strong bond between students and promotes university socialisation.

Family

The students all stated that family factors played no significant role in their learning at university, while only a small proportion of lecturers and support staff thought family influenced this process due to the monitoring role of the parents.

4.7. Discussion

This study aimed to present comprehensive insights into the role of social support factors on access and equity for low SES (Bidikmisi) students in the Indonesian university context. Whereas many studies have explored the impact of financial aspects on access and equity, our study aims to unravel the role and relevance of social support factors. Moreover, we discuss the differences and similarities between the perceptions and experiences of three different stakeholder groups (students, lecturers and support staff) regarding the social factors.

This study reveals the most important social support factors for both access and equity are family, teachers (or lecturers), peers and mentoring

programmes. Regardless of actor, most support provides students with driven support and guidance. Driven support refers to the motivation and encouragement that build confidence in the student, which is important for both access and equity in HE. Examples include the motivation to continue one's studies to university (for access) and confidence regarding one's academic performance (for equity).

The importance of mentoring programmes in both access and equity in HE was also shown by Mishra (2020), who stated that information and knowledge regarding study materials, preparing for exams and dealing with academic challenges play an important role in determining success.

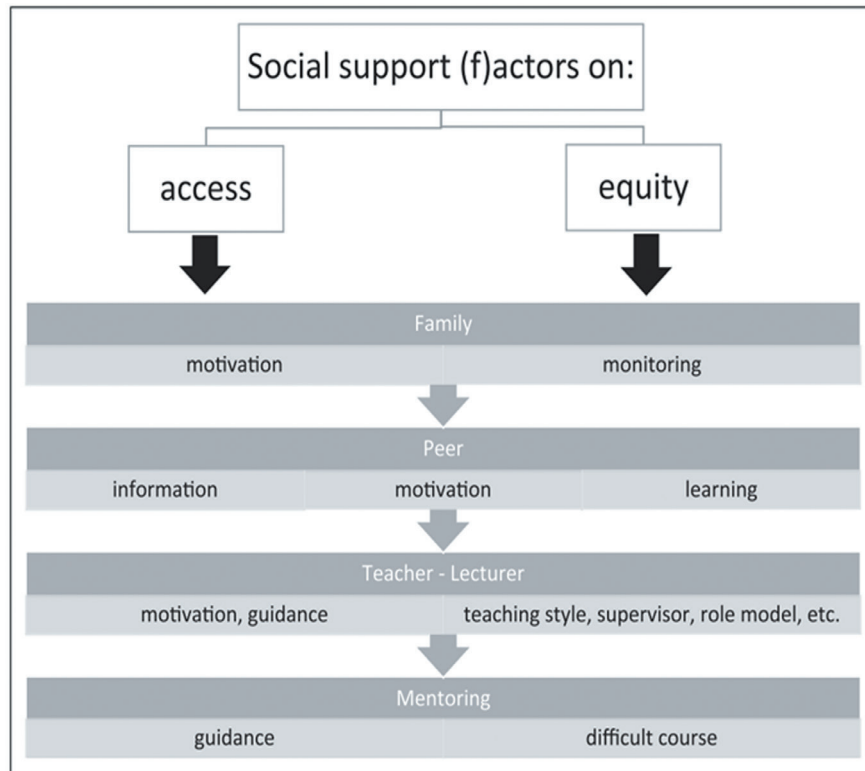


Figure 4.2.
The role of social support (f)actors on access and equity in higher education.

Family and mentoring are crucial for access to HE

Our data show that family and mentoring play crucial roles in supporting low SES students in accessing HE. This study illustrates the importance of receiving motivation from parents, who encourage the student to continue their education at university and allow them the freedom to choose their course and institution. The role of other family members who have attended university is also considered a crucial element. The freedom to choose their own HE path is important for supporting access to HE because students who choose their course based on their parents' recommendation tend to fail (or even drop out) in the first or second year. For students, choosing a field of study is a decision that not only weighs heavily on their hearts and minds, but also one that may have a significant impact on their success at university and in future life (Montag et al., 2012).

Mentoring is the next most important social factor influencing access to HE. Mentoring provided through high school programmes or individually (offered voluntarily to students considered capable of continuing their study at university) plays an important role for students, providing motivation, the opportunity to practice answering university tests, and guidance (to choose a course and university). In Indonesia, not all high schools have a mentoring programme for the university entrance exam. Students who are not from low SES families may receive paid mentoring via private institutions; however, if there is no freely available mentoring programme through the high school or volunteers, low SES students will be less likely to study at university, which is a weakness of the current situation.

Lecturers and peers are crucial for equity in HE

Equity refers to how social factors influence student learning at university. Concerning the lecturers, we found that *lecturers' teaching style* and *lecturers' role as a supervisor* were the most prominent social support factors promoting equity for students with low SES backgrounds.

First, the lecturer *teaching style (attractive and applicative)* was the factor that most influenced student learning, according to the students themselves. The more attractive the teaching style of the lecturer and the more applicable the learning material, the easier it is for students to

understand the lessons and the more enthusiastic they are to learn the subject. Based on the interviews with students from low SES backgrounds, they preferred *lecturers with applicative and practice-based teaching* because this helped them to understand the lessons more than material presented solely in lectures and classroom discussions. In a food packaging course, for example, students reported having a better understanding of lecturers who bring food wrappers or snacks directly into the classroom and use these items as learning materials. The experience to learn directly from certain materials in the classroom is a valuable experience for students from low SES backgrounds; therefore, lecturers' teaching styles are considered influential factors for the learning process of students (from low SES backgrounds).

All these aspects of teaching style affect student motivation and progress in the university. In addition, the lecturers confirmed that if they provide practical lessons, they perceive that student enthusiasm for learning tends to be higher. Lecturer teaching styles may affect the learning process of students in general, not just that of students from low SES backgrounds. The support staff agreed that lecturers play an important part in student learning, but mainly because the lecturers act as role models and share their expertise; teaching style was not considered as important by staff.

Differences in student academic achievement are related to an individual's social class (Barone, 2006). Students from a high social class have family-derived advantages in gaining educational credentials (Broer, Bai, & Fonseca, 2019); for example, students from a high SES background may benefit more from classroom discussions because they are already more accustomed to discussing social issues at home, and vice versa (Campbell, 2008). In other words, students from a high SES background have more benefits from plenary discussions than students from a low SES background.

Second, lecturers' role as *academic and thesis supervisors* builds strong relationships that influence student academic achievements. According to all participants, these relationships are important for supporting students, especially those from low SES backgrounds. This finding supports previous research showing that techniques to engage students in their learning have centred on fostering substantial and significant relationships between students and their teachers (Goggin et al. 2016; Hargreaves 2004). The role of social support, including lecturers' roles, is defined as 'social interactions or

relationships that provide individuals with actual assistance or with a feeling of attachment to a person or a group that is perceived as caring or loving' (Hobfoll & Stokes, 1988), and is significant for HE success. This resembles the observation by the staff that lecturers can be seen as role models.

Peers were the second source of support for equity in HE after lecturers. Peer support refers to motivating each other, learning together (including learning difficult material, thesis discussions and lab work) and enjoying social activities, all of which are essential for the learning process at university. During social activities, students can build long-lasting friendships that affect the learning process; for example, friends might help with questionnaire distribution (for thesis work) or volunteer to try a student's food product (thesis experiment). For minority groups (in this case, low SES students), Burt (1998) also stressed the importance of small mutually supportive student networks, which make these individuals feel more comfortable.

Other research supports these findings. Peer support and networks also determine student integration and acceptance in HE institutions, which subsequently affects their retention and success (Gallop & Bastien, 2016; Nagasawa & Wong, 1999). Hossler, Schmidt, and Vesper (1999) highlight the importance of peer support in improving the understanding of course materials and clarifying difficult concepts (Gallop & Bastien, 2016).

Striking point: mentoring in equity

This study divided mentoring into programmes targeting access or equity. For access, mentoring means providing guidance about continuing one's education at university. For equity, mentoring refers to guidance that supports students in their learning (e.g., learning difficult material, completing thesis or lab work, and exam preparation). Previous studies of access and equity in HE have emphasised the importance of the role of *mentoring programmes*, both during the transition period from high school to HE institutions, and after students from low SES backgrounds were accepted and throughout their university education (Kuperminc et al., 2020; Coles, 2011).

Surprisingly, most students in this study agree that mentoring plays a role in access but not in equity. Mentoring programmes were provided for all students by the university, but Bidikmisi students tended not to join because they wanted to study by themselves, which made them feel more

comfortable and focussed. None of the lecturers agreed that mentoring would affect student learning because they found that Bidikmisi students are typically independent learners with high academic achievements. By contrast, staff considered mentoring important and agreed that mentoring programmes help students to pass difficult courses, although they also confirmed that Bidikmisi students did not typically join such programmes. This finding supports the previous research finding that Bidikmisi students have relatively high academic achievements and learning motivation levels (Hendrayana, 2014; Inah & Khairunnisa, 2019; Yurnaliza, & Andayono, 2019). The difference of opinion between the staff, lecturers and students in this study is striking however, and highlights the added value of including these three stakeholder groups in one study.

The social factors found to have an important impact on access and equity in HE include the role of family, lecturers and peers. These factors might be relevant for students in general; however, we would like to emphasise that only students from a low SES background were included as respondents in this study (only low SES students can participate in the Bidikmisi programme). The other respondents, such as lecturers and staff, also focussed on students from low SES backgrounds; therefore, the results of this study specifically apply to students from low SES backgrounds. The results of this study support previous research by Coleman (1988), which showed that social capital can be created by family, school and community. In addition, the relationships between the family and the community may explain the educational achievements of students, where they are higher than what might be expected with respect to their SES alone (Mikiewicz et al. 2011). Differences in educational success can be attributed to different levels of existing social capital, which is produced in the networks and connections of the families that the school serves (Rogošić and Baranović 2016); for example, social capital supports educational success in the form of an appropriate school climate and the values that motivate students to achieve higher goals (Acar, 2011).

4.8. Limitations and suggestions for future research

This study only collected data at the university level from students, lecturers and support staff. A future study could also include the high school level, involving relevant stakeholder groups such as parents, high school teachers, students and support staff. In addition, this study was conducted at one university in one country. We suggest that future research should include more universities in other countries with the same or similar funding aid characteristics.

We conducted interviews and FGDs; however, a mixed-method study could combine quantitative (survey or questionnaire) and qualitative (interview) data to obtain an even more comprehensive perspective in the future.

This study explores the role of social factors from the student, lecturer and support staff perspectives. For future research, it would be interesting to examine correlations between the factors and provide an in-depth analysis of each social factor that contributes to access and equity in HE.

Finally, this study investigated students who succeeded in being accepted into, and continued to study at, the university. We therefore also suggest that future studies should focus on students who do not go on to HE and what (social) factors play a significant role in their choice to leave education.

4.9. Recommendations

For HE, the implication of this research lies in the mentoring programme and the involvement of peers in the learning process. We recommend that lecturers pay attention to making their teaching style applicable and attractive.

Based on this study, we recommend the development of mentoring programmes that not only aim to help students facing difficulties in learning, but also provide guidance on how to engage with other students, how to collaborate in teamwork and how to build networks; in other words, how to integrate into university life (Gallop & Bastien, 2016). Previous research that examined the perspectives of low-income students stated that peer

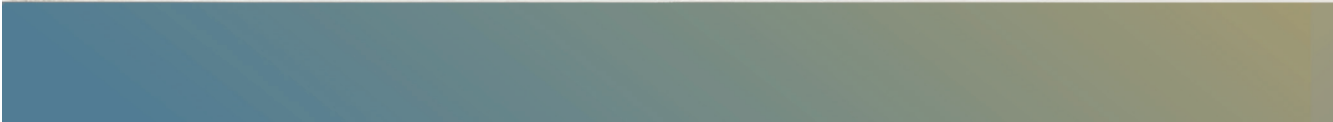
social capital, teachers who care, family and community assets, and multiple streams of motivation contribute to academic success (Williams et al., 2017). For underrepresented students, high levels of social support from network members can have a complementary effect and compensate for a lack of information-related social capital, eventually contributing to their success (Mishra, 2020).

Mentoring typically involves one or more active support functions: psycho-social-emotional support (i.e., counselling, guidance and encouragement), instrumental support (i.e., skill development through assistance in challenging tasks and opportunities for advancement) or co-authoring experiences (i.e., collaborative presentations or publications of research) (Eby et al. 2013; Hernandez et al. 2017; Paglis et al. 2006). In the present study, the answers from students regarding mentoring programmes at the university were generally consistent with the answers from lecturers, but this was not the case with the support staff. We recommend that support staff pay more attention to the role of social support and improve the mentoring programme to provide more of an active support function, as discussed above. We recommend a mentoring programme that also focusses on improving social skills and building a social network.

For principals and teachers at the high school level, we recommend that school programmes focus on preparing students to enter university. High schools that have a university socialisation and mentoring programme are considered more capable of preparing students for entering HE life. Students (especially low SES students) in high schools without such a mentoring programme (or volunteer teachers) have less of an opportunity to continue their education at university. This means we recommend that high schools offer specific step-by-step guidance for continuing one's studies at university, not only for students from low SES backgrounds but for students in general.

At the national level, we recommend that attention is paid to Bidikmisi recipients throughout their university life; for example, by creating a policy that students need to report about both academic and social life. Non-academic life refers to social activities, as previously discussed. This would give a greater insight into the social support factors most influential to these low SES students.

This study concludes that the main social support actors, such as family (and extended family), teachers, lecturers, peers and mentoring programmes, present diverse support for students from low SES backgrounds, promoting access and equity in university. This conclusion is consistent with the work of Schulz et al., (2017), who showed that social networks provide access to various forms of social capital, such as information, social support, values and aspirations, along with economic resources, all of which help students to achieve academic success.



Chapter 5.

Further insight into social factors affecting access and equity for low SES students in higher education: Experiences of alumni in Indonesia

This chapter has been submitted for publication to the European Journal of Inclusive Education.



5.1. Introduction

To increase access to and equity in higher education (HE), Indonesia has a financial-assistance programme (*Bidikmisi*) for students of low socioeconomic status (SES) with outstanding academic reports. Most research on the effects of the financial aid programme such as *Bidikmisi* has focused on student achievements or GPA (grade point average). Without overlooking the role of financial assistance for low SES students and its effects on academic achievement, this study discusses other factors (i.e., social factors) that support access to and equity in HE.

In a previous study, Wanti et al. (2023) reveal the importance of social factors to access and equity within the context of HE based on the views of university students, lecturers, and managers. In the present study, we explore the views and experiences of successful alumni (former *Bidikmisi* recipients) to examine the role of social factors in more detail and discuss the role and mechanisms of these factors. Wanti et al. (2022) identify social factors as crucial to both access and equity. To date, however, the ways in which these factors contribute to student success remain largely unknown. The present study explores the role and effect of social factors (family, peers, teachers, lecturers), beginning prior to entering university (access) and throughout the course of university studies (equity).

Why alumni?

Most studies on HE discuss the benefits of alumni contributions through such means as including them in university marketing, studying their career patterns, and encouraging alumni participation in the university (Story, 2021; Frenette and Dowd, 2018; Cownie and Gallo, 2021). Less is known about additional factors that alumni perceive as necessary to the success of low SES students in their studies. The present study therefore assumes that alumni offer many valuable lessons, especially regarding their experiences during the transition from secondary school to university and their experiences with university studies. Alumni experiences can provide insight into the role of social factors in access to and equity in HE, as well as concerning whether, when, and how these factors interact. In this study, “alumni” refers

to university graduates who were *Bidikmisi* scholarship recipients (and thus low SES students).

Why Bidikmisi?

Through the Directorate General of Higher Education (DGHE), the Indonesian government has several programmes for improving access to and equity in HE. Examples include BBM (*Bantuan Belajar Mahasiswa* or Student Study Assistance), PPA scholarships (*Peningkatan Prestasi Akademik* or Academic Achievement Improvement) and *Bidikmisi* (*bidik* refers to target; *misi* refers to mission). The PPA scholarship is specifically for students with outstanding achievement in academics, sports, or the arts. The BBM is available only to low SES students who have already entered HE and have outstanding reports. *Bidikmisi* is the only programme that entails both access and equity.

This study further analyzes the experiences of *Bidikmisi* recipients, as this programme is likely to have the most substantial effects on low SES students (e.g., by providing relief for registration and tuition fees, by providing living allowances, and by providing long-term financial assistance). We assume that *Bidikmisi* influences both access to and equity in HE for low SES students.

Study Objective

Social support plays a crucial role in access to and equity in HE. Most studies on this topic have been conducted in developed countries (Wanti et al., 2022). Social support refers to the role of family (parents and other family members), peers (in both secondary school and university), teachers and lecturers (Wanti et al., 2022). The support provided by these actors varies from across students. The present study therefore aims to explore the perceptions of individual alumni to provide a detailed explanation of the types of support provided by these actors, as well as how and to what extent they have influenced access to and equity in HE. The study was conducted in Indonesia, as an example of a developing country.

5.2. Research questions

The main research question of this study is as follows: (i) What roles do social factors play in access and equity for low SES students (*Bidikmisi* alumni) within the Indonesian university context? (ii) What do the experiences of successful *Bidikmisi* alumni reveal about the role of social factors?

5.3. Theoretical framework

Low SES students

Previous literature reviews and empirical studies on HE have indicated that SES-related differences in student experiences have to do with university preparation, employment status during university studies, and academic performance at the university (Aronson, 2008; Engle and Tinto, 2008; Merritt, 2008; Spiegler and Bednarek, 2013; Tym, McMillion, Barone, and Webster, 2004; Walpole, 2003).

Educated, middle-class parents possess cultural and social capital that seamlessly facilitates their children's transition to HE and the professional world (Basit and Tomlinson, 2012). Not all families can provide this level of support (Basit and Tomlinson, 2012). For example, in Indonesia, low SES students are the least likely to access HE (World Bank, 2014). In addition, studies have consistently demonstrated that low SES students have fewer opportunities to succeed within university contexts, as compared high SES students (Jury et al, 2017), as they face higher barriers.

Social support within the context of HE is important, as all students must cope with the transition from secondary school to and throughout HE, regardless of race, gender, or social class (Evans et al., 1998). The transition from one environment to another could thus be considered a stressful life event, and social support could enhance the ability to cope with such stressors (Carter-Francique, Hart, and Cheeks, 2015). Conceptualizations of social networks are often quite loose, however, with little attention to types of networks and the various forms of support they may provide (Ryan, Sales, Tilki, and Siara, 2008).

Resilient low SES adolescents with higher academic success often perceive having greater support from parents, peers, and teachers; closer ties to their schools, higher academic expectations, and greater self-efficacy (Esen-Aktay, 2010). Social support plays a major role in their HE trajectories. The present study therefore applies social capital theory (Bourdieu, 1986) to investigate the role of social factors in access to and equity in HE. This lens helps to explain why certain social factors play the roles that they do. Social capital refers to interactions, networks, and patterns of relationships, as well as to the process of social interaction by individuals or by groups (e.g., local associations, communities, and neighborhoods) (Black and Hughes, 2001; Putnam, 2000; Bankston and Zhou, 2002). In the present study, social capital is defined as a network from the closest environment, which creates interactions to process and achieve certain goals, in this case, to provide access to and equity in HE for low SES students.

Knowledge concerning how social networks can provide social support and benefits concerning access to and equity in HE is important for low SES students. Rodriguez and Cohen (1998) identify three functions of social support: instrumental, informational, and emotional. Instrumental support involves providing material aid (e.g., financial assistance). Informational support refers to providing relevant information intended to help the individual cope with current difficulties (e.g., in the form of advice or guidance). Emotional support involves the expression of empathy, caring, reassurance, and trust, and it provides opportunities for emotional expression.

These three social support functions have been used in recent research on the role of social support (see Vekkaila et al., 2018; Lloyd-Jones, 2021; Hernandez et al., 2021; Saefudin et al., 2021). The present study therefore adopts the approach to social support developed by Rodriguez and Cohens to analyze the role of social factors in supporting access to and equity in HE for low SES students. These categories might help to deepen understanding concerning the role of social factors for low SES *Bidikmisi* recipients in Indonesia. To explore the role of each factor in supporting access and equity, we provide a general definition of each social support, along with preliminary evidence of what social support looks like.

Informational support

Information and knowledge regarding study materials, preparing for exams, and coping with academic challenges play an important role in determining success (Mishra, 2020). Previous studies have reported that students with more information-related social capital perform better throughout their studies (Hansen and Mastekaasa, 2006). Considering the limited resources available to low SES students, informational support is important to facilitate their transition from secondary school to university. Further studies are thus needed on the role of informational support in access to and equity in HE.

Emotional support

Social interactions or relationships that provide individuals with actual assistance or with a feeling of attachment to individuals or groups perceived as caring or loving can make a significant contribution to success in HE (Hobfoll and Stokes, 1988). In addition, as noted by Putnam (2000), under-represented students gain emotional support from their peers from similar backgrounds by sharing negative experiences related to discrimination and stereotypes that bind them together. They also learn to overcome challenges by supporting each other emotionally. Other studies (e.g., Mishra, 2020) suggest that emotional support from network members may contribute to positive academic outcomes.

Emotional support may be crucial for helping low SES students succeed in HE, to overcome challenges in university, and achieve positive academic outcomes. Further investigation is needed regarding which actors are involved and how this emotional support affects low SES students in terms of access to and equity in HE.

Instrumental support

For low SES students (e.g., working-class, first-generation college students), HE is a territory in which they have limited instrumental knowledge. These students are often unaware of the importance of networking to establishing relationships and locating resources (Moschetti and Hudley, 2015). As observed by Lloyd-Jones (2021), students need instrumental support (e.g., financial assistance) to experience success in their studies. In this study, financial assistance may refer to help with transportation costs, registration

fees, and other expenses related to preparing for and proceeding through the university learning process. Knowledge on instrumental support for low SES students is limited, and more detailed information is needed.

5.4. Method

This qualitative comparative case study concerns alumni of one large public university in the Java Islands in Indonesia (hereinafter, “the university”).

Participants

Data were collected through in-depth interviews with *Bidikmisi* alumni concerning their experiences, explanations, and reasoning. Potential respondents were identified through university staff who managed the *Bidikmisi* programme. To be eligible for participation, respondents must have completed their university studies. This criterion was applied in light of the purpose of the *Bidikmisi* programme: to support prospective students who are not economically capable and have good academic potential to study in HE institutions through graduation (four years). From the staff, we obtained six names (including phone numbers and current jobs). We contacted these potential respondents using WhatsApp and asked their permission to be respondents. After a prospective respondent agreed, we scheduled an interview. The interviews were conducted through WhatsApp calls (voice recordings). After completing the interview, we transcribed each voice recording and summarized the results.

Interviews

The scheme for the semi-structured interviews was designed based on a prior study on the role of social factors (Wanti et al., 2022) regarding access to and equity in HE. The questions were built in several steps:

- (i) Creating an overview of social factors contributing to access to and equity in HE based on Wanti et al, (2022)
- (ii) Formulating general questions about experiences before and after entering university (e.g., “Please tell a story about your experience

before entering university life.”)

- (iii) Piloting interview questions with potential respondents (two *Bidikmisi* alumni, not included in the remainder of the study)
- (iv) Making notes during the pilot interviews regarding any roles or actors that emerged, and asking further questions about the extent to which these actors had provided support in the respondent’s educational journey
- (v) Making a brief summary at the end of the pilot interview and asking respondents for confirmation
- (vi) Asking pilot respondents at the end of the interview about any other actors who might have contributed but were not discussed earlier, and the extent to which they had played a role
- (vii) Asking pilot respondents if any questions had been unclear and if any improvements to the interviews were necessary
- (viii) Finalizing the interview scheme by changing the time frame (from pre-university until university) and providing an example of how each factor might work

Analysis

We followed several data-analytic steps to identify social factors affecting access to and equity in HE. In a previous review study (Wanti et al., 2022), we distinguish social factors in the roles of family, peers, teachers and lecturers. In the current study, we draw on the experiences of individual respondents to add other actors emerging from the interviews who had played a role in supporting access and equity.

First, all responses were classified under the various social factors, based on pre-university and university life. Second, the data were checked for references to additional factors. Third, the transcript from each interview was read carefully to obtain information about factors that had played a role and how these factors had worked to support access and equity. Finally, the data selected in the previous steps were assigned to specific categories of social support (i.e., emotional, instrumental, or informational).

Validity and reliability

To validate responses during the interview, the interviewer summarized the social factors that had played a role and the forms of support that had been provided. The respondent was asked to confirm this summary at the end of the interview. The first author and second reviewer (research assistant) checked correspondence between the voice recordings, transcripts, and summaries to validate each respondent's answers.

In the following section, we present our findings in three categories (i.e., respondent's background, pre-university life, and university life), thus covering the complete story. Background details (e.g., names of students, teachers, lecturers, universities, cities) presented in the Results section have been altered to ensure anonymity.

5.5. Results

This section is divided into four parts. The first section provides an overview of the six alumni respondents to identify differences and similarities between factors and social support regarding access to and equity in HE. Table 5.1 provides a brief overview of the main findings for each respondent. In the second section, we present a concise profile of each respondent, along with quotations, to arrive at a deeper understanding of how each factor works. Each profile concludes with an analysis of how each factor contributed to access and equity. Finally, to determine which factors and types of social support (i.e., informational, emotional, or instrumental) were most prominent for access and equity, Table 5.2 provides a summary of factors corresponding to specific types of support in relation to access and equity.

Table 5.1.
An overview of factors and forms of social support contributing to access and equity for each respondent.

Name*	Access: Pre-university		Equity: University	
	Factor	Type of social support	Factor	Type of social support
Nani	Family: Mother	Emotional (+)	RSA**	Emotional (+)
		Instrumental (+)	Lecturers: thesis supervisor	Instrumental (+)
				Emotional (+)
Yana	Family	Emotional (-)	RSA**	Instrumental (+)
	Teachers	Instrumental (+)	University: <i>Bidikmisi</i> staff	Instrumental (+)
	Secondary alumni	Informational (+)		
Ida	Family	Instrumental (-)	Peer	Informational (+)
	Teachers	Informational (+)		Instrumental (+)
	Family	Emotional (+)	RSA**	Emotional (+)
Susanti				Informational (+)
	Family: (older) sister	Informational (+)	Lecturer: thesis supervisor	Emotional (+)
	Teachers	Emotional (+)		
	Instrumental (+)			
		Informational (+)		
	Local government	Instrumental (+)		

Table 5.1. Continued

Name*	Access: Pre-university		Equity: University		Type of social support	Type of social support
	Factor	Type of social support	Factor	Type of social support		
Wira	Family	Emotional (-)	Peer: inner circle	Informational (+)	Informational (+)	Informational (+)
	Administrative staff (Scout coach)	Emotional (+)				
	Family: parents and grandparents	Instrumental (+)				
Sonya	Family: parents and grandparents	Emotional (+)	Local government	Emotional (+)	Emotional (+)	Instrumental (+)
		Emotional (+)				

* Fictitious name

** Regional student association (in Indonesian, *organisasi mahasiswa daerah*, or OMDA)

(+) and (-) symbols refer to the positive (supporting) or negative (hindering) effects of social actors, according to the respondents

Pre-university

Family played an important role in the pre-university life of each respondent, as reflected in all forms of support provided. In this study, family refers to parents, older sisters, aunts, and grandparents. It is important to note that respondents mentioned both positive and negative support from family. For example, older brothers or sisters could play a positive role by encouraging younger siblings to continue their studies by providing information about applying to university, obtaining scholarships, and choosing study programmes. In contrast, parents could play a negative role by not allowing their children to go to the university (mostly because of financial concerns).

Teachers in secondary school provided emotional, informational, and instrumental support. Peers were not mentioned as influencing access to HE. Secondary-school staff provided emotional and informational support. The role of local government in providing free secondary-school facilities also enhanced access to higher education.

University

The university-level lecturers in this study were mentioned primarily with regard to supervising theses and providing appraisal, emotional, and instrumental support. Peers also provided emotional, informational, and instrumental support. University staff, especially those managing the *Bidikmisi* programme provided instrumental support. The local government's contribution to instrumental support in the form of student dormitories also facilitated learning processes or equity at the university. Regional student associations (RSA) provided all forms of support to low SES students, especially at the beginning of university life. In the following sections, we provide further details on the journey of each respondent, with reference to actors and the support typically provided during pre-university and university life.

Alumni stories

1. Nani

Background

In 2015, Nani was one of the best university graduates, with a 3.88 GPA. She and her older sister were raised by their mother, who teaches in secondary school. As a single parent, Nani's mother played an important role in her children's education. Nani currently works at a sugar and agro-industrial company.

Pre-university life

In secondary school, Nani doubted that she would continue to university, as her mother was never open about her salary and the family's expenses, including university expenses for Nani and her sister. When she asked her mother whether she should postpone her studies, her mother insisted that Nani should go to the university.

'My mom told me that the money to study at the university was not my business, and I don't need to think about it.'

University life

During her first year at the university, Nani did not perceive any significant difficulties. She maintained a GPA of 3.9 for two semesters and received support from the RSA (e.g., information on adapting to a new environment).

'I think the RSA plays an important role. Like those who give directions on which restaurants are cheap, delicious, and suit our tastes. In addition, when students are homesick, the RSA embraces and accompanies them. They are very helpful.'

Nani's lecturers, and especially her thesis supervisor, played a crucial role for in her fourth year. She even regarded her supervisor as a parent (father figure).

'He (thesis supervisor) told me that, if I needed money for my thesis, we could work together. This shows that he embraces—he cares for students under his guidance.'

Nani's experience points to three actors who supported access and equity: her mother (secondary school to university), the RSA (beginning of university),

and her thesis supervisor (end of university). The support provided was emotional and instrumental. Emotional support provided by her mother gave Nani confidence to pursue HE. The RSA supported the process of adapting from secondary school to university. The thesis supervisor provided both emotional and instrumental support. This was significant, as it limited her thesis costs and built the motivation to graduate on time.

2. Yana

Background

The son of a farmer and a homemaker, Yana came from a small city in Sumatra. Since childhood, Yana had dreamed of studying on Java Island (the most developed island in Indonesia). Currently employed as a forestry consultant, he started a Master's degree in 2021.

Pre-university life

Yana's interest in HE began with a socialization programme offered by one of the universities in West Java.

'There was a university-socialization programme entitled "The university goes to school." University students who were attending classes—who were studying at the university—they went to schools to socialize kids about what university was like, and I started to see it as a good opportunity for me.'

Yana's family initially opposed his desire to study on Java Island, as it was far from home. When Yana had difficulty with registration expenses, he received support from his teacher.

'And I remember very well that there was a registration fee about 200,000 rupiah (€12.5). I was in secondary school, and I didn't have any money, so I told my parents, and they forbid it. So actually, from the beginning, my parents didn't support me to study far away.'

Yana's intention to attend university in Java did not stop with his parents' prohibition. He worked hard to come up with the registration fee. He was accepted to the university by invitation (entrance selection based on academic report).

‘But because I was desperate, I looked for odd jobs, guarding the shop. In the village, there are clove plantations, so if you climb and get the cloves, the owner will give you money. I kept the money, so I could pay the registration fee.’

Yana further explained the role of his teacher.

‘Before leaving for university, I visited her home, and she helped me by giving me money. I remember at that time it was 100,000 rupiahs (€6.25 euro). In the past, 100,000 rupiah was quite substantial. I was quite close to this teacher, because she both explained the courses and always gave me motivation.’

University life

At the beginning of his university life, Yana received support from the RSA, which helped with accommodations.

‘Fortunately, there was the RSA. A senior was very helpful when he first entered the university. We didn’t have to bother looking for student housing; we just stayed at our senior’s RSA boarding home.’

Yana also received support from *Bidikmisi* staff in the university student office by involving Yana in its activities committee.

‘For example, there were activities for trainees and we—Bidikmisi students—were involved in committees, each with a different salary. That was quite helpful.’

As demonstrated by Yana’s experience, family does not always act as a supporting factor for HE. Instead, Yana received instrumental and emotional support from his teacher. Secondary-school graduates provided necessary information on HE, and the RSA provided instrumental support at the beginning of university life. The *Bidikmisi* staff provided instrumental support by arranging additional financial assistance through jobs at university events.

3. Ida

Background

Ida's father was a civil servant (village apparatus), and her mother was a homemaker. Currently employed as a teacher, Ida obtained a Master's degree (on scholarship) in 2020.

Pre-university life

The first challenge Ida faced in pursuing HE occurred when her parents did not allow her to continue her studies at the best secondary school in town due to its cost and location.

'At that time, I had passed using the academic report at the best secondary school (name SMA 1), but because my parents were worried that SMA 1 would require a lot of money, and the location was far away. Even when my teacher tried to persuade my parents, they didn't allow it. '

The secondary-school guidance counselor's role in the transition between secondary school and university involved supporting Ida in the registration process for the *Bidikmisi* programme.

'I didn't listen to my parents when I registered for Bidikmisi, and this was helped by the guidance counselor, so I think the secondary-school guidance counselor played a very important role. In my opinion, the relationship between students and the guidance counselor is also important. So, I was given money to print the documents, and to go to the internet café, because I don't have a laptop.'

5

University life

At the university, Ida felt she needed to put more effort into studying, because she felt that other students had come from the best secondary schools, which had the best study facilities. She therefore needed to make more effort to compete with other students.

'So I added extra time to study. So I tried to be more diligent than my friends who lived in that city. That's what I could do.'

I tried to be more diligent. Thank God, my GPA was 3.79 in the first year. My highest GPA was 3.89, and my last GPA was 3.67. Thank God, I could graduate cum laude.'

Ida also perceived that her friends had played an important role in the learning process at university, mostly when learning together, but also with financial support.

'With friends in the department, the focus was more on learning together and preparing for competitions. We studied together in the boarding house, and there were books or journals that we reviewed. Or we divided the lesson—I learn this part, you learn that part, then we'll share and explain them to each other. Then we had friends we could rely on for financial support. When one person lacked money, someone who still had money would lend it. So the friendships differed; some were for learning. From friends in the organization, we learned public speaking and how to socialize with each other.'

Ida received instrumental support from her teacher in secondary school. Peers played an important role in providing informational and instrumental support throughout her university life.

4. Susanti Background

Susanti's father was a bus driver, and her mother was a street vendor. Susanti currently works as an assistant manager at a food and beverage company.

Pre-university life

Susanti had displayed brilliant achievements since primary school. This led to her acceptance to a secondary boarding school provided by the local government in Indonesia. A teacher in the secondary school encouraged her and other students to pursue HE through the *Bidikmisi* route.

'When I was in secondary school, I attended a boarding school. The local government took the initiative to establish a boarding school and provide full scholarships to students. I come from a

poor family and, indeed, from the start, I received a scholarship for three years in secondary school. Because this school is free—completely free—all school fees, living costs, and housing costs were covered by the local government at that time.'

'When I was in the third year of secondary school, our teachers really encouraged their students to continue studying and get another scholarship, because they had already received scholarships for secondary school. I received a lot of help from my teachers and was assisted in enrolling in public HE through the Bidikmisi route. '

Susanti distinguished two forms of support that helped her to continue her studies at university: motivation and technical support.

'If it's possible to separate the roles into two, one role provides rich motivation, mental support, and enthusiasm to continue studying at a higher level, and the other consists of technical support. In terms of motivation, I received support from parents and family. From the start, my parents told me that my father would not be able to give me anything from an economic perspective. The only thing that parents could give was to help in terms of education. So that was the main motivation for my brothers and sisters. In terms of technical support, the most important people were my teachers in secondary school, who helped a lot with the Bidikmisi registration. Another one might be my sister, who was more experienced than my parents, who didn't really understand where to go to university or what major to choose.'

5

University life

Peers and RSAs played an important part in Susanti's university life.

'So, I spent most of my time with friends and, at the beginning of my studies, there were student organizations from my hometown. Well, at that time, a university student from my secondary school came to visit me. The RSA taught me how to live outside my hometown, because it was my first time in Y

city. After that, I met friends who were in the same department. We struggled together, studied together, and did assignments together.'

During her second year, Susanti met an instructor who guided her throughout her university studies.

'When I was in the second year, I met a nutrition instructor. At that time, he was teaching one course. It was fun, and it encouraged me to be active in the organization and in competitions. So, I often asked this instructor to be a mentor in every competition, until the very end.'

In her story, Susanti points to several actors who supported her education up to and at the university. Her family provided emotional and informational support, her lecturer provided emotional and instrumental support, and the local government provided instrumental support through a free secondary boarding school. At the university, Susanti received emotional and informational support from the RSA, which facilitated the early transition from secondary school to university. She also considered the emotional support provided by the thesis supervisor important.

5. Wira Background

The son of a farmer and a homemaker, Wira is currently employed at a coal company.

Pre-university life

Wira was unsure of whether to continue his studies at the university. He then received information about *Bidikmisi* and motivation for HE from a Scout coach, who was also a member of his secondary school's administrative staff. Wira's plans for HE were nevertheless hindered by the concerns of his parents, and especially his mother.

'After my parents and my coach discussed the Bidikmisi programme, my mother finally started to open up, and she said, "yes," and asked me to try it first. Then I tried, in the name of

God, and thanks to God, I passed. Because of Bidikmisi, with all kinds of expenses, tuition is free, everything is covered.'

University life

At the beginning of his university studies, Wira had trouble following academic life, but then he got a friend to study with him.

'In the past, it was a bit difficult to adjust to the education phase at the university in the first year. At that time, the solution was to have friends in class to study together.'

His thesis supervisor played a crucial role in supporting Wira's efforts to complete his university studies.

'The relevant factor refers to my supervisor, who is very good—super good. He was the one looking for a research site. He facilitated all research expenses for students under his guidance. A group of all students under his guidance and senior alumni was created to guide the students during the research process. Basically, I didn't spend a dime for my research.'

At first, Wira did not receive support from his family. He did receive support from staff at his secondary school, however, who approached his parents to inform them about *Bidikmisi*. Peers and the thesis supervisor provided important informational and instrumental support during Wira's university life.

5

6. Sonya

Background

Sonya lived with and received educational support from her grandparents, who lived in a small village in Java. Her parents worked in Jakarta (the capital city), and her mother worked as a TKW (*tenaga kerja wanita*, or a woman working abroad, usually as a housekeeper). Sonya is currently employed as a production manager in a honey company.

Pre-university life

Sonya was hindered from pursuing HE by her grandparents and aunts, as

well as because of limited funds. Her parents nevertheless supported Sonya's desire to pursue HE.

'From childhood, I was closer to my grandparents, because my parents worked in Jakarta, and my school fees were paid by my grandparents. When I wanted to continue to university, my grandfather told me that, if I wanted to continue my studies, he did not think he could afford it. But my parents continued to support me. I had to try it first, because there might be information about scholarships.'

University life

During her university life, Sonya felt that the greatest support came from her friends from her hometown. She also saw the student dormitory provided by the local government of her hometown as an important source of support. In addition, the thesis supervisor provided instrumental support in the final year.

'We were in the university dormitory during our first year. My friends from the same hometown helped a lot. Even though they were in different majors, the lessons were still the same. If I didn't have money, I could borrow from them. In the fourth year, there is a research fee. For me, it was quite expensive, and my parents could not always send the money, so I initially borrowed the money from my friends'

'In the second year, I lived in the dormitory provided by my hometown local government. All students from my hometown could stay there for free. When writing the thesis, my supervisor helped with the cost of the analysis. For example, when he asked me to do the acid amino analysis, he would pay for the costs. '

Sonya's experience points to several family actors (e.g., grandparents, aunts) who provided emotional and instrumental support during the pre-university period. The RSA and peers provided emotional support at the beginning of university, and the local government provided instrumental support through student dormitories.

Conclusion on social-support factor in access and equity in higher education

In this section, we summarize each social-support factor and its function in relation to access and equity.

Table 5.2.

Social-support factors and functions in relation to access and equity for *Bidikmisi* alumni.

Social-support function	Family		Teacher – Lecturer		Peers		Staff		Local government		RSA*	
	access	equity	access	equity	access	equity	access	equity	access	equity	access	equity
Emotional	√		√	√		√	√				N/A	√
Informational	√		√			√	√				N/A	√
Instrumental	√		√	√		√		√	√	√	N/A	√

RSA* refer to Regional Student Association (Organisasi Mahasiswa Daerah in Bahasa Indonesia)

As shown in Table 5.2, family and teachers provided all three support functions for access to HE during pre-university life. The results nevertheless indicate that family had both positive and negative effects. One positive effect was the instrumental support that a mother provided to help her daughter continue studying at the university. One negative effect was that some relatives (e.g., grandparents) did not support a family member's HE aspiration due to financial concerns. The emotional and instrumental support provided by administrative staff in secondary schools proved important to *Bidikmisi* alumni. In addition, local governments provided instrumental support to *Bidikmisi* students in the form of free dormitories or housing.

During university life (equity), lecturers played a crucial role by providing emotional and instrumental support. Although peers did not appear to have influenced access, they did provide emotional, informational, and instrumental support during university life. University staff and local governments also provided instrumental support, and RSAs provided *Bidikmisi* students with all types of social support. During the university period, the family's role was apparently replaced by other factors (e.g., peers, RSAs, and lecturers).

5.6. Discussion

This study is intended to provide deeper insight into the roles and functions of social factors for low SES students (especially *Bidikmisi* alumni) in terms of access to and equity in higher education (HE) in Indonesia. In this discussion, we highlight the relevancy of the results in light of previous findings and additional factors. Emotional and instrumental support emerged most prominently across all findings, and family played an important role in the pre-university life of each respondent. It is nevertheless important to note that, in this study, family provided both positive and negative support.

In general, our results confirm previous findings on access to and equity in HE, as reported by Wanti et al (2022). The same actors (family, teachers, lecturers, peers, and local government) appeared important, and the results provide greater insight into the nature of the factors. Secondary-school administrative staff and university RSAs emerged as additional factors crucial to *Bidikmisi* alumni.

Family and teachers provided information, instrumental, and emotional support in HE access. In addition, during secondary school, teachers provided many important types of support: emotional (e.g., motivation), informational (e.g., relating to *Bidikmisi*), and instrumental (e.g., registration fees, printing). Such support is crucial to low SES students in terms of HE access, even if their own parents or close relatives are not in favor of them going to university. This finding suggests that secondary-school need to give more attention to low SES students who have the potential to pursue HE.

Our results echo previous studies reporting that many low SES-students have done well in school because of teachers who helped them succeed (Garza and Garza, 2010). Previous studies further identify successful teachers as those who assist students in negotiating and navigating through the system, as well as those who provide support and help students build resiliency for working within the system while maintaining their cultural identity and dignity (Garza, 1998; Scheurich, 1998; Valdéz, 1996; Valenzuela, 1999).

During university life (equity), peers, RSAs, and lecturers provided emotional and instrumental support. In addition, as noted by many scholars, social support (including from peers) is crucial for students during the

process of adjusting to a new university environment (Arevalo et al., 2016; Chiang et al., 2004; Dennis et al., 2005).

During the university trajectory, lecturers play a crucial role by providing emotional and instrumental support. During the thesis process, lecturers provide emotional support (e.g., motivation to graduate on time) and instrumental support (e.g., by involving students in their research projects and covering the laboratory fees). Consistent with this finding, Lovitts (2001) reports that students who do not complete their studies are more likely to complain about the poor quality of their relationships with or lack of support from their former advisors. These dropouts identify a range of unsupportive behaviors and unfulfilled needs, ranging from not receiving practical tips and advice to feeling low levels of emotional support (Blanchard and Haccoun, 2019). In addition, as observed by Curtin, Stewart, and Ostrove (2013), support from the supervisor is correlated with a graduate's sense of academic success.

This study highlights several additional factors that have not emerged in previous studies (our own or others). They include support provided by secondary-school administrative staff, RSAs, and local governments.

First, the role of secondary-school administrative staff has been largely ignored in previous studies (e.g., Wanti et al., 2022). The present study indicates that secondary-school staff supported *Bidikmisi* alumni by (i) providing informational support (e.g., on the *Bidikmisi* programme and registration) and (ii) providing emotional support (e.g., motivation to apply to the *Bidikmisi* programme). This finding supports Choy (2001), who reports that first-generation students (including low SES students) received help from secondary-school staff when completing financial-aid applications. In addition, Hudley et al. (2009) state that adolescents who often discuss their HE plans with school staff are likely to adjust more successfully during the transition to HE.

Second, RSAs played a prominent role by providing emotional, informational, and instrumental support at the beginning of university life. In terms of instrumental support, RSAs mostly collect funds from their members. In a cyclical process, the RSA arranges for older students to assist new students, who subsequently assist younger students at the end of their university studies. This finding is unique, as most previous studies on

university student associations focus on hobbies, sports, or political views. Our respondents also received emotional, informational, and instrumental support from student associations from their home regions. This observation supports Wu (2020), who notes that state that university student associations facilitate exchange and communication among students, helping them to learn from each other's strengths, to establish proper values, and to achieve constant improvement in their knowledge level.

Third, the role of local government is often addressed only in terms of policy formulation (Wanti et al., 2022). As revealed by the present study, however, local governments play an important role in terms of both access and equity. With regard to access, local governments provided free schools during pre-university life. In terms of equity, they provided student housing at the university. This finding supports previous research noting that government interventions in education through programmes and expenditures help to expand school enrollment (Prasetyia, 2019).

Most studies investigating social support in relation to the transition to university adopt a psychological perspective. The findings indicate that social support is vital to successful adjustment to university life (Lamonthe et al., 1995) and that support from different sources (e.g., peers, tutors, parents) play different roles (Tao et al., 2000). The literature includes few sociological analyses of the structural and material aspects of social support (Wilcox, Winn, and Fyvie-Gauld, 2005). In the present study, of three distinct forms of support (emotional, instrumental, informational), emotional and instrumental support were most prominent across all findings, with informational support playing a somewhat smaller role. We speculate that this may be because the respondents did not regard informational support as support *per se*, but as belonging to the regular duties of lecturers.

In contrast to previous studies on access to and equity in HE, which attribute positive effects to family (Wanti et al., 2022), our results reveal that family effects can be both positive and negative. Family support positively influenced students to pursue HE. In contrast, some parents did not support their children's HE aspirations, as they assumed that university life would be expensive and they would not be able to afford tuition fees and their children's monthly expenditures. This finding is consistent with other studies indicating that low SES parents can contribute to factors that enhance the

academic success of their children, as well as to those that place them at risk for academic failure (Watkins and Howard, 2015).

Our finding that families do not always support their children's desire to pursue HE is consistent with previous evidence that university students do not always receive the full support of their families, as their parents believe that HE is not an option or that it is exclusively for elite, wealthy families (Rendon, 1992). In addition, Roksa and Kinsley (2019) report that emotional support from the family plays an important role in fostering positive academic outcomes and is beneficial to promoting psychological well-being and facilitating greater student engagement.

Previous studies on the HE experiences of low SES students have found that low SES students are less likely to be academically prepared for college, that they have lower GPAs, less social and financial support, less campus involvement, and that they are most likely to leave college without a degree (Jury et al., 2017). According to the results of this study, however, emotional support (e.g., motivation or reinforcement of the ability to pursue HE), instrumental support (e.g., assistance with registration fees, photocopies), and informational support (e.g., *Bidikmisi* terms and conditions) provided by various actors helped all our respondents to complete their university degrees and to obtain relatively good employment.

Emotional, informational, and instrumental support provided by teachers and secondary-school staff might have served to help low SES students gain attention from their schools or school committees. Students with potential to be accepted at university through the *Bidikmisi* route may receive assistance in the registration process.

In conclusion, the results of this study support previous evidence concerning the role of social factors (e.g., family, teachers, lecturers, and peers). The results also reveal additional social factors contributing to access to and equity in HE for low SES students, including secondary-school administrative staff, university student organizations, university scholarship or student-office staff, and local governments. Most importantly, our respondents would probably have never made it to graduation without this support.

5.7. Limitations and suggestions for further research

The results of this study are based on the experiences of six *Bidikmisi* recipients. Future studies should investigate a broader population of alumni, thereby generating more comprehensive insight regarding this topic and confirming interesting aspects emerging from this study. While this study focuses more on factors supporting access to and equity in HE, future research could explore the obstacles experienced by low SES students. Such results could be used to inform policy, programmes, or assistance relating to low SES students. Studies could also include low SES students who did not manage to complete their university studies to determine whether their lack of success was due to a lack of support or to other reasons.

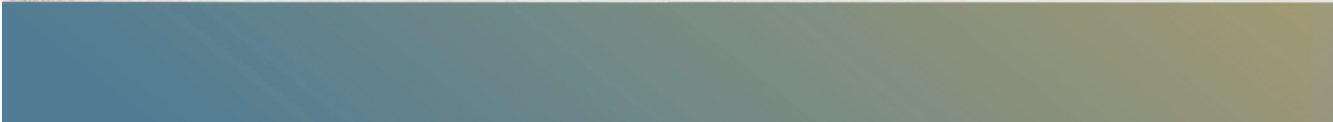
The interviews revealed that some parents did not initially support their children's plans to pursue HE due to financial concerns. Once these parents received information about the *Bidikmisi* programme, which covered tuition fees for four years (the standard time for completing an undergraduate degree) and provided for monthly living expenses, they eventually changed their minds and supported their children's plans.

Based on the findings of this study, the Indonesian Ministry of Education (which manages the *Bidikmisi* programme at the national level) should not limit its promotional efforts for the *Bidikmisi* programme to the secondary-school level, but to involve school committees (which consist of parent representatives and secondary-school staff) to ensure that all families are aware of the possibilities for financial support.

5.8. Recommendations and practical implications

Our findings indicate that families do not always support their children in pursuing HE, due to financial problems. After receiving informational support about the *Bidikmisi* programme, which eliminated tuition fees and provided students with a monthly allowance, parents agreed to and supported their children's university ambitions. The findings therefore suggest that the *Bidikmisi* programme was promoted to both secondary-school students and their parents (possibly by involving the school committee in explaining the programme).

Our respondents also experienced difficulties with the scholarship application fee, due to financial factors. Because this programme is for low SES students, we suggest that the Ministry of Education—as the national-level organizer—should exempt these students from registration fees. At the university level, especially for *Bidikmisi* staff, we recommend providing a programme that could assist future *Bidikmisi* students to engage multiple factors to support their university performance.



Chapter 6.

General Discussion



The main aim of this dissertation is to generate deeper insight into how different social actors and factors influence access to and equity in higher education (HE) for students with low socio-economy status (SES) in Indonesia. This final chapter begins by summarizing the main findings from each of the four individual studies conducted. It then provides an overall reflection on significant findings from the project as a whole. The theoretical contributions of this research to the existing scientific literature in this field are discussed as well, along with their implications for policy and practice. After acknowledging the limitations encountered during the research process and presenting suggestions for future studies, the author shares a personal reflection on her own experiences following the completion of these four studies.

6.1. Main conclusions

The key conclusions of this dissertation are presented first, addressing the two main research questions that were posed in Chapter 1 and that guided the study as a whole. The first research question—‘Which actors and factors are important to support access to and equity in higher education for students with low SES in Indonesia?’—is addressed in Chapters 2 and 3. The question is addressed by highlighting the relevant factors, which are summarized below. The second research question—‘How do the various actors and factors provide support to students with low SES in Indonesia?’—is addressed in Chapters 4 and 5. The findings of these chapters are summarized in which this question is answered by examining how the identified factors contribute to the support of students with low SES.

6

Factors determining access to and equity in higher education: A systematic review

Chapter 2 presents a comprehensive overview of factors determining access to and equity in higher education, based on a systematic literature review. The literature search included various keywords related to access and equity, including synonyms, to ensure comprehensive coverage. The search was conducted in Scopus and Web of Science, resulting in a total of 1057 articles.

These articles underwent a screening process involving duplicate removal, relevance assessment based on titles and abstracts, availability check, and full paper screening. Of the 33 studies included, 22 focus on access, 8 on equity and 3 on both access and equity. The review provides comprehensive insight into factors that have been shown to influence access, equity or both in higher education.

In general, the studies report more factors that influence access than factors that influence equity. In structuring and analysing all factors, the outcomes of Chapter 2 build upon Jensen's (2011) analysis of student retention in higher education, which identifies factors at three levels: individual, institutional, and social. In the current study, we divide the factors into four levels—government, university, education before university, and individual/student—as we are convinced that most of the factors identified in our study review could be classified into one of these four less general categories.

Of the 40 factors addressed in our review, the majority relate to the university level (18) and the individual/student level (15), followed by the government level (4). The fewest factors were found at the level of education before university (3). It is important to note that not all of the factors found in this review apply to access, equity or both, at every level. In the following sections, we present the levels of the various factors.

Government – access

Four factors have been reported to affect access to higher education at the governmental level. *Policies* aimed at supporting disadvantaged groups and *programmes* focusing on enhancing confidence and academic skills have been identified as two crucial factors for improving access to higher education. The presence of an education system that mandates *compulsory education until the age of 16 years* and the *number of higher education institutions* available also play a role in facilitating access to higher education. No specific factors were identified in relation to equity at the governmental level. This could possibly indicate that policy has thus far focused more directed towards access than towards equity (Jia & Ericson, 2017; Leach, 2013). It is possible that the primary objective has been to ensure that disadvantaged student groups are able to make the transition from pre-university education to

university education, which could explain the emphasis on access-related factors at the levels of government and pre-university education.

University – access

At the university level, *financial support* emerged as the most significant factor improving access to higher education for students with low SES. Other crucial factors relating to access include *mentoring and pathway programmes* that provide the confidence and insight needed in order to pursue university studies. In addition, *clear information on academic requirements* and *admission policies* that allow more flexibility in the ways in which students are admitted to higher education have been shown to play a positive role in access to higher education.

The studies included in the review also identify factors that have a negative influence on access, including *uneven financial support*, *difficult enrolment processes* and *low-quality communication* by the university. Such factors can impede access to higher education for students with low SES.

University – equity

Peer support and *teacher support* have been identified as major factors supporting student learning processes at the university level. Other positive university-level factors for students from low SES backgrounds included the *teaching of basic academic skills*, the *teaching of learning strategies* and *university support* (e.g. *services, programmes*, student accommodations).

As reported in Chapter 2, *low academic achievement in high school*, *negative approval* and *unwelcoming treatment* (e.g. rejection and exclusion) for disadvantaged students from specific departments, *narrow framing of gender* in STEM (i.e. science, technology, engineering, and mathematics) majors have been identified as negative factors at the university level.

Pre-university education – access

With respect to education before university, the role of *teachers* and *enrolment guidance from adults* emerged as the most important factors in access to higher education. Another factor that could affect the attitudes of young people towards higher education is the *school's view about debt*. At one school, it was believed that having debt is normal, which could have

helped students who were afraid of debt to realize that debt would not necessarily prevent them from going to university. In contrast, other schools focused on debt and money matters, possibly making existing fears worse for some students. No factors at the level of pre-university education were identified in relation to equity.

Individual/student – access

The literature identifies six individual/student-level factors that have a positive influence on access to higher education: *family support; high SES family background; highly educated parents; financial support from extended family members; student anxiety about debt; and the role of the community.* Several other factors have been found to have a negative effect on access at the individual/student level, including *lack of money; negative student views about higher education; lack of motivation; insufficient information about higher education pathways; low SES family background; being the first in the family to attend university; and self-doubt.* No factors affecting equity were identified at the individual/student level.

The findings presented in this study arguably reflect a Western perspective, as most of the papers in the review (82%) are based on information from only three continents: Europe, Australia and America. Perspectives from Eastern and developing countries are thus under-represented in current narratives. Overall, the studies report more factors affecting access than factors affecting equity.

The Bidikmisi programme for students with low SES in Indonesia: An analysis of factors relating to access to and equity in higher education

The fact that all studies included in the review reported in Chapter 2 are based on developed countries highlights the necessity of a national-level study conducted within a different context. To this end, the study presented in Chapter 3 focuses on Indonesia, where students with low SES have been identified as the least likely of all students in that country to gain access to higher education (World Bank, 2014). More specifically, this study examines the Bidikmisi program, through which the Indonesian government aims to enhance access to higher education by offering financial support to students from low socio-economic backgrounds.

To investigate factors relating to access to and equity in higher education for students with low SES in Indonesia, this study draws on data in the form of scientific or applied research work from journal articles, conference papers, books or dissertations on the Bidikmisi programme. In all, we identified 11 relevant publications. The results are structured according to the CIPP (context, input, process, product) model to provide a comprehensive overview.

With respect to product, studies have indicated that the Bidikmisi programme has contributed to the *academic and professional development* of students (Aliyyah, Rosyidi, & Yazid, 2019). University fees have been identified as the main factor affecting the success of students with low SES and, more specifically, financial aid provided by the Bidikmisi scholarship to enter and stay at the university. This type of assistance has also enabled students to enhance their development by gaining valuable experience and skills while at university, including academic and professional experience. The programme has also been shown to have a *positive impact on education in Indonesia* (Aliyyah, Rosyidi, & Yazid, 2019), due to the positive effects of helping students with low SES but good academic achievement to continue their studies in institutions of higher education. In this sense, the Bidikmisi programme has arguably had an influence on the development of a skilled workforce that can drive economic growth and development. By helping them to complete higher education, the grants have provided students with opportunities to gain the knowledge and skills necessary to enter into professions that are in demand and that contribute to the growth of the economy.

With respect to the context component of the CIPP model, the results of this study highlight the need for *clear policies at both the national and university levels*. The results relating to the input component highlight *obstacles to programme implementation*, as well as the significant influence of *parental involvement* and *environmental support* on student outcomes. Results for the process component focus primarily on *student activity*, as reported in most studies. Although the role of financial assistance has been identified as important for students with low SES, the results reported in Chapter 3 suggest that social factors (e.g. *parents* and *the environment*) also play a role in the success of these students.

The role of social factors in access to and equity in higher education for students with low socioeconomic status: A case study from Indonesia

To follow up on the national-level study discussed in Chapter 3, Chapter 4 reports on a study conducted at the university level to identify the perceptions of students, lecturers and support staff concerning access to and equity in higher education. The investigation is based on a qualitative research design in the form of a case study conducted at one large university in Indonesia. Data were collected through semi-structured interviews with 38 students, 16 senior lecturers and 11 support-staff members. This study is one of the first to include a variety of stakeholders and their views on factors influencing access to and equity in higher education for students with low SES.

The interview data were analysed in several steps. First, all responses were classified as either social factors or other factors, based on the outcomes of the review study (Chapter 2). Second, the percentage of respondents mentioning each factor was calculated for each stakeholder group (students, lecturers and support staff). To understand how these factors worked, the answers were read carefully and the mechanisms behind the factors were distilled. A second reviewer then checked the coding for each respondent. The responses were validated by inviting representative participants for focus-group discussions aimed at confirming the preliminary results of the interviews.

As revealed in Chapter 4, the most important social support factors for both access and equity are family, teachers (or lecturers), peers and mentoring programmes. Social support refers to the motivation and encouragement that builds confidence in students, and it is important for both access to and equity in higher education. Examples included the motivation to continue studies to the university level (access) and confidence regarding academic performance (equity). According to the results, *family* and *mentoring* play crucial roles in helping students with low SES to access higher education. This study illustrates the importance of receiving *motivation and support from parents and other family members*, thereby encouraging students to continue their education at university. The next most important social factor influencing access to higher education, *mentoring* provided either

individually or through secondary-school programmes (offered voluntarily to students considered capable of continuing to university studies) plays an important role by providing students with motivation, the opportunity to practice taking university tests and guidance (in choosing a degree programme and university).

With regard to equity, *lecturers* and *peers* emerged as the most prominent social support factors that support the learning process in higher education. The role of the lecturers consists of several functions and elements that affect equity: *the teaching style of the lecturer, the lecturer as a supervisor, the lecturer as a role model, the lecturer as a source of information, the lecturer as a counsellor*. Of these elements, the teaching styles of lecturers (i.e. attractive and application-oriented) and their roles as academic and thesis supervisors were mentioned as the most crucial factors.

An attractive and application-oriented teaching style has a positive effect. For instance, instead of simply lecturing about a scientific concept by using PowerPoint slides, a teacher could organize a laboratory experiment in which students actively participate in conducting experiments and making observations. An example of an application-oriented teaching style is when a lecturer relates learning material to real-life situations or practical applications. Students with low SES often encounter barriers, including limited access to learning resources (e.g. textbooks, technology or study materials). An attractive and application-oriented teaching style can help to overcome these obstacles by offering engaging and accessible learning experiences.

Second, in their roles as *academic and thesis supervisors*, lecturers build strong relationships that have a positive influence on the academic achievements of their students. *Peers* were identified as another source of support for equity in higher education. Peer support refers to motivating each other, learning together (e.g. learning difficult material, thesis discussions and lab work) and enjoying social activities, all of which were essential to the learning process at university.

Further insight into social factors affecting access and equity for students with low SES in higher education: Experiences of alumni in Indonesia

The study presented in Chapter 5 was a follow-up to the university-level study discussed in Chapter 4. This chapter addresses factors that either support or hinder students with regard to access to and equity in higher education, based on the experiences of alumni who had received funding through the Bidikmisi programme. This study draws on the experiences of these alumni, assuming that they could provide a deeper understanding of factors that influence both access and equity, as they are able to look back on their prior experiences at the university. The study maps alumni experiences about access to and equity in higher education in relation to three phases: pre-university life, university life during the admission period and learning processes at the university.

The main research questions addressed in Chapter 5 are as follows: (i) Which social factors play a role in access and equity for students with low SES (Bidikmisi alumni) within the Indonesian university context? (ii) What do the experiences of these successful Bidikmisi alumni reveal about the function of social factors? Proceeding from a qualitative approach, this study draws on narrative interviews to examine the experiences of six alumni from different study programmes at one large-scale university (the same university as in the study reported in Chapter 4) who had received financial aid during their studies. University staff members managing financial aid were contacted to find potential respondents who had successfully completed their studies at the university. To confirm the results, we made a summary or key notes of the respondents' answers during the interviews, and then confirmed them at the end of interview.

The results indicate how different actors had provided different support functions to alumni. According to the results, emotional support (e.g. motivation or reinforcement of the ability to pursue higher education), instrumental support (e.g. assistance with registration fees, photocopies) and informational support (e.g. terms and conditions of the Bidikmisi programme) provided by various actors had helped all respondents to complete their university degrees and to obtain relatively good employment.

These results support previous evidence concerning the role of social factors (e.g. family, teachers, lecturers and peers). They also reveal additional social factors that contribute to access to and equity in higher education for students with low SES, including secondary-school administrative staff, university student organizations, university scholarship or student-office staff, and local governments. Most importantly, our respondents might not have ever made it to graduation without this support.

Brief overview of main findings

An overview of the outcomes reported in this dissertation is presented in Figure 6.1, categorized by chapter or level. Interventions at various levels by various actors (e.g. teachers, peers and administrative staff in secondary school, and lecturers and financial-aid staff in university) were required in order to increase access to and equity in higher education. This process could not be realized by the student alone. It is thus important to realize that, in addition to financial support, students with low SES need social support in multiple forms and at multiple levels.

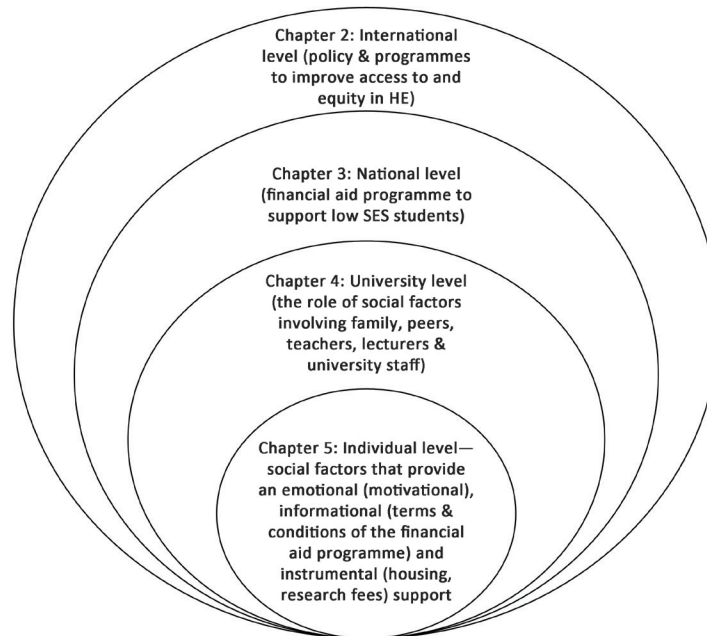


Figure 6.1.
Overview of the main findings reported in this dissertation.

6.2. Theoretical contributions of the findings

The findings of this research could make several contributions to the development of literature related to the role of social factors that increase access to and equity in higher education for students with low SES.

First, previous studies have focused on parents, peers and teachers as actors playing an important role in access and equity (Mishra, 2020; Gallop, & Bastien, 2016; Portes, Fernandez-Kelly, & Haller, 2005). In the present research, we have identified several other actors who play a role in access and equity, including administrative staff secondary schools and universities, financial aid programme managers, and student organizations. The support provided by these actors includes emotional support (e.g. motivation and encouragement to study at university), informational support (e.g. how to apply to financial aid programmes, how to choose a degree programme and university) and instrumental support (e.g. assistance with costs of printing and transportation).

Second, as reported in Chapter 5, some Bidikmisi alumni stated that their parents had not supported the decision to continue their studies at university for several reasons (e.g. financial concerns associated with studying at university, student housing concerns, distance between the university and the parental home). This finding indicates that, as the environment closes to students with low SES, family can either help to support their children's university studies or hinder them from studying at the university level. This finding aligns with those of a recent study by Russell-Bennett and colleagues (2022), who state that some parents who had not experienced tertiary education themselves wanted their children to have this opportunity, while others preferred their children to follow in their footsteps and not pursue university studies. Our study emphasizes the importance of collaboration and synergy amongst schools, teachers, staff and families to support students from low SES backgrounds in terms of access to and equity in higher education. It also highlights the fact that previous studies have focused predominantly on either teachers or students, thereby underscoring the need for comprehensive research that considers all stakeholders involved and that considers the possibility that the same actors could play either a supportive or a hindering role.

Third, previous studies have studied and discussed the role of the government mainly at the national level. In Chapter 5, we identify an additional important role that the local government plays in providing instrumental support. At the secondary-school level, local governments support students with low SES by providing free boarding schools. At the university level, they provide support by creating free student dormitories. These types of support are not provided in all regions in Indonesia, however, possibly due to the implementation of a policy of decentralization in 2001.

Decentralization is intended to transfer power and decision-making authority from the central government to local governments. This change was implemented in order to promote better governance by empowering local governments to make decisions that are more responsive to the needs and aspirations of their communities. The policy acknowledges that local authorities are often better equipped to understand and address local issues effectively. The local government's decision to provide boarding-school facilities for students with low SES in secondary school and student dormitories in university is regarded as a crucial policy for increasing access to and equity in higher education.

Fourth, as demonstrated in Chapter 2, most studies on access to and equity in higher education have focused on developed countries. In contrast, the studies presented in Chapters 3, 4 and 5 help to fill a gap in the literature by providing specific insights into the challenges and dynamics of access to and equity in higher education within the context of developing countries, like Indonesia. The findings reported in Chapter 2 emphasize the significance of financial assistance for supporting students with low SES in developed countries. Chapter 3 focuses on the Bidikmisi financial aid programme in Indonesia (as an example of a developing country), highlighting its positive impact on students with low SES in accessing higher education. Chapters 2 and 3 emphasize the role of social factors (e.g. family support and the environment) in assisting students with low SES. Subsequent chapters (Chapters 4 and 5) delve more deeply into social factors and explore various actors and types of support provided to students with low SES.

Taken together, the results of this study enhance existing understandings of the importance of financial assistance, social factors and customized support programmes to promoting access to and equity in higher education,

particularly in developing countries (in this case, Indonesia). The chapters of this dissertation provide a closer examination of social factors and explore various types of support provided to students with low SES. This in-depth exploration provides additional insight into the multifaceted nature of social factors and the diverse forms of support that can contribute to improving access to and equity in higher education.

Fifth, Chapter 4 provides a comprehensive understanding by involving a variety of stakeholders (e.g. students, senior lecturers and support staff) and their views on factors that influence access to and equity in higher education for students with low SES. Most previous studies on this topic focus only on the perspectives of students or teachers. Our findings are based on the perceptions of students, lecturers and support staff regarding social factors that support access to and equity in higher education. As acknowledged in Chapter 4, family support has a significant influence on access to higher education, while lecturers are universally identified as playing an important role in equity. In addition to reinforcing the results of previous chapters (Chapters 2 and 3), Chapter 4 provides additional knowledge on the different types of support that should be provided by different stakeholders.

The added value of linking results at four levels

In an analysis of equity in higher education in terms of student retention, Jensen (2011) distinguishes factors at three levels: individual, institutional and social/external. Key factors that affect student retention are identified at each of these levels. At the *individual level*, academic performance and attitudes, as well as satisfaction, have a significant impact on academic success. At the *institutional level*, active engagement and participation in academics plays a crucial role in student retention. At the social/external level, support received from the social *environment and family members* plays a vital role in a student's academic journey and overall well-being. Jensen's findings highlight the significance of considering multiple levels of influence when designing interventions and support systems to promote academic success.

The review study presented in Chapter 2 contributes valuable insights to Jensen's study by offering a comprehensive overview of factors that influence access, equity or both in higher education, thereby providing a

more comprehensive understanding of the topic. While Jensen distinguishes factors at three levels (individual, institutional and social/external), the results discussed in Chapter 2 strengthen Jensen's findings by distinguishing the factors at four different levels: the university level (which is similar to the institutional level), the individual level, the governmental level and the level of 'education before university' (the latter consisting primarily of factors constituting the trajectory of students). The latter two levels are derived from Jensen's social/external level. This distinction is important when examining access to and equity in higher education, as each level has distinct factors and dynamics that influence both access and equity.

The governmental level encompasses policies, regulations and funding mechanisms that shape access to and equity in higher education on a broader scale. This includes government initiatives, legislation and funding allocations that impact educational opportunities for students with low SES. By examining the governmental level, researchers can investigate how systemic factors (e.g. educational policies and financial support) can either contribute to or hinder access to and equity in higher education.

The level of 'education before university' focuses on pre-university educational experiences, systems and factors that influence access and equity. This level includes primary and secondary education, during which the educational foundations of students are established. Factors including school quality, resources and teacher effectiveness play crucial roles in shaping a student's preparedness and opportunities for higher education. Examination of this level could help to identify early barriers to access and equity, thereby allowing the implementation of interventions and support systems at earlier stages.

The investigation of access to and equity in higher education 'before the university level' is important for several reasons. First, by examining access and equity at early educational stages, researchers can identify disparities and inequalities existing amongst students with low SES. This could enable early intervention and targeted support to address these disparities before they become entrenched. Second, access and equity in early education can have a significant long-term impact on a student's educational attainment, career opportunities and overall life outcomes. Understanding factors that influence access and equity during this critical period can contribute

to the design of effective interventions that promote equal opportunities for students with low -SES. Third, education is often seen as a key driver of social mobility, providing individuals with opportunities to improve their SES. By studying access and equity before the university level, policymakers and educators can work towards reducing barriers and creating pathways for upward mobility for students with low SES.

Most institutional-level studies on access to and equity in higher education focus on the university, while often overlooking the crucial role of primary and secondary education, and especially the role of social factors (e.g. teachers and mentors) at the level of ‘education before university’.

The results of this study emphasize that social factors have a significant influence on both access to and equity in higher education. It underscores the importance of recognizing and addressing these factors through supportive family environments, lecturer teaching styles, the roles of lecturers as thesis supervisors, targeted programmes for improving academic performance and confidence, and a comprehensive, long-term approach in order to ensure that students with low SES also have equal opportunities to study and succeed in higher education.

The findings in Chapter 2 is supported and complemented by the findings in Chapters 3, 4, and 5

The results presented in Chapter 2, which categorize the determining factors of access and equity in higher education at different levels, were expanded upon in the following chapters. Chapter 3 focuses on government financial aid programmes, Chapter 4 explores the role of social factors at the university level and Chapter 5 investigates the individual level through interviews with alumni who have received financial aid to identify the various actors and forms of support existing within the range of social factors.

As reported in Chapter 2, the most significant factor supporting access to and equity in higher education consists of *the policies and programmes* implemented by the government to provide financial aid, particularly for students with low SES. In addition to financial aid, this study highlights *the role of social factors*: family, peers, teachers, lecturers, administrative staff in both secondary school and university, regional student organizations and local governments. The findings concerning the role of social factors, as

identified in Chapter 2, are strengthened and complemented by the results reported in Chapters 3, 4 and 5.

Chapter 3 provides further support for the findings reported in Chapter 2 by emphasizing the important role that government financial aid programmes play in supporting access to and equity in higher education. It also strengthens the results reported in Chapter 2 concerning the significance of social factors (e.g. family and the environment) in providing support for students with low SES. As demonstrated in Chapter 3, most studies on the national Bidikmisi financial aid programme have focused on student academic achievement, the implementation of the programme, student activity and the role of social factors. While most previous studies address the relationship between student learning outcomes and the receipt of financial aid, they do not investigate factors that support the learning processes of students from low SES backgrounds, including family and environment. We therefore argue that understanding the specific factors relating to the Bidikmisi programme and its recipients may support student learning and that educators and policymakers should develop more targeted interventions and strategies to address the needs of students with low SES.

The results reported in Chapter 4 reinforce those reported in Chapters 2 and 3 by highlighting the significance of social support factors for Bidikmisi recipients, including family, teachers (or lecturers), peers and mentors (through mentoring programmes) in promoting both access to and equity in higher education. As indicated by the findings presented in Chapter 4, family plays a significant role in both access and equity, albeit with a stronger influence on access, while lecturers have a greater impact on equity.

The findings on the influence of social factors (Chapters 2, 3 and 4) are expanded in Chapter 5 with the introduction of three additional actors: administrative staff in secondary school and university, regional student organizations and local government. These actors play a significant role in providing emotional, informational and instrumental support to students from low SES backgrounds. These findings align with previous research conducted at the secondary-school level, which reveal that students who receive support from parents, teachers and friends achieve better academic performance than do those who lack such support (Rosenfeld, Richman, & Bowen, 2000). It is interesting to note that families and teachers provided

various types of support during the pre-university phase, but that family support can have both positive and negative effects.

The Importance of Emotional Support for Access and Equity in Higher Education

Emotional support emerged as the most consistent and important type of support provided by family during the secondary-school period and by lecturers during the university period. For example, it was mentioned by all respondents in the alumni study (Chapter 5), and it thus applies to both access and equity. Instrumental and informational support provided by family, teachers and lecturers also appears to be relevant to both access and equity, albeit to a somewhat lesser extent.

The results of this study provide information regarding the main support needed by students with low SES: emotional support (i.e. emotional reinforcement). Once students have gained sufficient confidence and motivation, the second crucial step is information support. The significance of information was underscored, as the immediate environment of students with low SES often lack knowledge concerning access to and equity in higher education. The third aspect is instrumental support, which often translates into financial assistance. This finding is intriguing, given that previous research emphasizes financial support as the primary requirement for students with low SES. The results of this study thus contribute by elucidating that the main support needed includes emotional reinforcement, followed by information support and, finally, instrumental (financial) support.

6.3. Implications of the findings of this project for policy and practice with respect to access and equity

The findings reported in this dissertation highlight the pivotal role of social support in promoting both access to and equity in higher education. The role of social support refers to family, peers, teachers, lecturers, administrative staff in both secondary school and university, regional student organizations and local government. These findings emphasize the need to strengthen educational policies and practices to enhance access to and equity in higher education.

The results reported in Chapter 2 reveal the most significant factors that support access to and equity in higher education for students with low SES, including policies and programmes implemented by the government to provide financial aid. The study suggests that increasing the availability and accessibility of financial aid programmes and scholarships specifically targeting students from low SES backgrounds helps to alleviate the financial burden and to ensure equal opportunities for higher education. This could be done by implementing affirmative action policies or quotas to ensure that groups with low SES are represented in institutions of higher education.

As demonstrated in Chapter 2, the role of mentors in mentoring programmes at both the secondary-school and university level is crucial for students with low SES. Based on this finding, this study recommends the establishment of academic support programmes for students with low SES. These programmes should be aimed at providing additional resources, mentoring, tutoring and counselling services. The implementation of such programmes likely to enhance academic preparedness, bridge learning gaps and foster student success.

Chapter 3 emphasizes the critical need for standardized policy or guidelines to govern the implementation of financial aid programmes at the university level. The review presented in Chapter 3 identifies hindering factors, including a lack of coordination and communication. The absence of a standardized policy leads to ongoing coordination issues, challenges in information management and discrepancies across various university departments. By highlighting the necessity of a standardized policy, we advocate for the establishment of clear guidelines that specify procedures,

responsibilities and data-management protocols to ensure a transparent and inclusive approach to the implementation of financial aid.

The findings presented in Chapter 3 emphasize the significant role of the family and the environment surrounding a student in promoting access to and equity in higher education. Family and environment can have a heavy influence on a student's motivation and expectations. When families value education and encourage their children to pursue higher education, this creates a positive academic atmosphere. Students with low SES who have supportive families and environments are more likely to view higher education as attainable and to strive towards it. It is therefore crucial for institutions of higher education to prioritize the role of social factors in supporting access to and equity in higher education.

Higher education institutions can implement various programmes to prioritize the role of social factors in supporting access and equity. First, they can *create outreach programmes* aimed specifically at reaching groups with low SES and *increase awareness* of opportunities for higher education. These initiatives could involve workshops, college fairs and information sessions that actively involve students and their families, thereby equipping them with crucial knowledge about the advantages of and paths to pursuing higher education.

Institutions could also foster *collaboration with community organizations, non-profit groups and government agencies* dedicated to promoting access to and equity in higher education. By partnering with these organizations, educational institutions could establish joint programmes, share resources and engage with the community. Such collaborative efforts are intended to strengthen support networks and enhance outreach initiatives, ultimately making higher education more accessible to and equitable for all students, and especially those with low SES.

In addition, institutions could offer *programmes to develop academic and study skills* that would equip students with tools that are crucial to success in higher education. Such programmes could consist of workshops focusing on time management, research skills, critical thinking and effective study strategies. By providing these resources to students with low SES, educational institutions could empower them to excel academically and thrive in their higher-education journeys.

As implied by the results reported in Chapter 4, policymakers and educational institutions should recognize the crucial role of social support factors, including family, teachers (or lecturers), peers and mentors in providing support and guidance to students in promoting access to and equity in higher education. One important aspect to consider in this regard is family engagement. Policies should highlight the importance of parental involvement and establish ways to encourage and enable the active participation of families in their children's education. This could involve supporting initiatives like parent-teacher conferences, workshops for parents and establishing regular channels of communication to keep parents informed and engaged in the educational journeys of their children.

Another key aspect is teacher (or lecturer) training and support. Policies should prioritize the professional development of teachers (or lecturers) to ensure they have the necessary skills and knowledge to provide effective support and guidance to students. This could include training programmes focused on developing mentoring techniques, creating inclusive learning environments and fostering positive teacher-student relationships.

Policies should also encourage the implementation of peer-support programmes to facilitate interaction and collaboration amongst students. Such programmes could take the form of mentoring initiatives, study groups or buddy systems, in which experienced students offer guidance and support to their peers. This would foster a supportive learning community that enhances student engagement and success.

Furthermore, policies should acknowledge the importance of mentoring programmes and allocate resources and support for their implementation. Such programmes could pair students with mentors who are able to provide guidance in academic, career and personal matters. Mentors could be from diverse backgrounds (e.g. professionals, alumni or senior students), and their valuable insights and support could help students to navigate their educational journeys successfully.

Chapter 4 highlights the importance of lecturers in promoting equity for students from low SES backgrounds. These students express a preference for lecturers who incorporate practical and hands-on approaches in their teaching, as this facilitates their comprehension of the subject matter.

We therefore recommend that lecturers utilize attractive and application-oriented teaching styles, particularly for students with low SES.

As identified in Chapter 5, some parents initially oppose their children's pursuit of higher education due to financial concerns. After receiving information about the Bidikmisi programme, which covers tuition fees and provides monthly living expenses for four years, however, parents may eventually change their stance and support their children's educational aspirations. These findings suggest that efforts to promote financial aid should extend beyond secondary schools by involving school committees that include parent representatives and secondary-school staff. This could help to ensure that families with low SES are informed about the financial support opportunities that are available to them.

Chapter 5 highlights the role of local government in providing free boarding schools at high school for students with low SES who have good academic achievement. Boarding schools funded by local governments offer a range of facilities, including student dormitories, classrooms and libraries, which typically located within the same premises. Such facilities could be one way to reduce dropout rates in secondary school and to contribute to increasing access to higher education institutions. At the university level, the local government's role in providing student housing and financial aid is also a crucial factor. Given that this support is not provided by all local governments in Indonesia, we encourage other local governments to establish policies that support such facilities for their secondary and university students, and especially those from low SES backgrounds.

As demonstrated by the results reported in Chapter 5, school management and school committees should devote attention to emotional, informational and instrumental support provided by teachers and secondary-school staff in supporting students with low SES. Those who have the potential to continue their studies at institutions of higher education need special attention from relevant stakeholders, including instrumental support (e.g. assistance with fees for registration, transportation and research) Informational support is important as well. For example, mentoring programmes could provide both emotional support (e.g. motivation and encouragement) and information support (e.g. how to choose a degree programme and university, and how to apply for scholarships).

6.4. Limitations and suggestions for future research

The findings of this study are intended to provide insight into and contribute to efforts aimed at improving access to and equity in higher education in Indonesia, specifically for students with low SES. It is nevertheless important to note several limitations to the studies of this project. More importantly, we add suggestions for future research to counter these limitations in the future.

The literature review presented in Chapter 2 is restricted to the period from 2014 to 2018. Future studies should extend the timeframe to include more recent information, up to the present. Examination of a longer period (e.g. the past 10 or 20 years) could reveal significant changes and variations over time, thereby providing a more comprehensive understanding of the topic. One reason to expand the period is that the period covered in our literature review was before the COVID-19 pandemic, which had a significant impact on both access to and equity in higher education. Lockdowns, social distancing measures and the shift to online learning disrupted educational systems throughout the world. Students from low SES backgrounds faced challenges due to the digital divide, as limited access to technology and internet connectivity hindered their participation in online learning, potentially exacerbating existing educational inequalities. The learning process was further disrupted by school and university closures, which required adjustments to online formats. Not all students were prepared for this transition, however, and it created difficulties associated with adapting to the changes, as well as with decreased engagement. The lack of face-to-face interaction and support also affected the motivation and overall learning outcomes of students.

The limitations to the study presented in Chapter 3 are related primarily to the limited literature used for collecting data on factors influencing access to and equity in higher education through the Bidikmisi programme. To address these limitations and obtain more comprehensive results, future research should consider incorporating a greater number of relevant literature sources. Suggestions for expanding the literature review could include: (i) reputable education journals (e.g. the *Journal of Higher Education*, *Research in Higher Education*, *Higher Education*, and *Studies in Higher Education*);

(ii) online bookstores, university libraries and Google Books for relevant books and book chapters on the topic; (iii) websites of relevant government departments or educational institutions to access reports and publications related to access to and equity in higher education; and (iv) dissertations and repositories (e.g. ProQuest Dissertations and Theses) for previous research studies that have examined the topic. By incorporating a wider range of literature sources, future studies could enhance the depth and breadth of understanding regarding factors impacting access to and equity in higher education.

Chapter 3 focuses on the Bidikmisi programme, which was initiated by the Indonesian government in 2010 to enhance educational opportunities for students with low SES. In 2020, however, the government introduced a new system known as KIP (Kartu Indonesia Pintar, or the Indonesian Smart Card) Kuliah (college) as a replacement for the Bidikmisi programme. The new programme offers two distinct advantages over the Bidikmisi programme. First, it reaches a much larger number of recipients, with over 400,000 individuals benefiting from the programme in 2020, as compared to 130,000 Bidikmisi recipients in 2019. This expansion allows KIP Kuliah to support a broader range of students in their pursuit of higher education. Second, KIP Kuliah emphasizes vocational education, providing enhanced opportunities for students interested in vocational training and development. By focusing on vocational pathways, KIP Kuliah helps to address the diverse educational needs and career aspirations of its recipients. Despite its recent implementation, limited research on the programme is currently available. Future research should therefore aim to explore the implementation of recently launched initiatives (e.g. within the past three years) in Indonesia.

The data collection for Chapter 4 was conducted at the university level, involving students, lecturers and support staff. To further enhance the understanding of access to and equity in higher education, future research could expand the scope to include the secondary-school level and involve a broader range of stakeholders (e.g. parents, secondary-school teachers, students and support staff). In addition, the study was conducted at a single university in a single country, which limits the generalizability of the findings. To enhance the applicability of the findings, future research could include

multiple universities in different countries, taking into account comparable funding aid characteristics.

In terms of methodology, Chapters 4 and 5 are based on a qualitative approach involving interviews and focus-group discussions. Future studies could adopt a mixed-method approach by combining quantitative data (e.g. surveys or questionnaires) with qualitative data (e.g. interviews and focus-group discussions). This would provide a more comprehensive understanding of factors that influence access to and equity in higher education and make it possible to study a larger sample. Such a broader scope is also necessary to validate the noteworthy aspects of the study for different universities and countries.

This study explores the role of social factors from the perspectives of students, lecturers and support staff. Future research could examine correlations between these actors and conduct a detailed analysis of the contribution of each social factor to access to and equity in higher education. Future studies should also investigate students who did not pursue higher education and explore the social (and other) factors having a significant influence on their decisions to discontinue their education.

Chapters 4 and 5 concentrate mainly on factors that support access to and equity in higher education for students with low SES who had been accepted into and successfully completed university studies. Future research would do well to consider those who have been accepted into university but who have failed to complete their studies or who have dropped out of higher education. Such insights could inform policies, programmes and assistance aimed specifically at equity for students with low SES.

6.5. Reflection from the author's personal experience

This dissertation study was inspired by the author's personal teaching experience, with the objective of generating deeper insight into factors and actors affecting access to and equity in higher education for students with low SES that could ultimately result in increasing both access and equity in Indonesia. The process of conducting the four studies of this doctoral project has led to the realization that most of the findings also relate to and/or reflect the author's own situation and perceptions.

As reported in Chapter 2, students from high SES family backgrounds are greatly influenced by their access to higher education, and they are significantly more likely to enrol in university, as compared to their counterparts from middle and low-income groups. This finding is highly relevant to the author's work experience in schools where the majority of students were from high SES backgrounds. Within this context, the author observed that these students had access to various resources, including practice books for university entrance exams, and even university-level study materials to prepare them for higher education. They were also able to afford services from private institutions that provide guidance and training, which increased their likelihood of being accepted into public universities. These private institutions offer assistance in answering questions, selecting majors and choosing institutions of higher education.

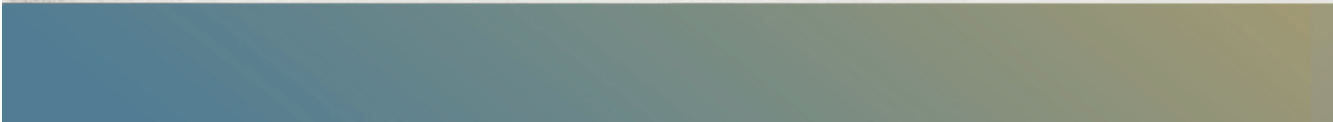
The results of Chapter 2 also indicate that students from low SES family backgrounds have fewer opportunities to pursue higher education, thus highlighting the need for additional support, as compared to their counterparts with high SES. In the author's experience, some students from low SES backgrounds exhibited above-average academic abilities in comparison to their peers. Despite their abilities, however, these students required emotional support to enhance their self-confidence and motivation, as well as access to university-related information.

In 2010, the Indonesian government introduced the national financial aid programme known as Bidikmisi to assist students from low SES backgrounds. This programme offered financial aid to secondary-school graduates who demonstrated good academic abilities but faced economic limitations. Its primary objective was to facilitate access to higher education

for these students. The impact of this government support was personally conveyed to me by one of my students, who had received financial aid from the Bidikmisi programme while pursuing a Bachelor's degree. This assistance proved immensely helpful and, as shared with the author, the student would likely not have been able to pursue undergraduate studies without it.

Although they are no longer studying at the aforementioned school, the author's former students continue to contact the author through social media platforms (e.g. Facebook and Instagram). They seek guidance on various aspects, including how to apply to universities, selecting appropriate degree programmes and institutions, and identifying suitable cities for their undergraduate studies. This experience clearly reflects that the mentor role, as discussed in each chapter in this study, plays a crucial role in providing direction and support to students in their journey towards pursuing tertiary education.

Finally, as mentioned in the introductory chapter, one of the United Nations Sustainable Development Goals (SDG) is to achieve 'Education for All' (SDG 4), with a focus on 'Quality Education'. This goal includes Target 4.3, which aims to ensure equal access to affordable and high-quality technical, vocational and tertiary education—including university education—by 2030. The findings of this study contribute to the identification of key factors that play a crucial role in achieving these ambitious goals. These factors include policies and programmes related to government financial aid, as well as the influence of such social factors as family (including extended family members), peers, teachers, lecturers, administrative staff in secondary schools and universities, regional student organizations, and local governments. These stakeholders provide vital emotional, informational and instrumental support, particularly for students from low SES backgrounds. In conclusion, we hope that our study has made a valuable contribution towards the achievement of this SDGs target.



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References marked with an asterisk (*) indicate studies included in the analysis Chapter 2

References marked with an asterisk (**) indicate studies included in the analysis Chapter 3

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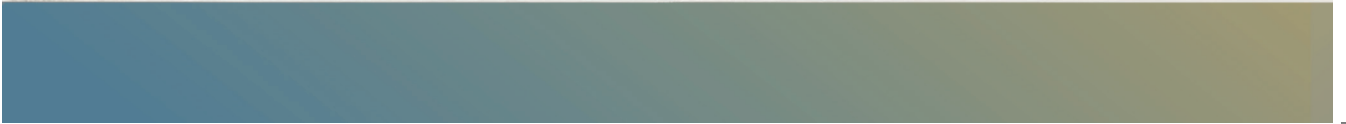
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Appendices



Appendix 2.1. Keywords (OR)

Using OR in a keyword search for the main keywords:

1. access OR participation OR enrolment
2. equity OR inclusive OR diversity OR inclusion
3. “higher education” OR university OR “tertiary education”

Appendix 2.2. Keywords (NOT)

Using NOT in a keyword search for irrelevant keywords:

1. NOT health OR medicine OR medical OR hospital OR clinical.
2. NOT achievement OR engagement OR efficacy OR assessment
3. NOT “early childhood” OR “pre-school” OR “primary school” OR “secondary school” OR “high school”
4. NOT library OR librarian OR “technological tools”
5. NOT genetics OR species OR plant OR biodiversity OR cell
6. NOT land OR household OR ecology OR park OR forest
7. NOT economy OR finance OR trade OR market
8. NOT company OR “labour market” OR employment

Appendix 3.1.

Policies on access to higher education in Indonesia:

i. The National Education System Law (Undang-Undang tentang Sistem Pendidikan Nasional) 20/2003, on Chapter 5 on students. Article 12, Paragraph (1) states that every student in each educational unit has the right to:

- receive tuition assistance for high achievers whose parents cannot afford their education;
- receive education fees for those whose parents cannot afford their education.

ii. Government Regulation (Peraturan Pemerintah) 48/2008 concerning Education Funding. Fifth Part. Article 27, Paragraph (1).

- The government and regional governments, in accordance with their authority, provide tuition assistance to students whose parents or guardians cannot afford to pay for their education.

iii. The Law on Educational Legal Entities (Undang Undang tentang Badan Hukum Pendidikan) 9/2009 on Chapter VI. Article 46 (i).

- Educational legal entities are required to recruit and accept Indonesian citizens who have academic potential and are from economically disadvantaged background amounting to at least 20% of the total number of new students.

iv. The Higher Education Law (Undang Undang tentang Pendidikan Tinggi) 12/2012

- Chapter ii: Implementation of higher education. Part 1. Article 6 states that the higher education system is bound to adhere to the following principles: i. siding with economically disadvantaged community groups;
- Chapter iv: Higher education, Part 7 on Student Affairs.

Paragraph 1 concerning New Student Admissions. Article 74(1) Public universities are required to seek and recruit prospective students who have high academic potential but who are economically disadvantaged and prospective students from the foremost,

outermost and underdeveloped areas to be accepted amounting to at least 20% (twenty per cent) of all new students who are accepted and spread across all study programmes.

Paragraph 2 Fulfilment of Student Rights Article 76 (1) The Government. Regional Government. and/or Higher Education system are obliged to fulfil the rights of students who are economically disadvantaged to be able to complete their studies in accordance with academic regulations. (2) The fulfilment of student rights as referred to in Paragraph (1) is carried out by providing: a. tuition assistance to outstanding students; b. assistance or waiver of Education fees; and/or c. an interest-free loan that must be repaid after graduation and/or obtaining employment.

Appendix 3.2.

Policies on equity in higher education in Indonesia:

i. Higher Education Law 12/2012 in Chapter vii, Paragraph 2, Article 76.

- In order to complete student studies, government, local government and higher education institutions are required to support students with low SES by granting or waiving tuition fees, or by extending interest-free loans that must be repaid after graduation or obtaining employment.

ii. The Law on Educational Legal Entities (Undang Undang tentang Badan Hukum Pendidikan) 9/2009 on Chapter VI, Article 46 (ii.)

- Educational legal entities are required to allocate tuition assistance for Indonesian citizens who have academic potential and who are from economically disadvantaged background amounting to at least 20% of the total number of students.

Appendix 3.3.
Literature search and screening

Database	Google scholar		Scopus		Web of science	
	English (Bidikmisi evaluation)	Indonesia (Evaluasi Bidikmisi)	English (Bidikmisi evaluation)	Indonesia (Evaluasi Bidikmisi)	English (Bidikmisi evaluation)	Indonesia (Evaluasi Bidikmisi)
Result	3	9	2	0	0	0
Screening 1: Title and abstract	2	8	1	0	0	0
Screening 2: Similar title	1	7	1	0	0	0
Screening 3: Availability	1	7	1	0	0	0
Total	9 results					

Appendix 5.1. Research questions

The research questions are divided into two phases:

1. Pre-university life

- Please elaborate on your experiences in pre-university life.
- Who was involved in this period, and to what extent did they play a role?
- What other factors do you think might have influenced your pre-university life, and how?

2. During university life

- Please elaborate on your experiences during your university life.
- Who was involved in this period, and to what extent did they play a role?
- What other factors might have influenced your university life, and how?



Summary



Conducting research on access to and equity in higher education is crucial to the identification of systemic barriers that prevent certain groups (e.g. students with low SES) from pursuing higher education, as well as to the formulation of strategies for promoting inclusivity. Understanding the factors that contribute to unequal access and disparities in educational outcomes could enable policymakers and educators to develop targeted interventions and policies to create a more equitable and accessible system of higher education.

Studies have also indicated that access to and equity in higher education could potentially have an impact on social mobility and economic development. Higher education is widely regarded as a pathway to upward social mobility, as it provides individuals with the knowledge, skills and credentials necessary to secure better job opportunities and improve their SES. When access to higher education is limited, however, it perpetuates existing social inequalities and hinders social mobility for disadvantaged groups. By examining access to and equity in higher education, researchers can identify and address the barriers that prevent individuals from low SES backgrounds from accessing and succeeding in higher education.

Knowledge about access to and equity in higher education is also important in support of SDG 4, which aims to provide inclusive and quality education for everyone. Most previous research on this topic has nevertheless focused on developed countries. For this reason, the current study offers a unique perspective by examining a developing country (i.e. Indonesia). By exploring the challenges and dynamics of access and equity in higher education in Indonesia, this study aims to contribute valuable insights that can be used to inform efforts to achieve SDG 4 on a global scale. It expands the existing body of knowledge beyond developed countries to provide a more comprehensive view of issues and potential solutions related to access to and equity in higher education.

Based on the reasons outlined above, the objective of this dissertation is to generate deeper understanding of access to and equity in higher education, especially for students from low SES backgrounds in Indonesia. The dissertation comprises four consecutive studies. The first two studies (presented in Chapters 2 and 3) focus on the first main research question, which concerns factors that support access to and equity in higher education.

The last two studies (presented in Chapters 4 and 5) focus on the second main research question, which concerns who and how these factors contribute to access and equity.

Chapter 2: Determinants of access to and equity in higher education: A systematic literature review

Chapter 2 provides a comprehensive overview of factors influencing access to and equity in higher education. The review draws on a systematic literature search using keywords and databases, resulting in the selection of 33 peer-reviewed articles. Each of these articles focuses on access, equity or both. The review highlights more factors related to access than to equity. The factors were categorized according to four levels: government, university, education before university and the individual student. This was a novel outcome, as compared to those of other scholars, who focus on only three levels: government, university and individual.

At the governmental level, four factors were identified as influencing access to higher education: policies supporting disadvantaged groups; programmes aimed at enhancing confidence and academic skills; compulsory education up to the age of 16 years; and the availability of higher education institutions. No specific factors were found for equity at the governmental level, suggesting that policies to date have placed greater emphasis on access than on equity.

The highest number of factors influencing access to higher education were found at the university level. Significant positive factors include financial support, academic requirements and admission policies. Negative factors include uneven or perceived inequitable financial support; challenging enrolment processes; and poor communication by universities. For equity at the university level, peer and teacher support; the teaching of basic academic skills and learning strategies; and university support were identified as positive factors. Negative factors included low academic achievement in secondary school, negative treatment of disadvantaged students; and limited views on how to affirm gender differences in STEM programmes (Science, Technology, Engineering, Mathematics).

In terms of education before university, factors influencing access to higher education include guidance provided by secondary-school teachers and other adults, as well as the school's view on debt (e.g. the relative acceptability of incurring debt for the purpose of studying). No factors related to equity were identified within this context.

At the individual or student level, positive factors affecting access include family support, high SES background, educated parents, financial support from extended family members, student anxiety about debt, and community support. Negative factors included lack of funds, negative perceptions of higher education, low motivation, insufficient information about study pathways, family background characterized by low SES, being the first in the family to attend university, and self-doubt. No factors specific to equity were found at the student level.

It should be noted that the studies included in the review are based primarily on Western perspectives, as the majority are from Europe, Australia or America. Perspectives from Eastern and developing countries are under-represented. Overall, the review highlights more factors influencing access than equity in higher education.

Chapter 3: Analysis of the Bidikmisi programme for students with low SES in Indonesia in terms of factors relevant for access to and equity in higher education

Considering that the majority of studies reviewed in Chapter 2 focus on developed countries, it was deemed necessary to conduct a study on developing country such as Indonesia (see Chapter 3). In Indonesia, students from low SES backgrounds have been identified as having the least access to higher education. The study presented in Chapter 3 is therefore a specific investigation of the Indonesian government's Bidikmisi higher-education assistance programme.

Socio-economic differences make it difficult for everyone in Indonesia to have equal access to and equity in higher education. To address this issue, the Indonesian government introduced the Bidikmisi programme in 2010, with the objective of supporting students from low SES backgrounds who meet required academic criteria. This is done by providing them with

funding for tuition fees and a monthly living allowance throughout their four-year undergraduate studies. Chapter 3 presents an analysis of the Bidikmisi programme as a means of promoting access to and equity in higher education for students with low SES in Indonesia.

The research is guided by the following question: ‘Which factors relevant to access and equity for students with low SES can be identified within the context of the Bidikmisi programme in Indonesian universities?’ The analysis draws on empirical reports obtained from a variety of sources, including journal articles, conference papers and books retrieved through Google Scholar, Scopus, and Web of Science. The results are categorized according to the CIPP model (context, input, process, product) and classified as factors that either support (+) or hinder (-) access and equity.

As indicated by the findings reported in Chapter 3, the Bidikmisi programme contribute to both personal growth and career advancement for individuals, while also playing a pivotal role in driving national development. Financial aid provided by the scholarship has played a significant role in facilitating students’ entry into and continuation of university education, thereby enabling them to gain valuable academic and professional experience. It has been argued that the programme has enhanced academic development by providing opportunities for students to acquire essential skills and experiences. It has also been reported to have a positive impact on education as a whole in Indonesia by helping students with high academic achievement but low SES to pursue higher education. The Bidikmisi programme has been regarded as instrumental in developing a skilled workforce that contributes to economic growth and development, given that completing higher education equips students with the knowledge and skills necessary for in-demand professions.

With regard to context, the results emphasize the importance of having clear policies at the national and university levels. Findings for input highlight challenges encountered in the implementation of the programme and underscore the significant influence that parental involvement and environmental support have on student outcomes. In terms of process, the results primarily concern student activities, as reported in most studies. While financial assistance is crucial for students with low SES, the results reported in Chapter 3 suggest that social factors (e.g. parental support

and the environment) also play an important role in the success of these students. Based on these findings concerning the Bidikmisi programme, it was decided to conduct a more detailed investigation into the role of social factors and a variety of actors by examining one university (case study).

Chapter 4: The role of social factors in access to and equity in higher education for students with low socioeconomic status: A case study from Indonesia

Research on university students with low SES provides valuable insight into the experiences of stakeholders involved in access to and equity in higher education. To this end, Chapter 4 focuses on one large public university in Indonesia, examining the experiences of a variety of stakeholders, including Bidikmisi recipients, lecturers and university support staff with regard to social factors that support access to and equity in higher education.

The main research question addressed in Chapter 4 is as follows: ‘Which social factors contribute to access and equity for students with low SES (Bidikmisi recipients) within the Indonesian university context?’ This question was further explored through the following sub-questions: (i) ‘What are the most prominent social factors perceived by students, lecturers and support staff that impact access and equity at the university?’ (ii) ‘How do these factors work, and what are the underlying mechanisms?’ (iii) ‘What similarities and differences exist in the experiences of students, lecturers and support staff regarding these factors?’

Chapter 4 builds upon the national-level study (Chapter 3), focusing on the university level based on the perceptions of students, lecturers and support staff regarding access to and equity in higher education. Proceeding from a qualitative research approach, the case study concerns a large university in Indonesia. Semi-structured interviews were conducted with 38 students, 16 senior lecturers and 11 support-staff members. This study is one of the first to include multiple stakeholders and their perspectives on the factors influencing access to and equity in higher education for students with low SES.

The findings presented in Chapter 4 highlight the significance of a broad range of social support factors and actors—including family, teachers, lecturers, peers and mentoring programmes—for both access to and equity in higher education. Social support plays a crucial role in motivating and building confidence in students, which is essential for their ability to access and succeed in higher education. Examples include family support in encouraging students to pursue university education and mentoring programmes that provide guidance and motivation.

With regard to equity, lecturers and peers emerge as prominent social support factors in the learning process. Lecturers fulfil a variety of roles that impact equity, including teaching style, supervision, serving as role models, providing information and offering counselling. Attractive and application-oriented teaching styles that engage students and that relate learning materials to real-life situations are particularly influential. The roles of lecturers as academic and thesis supervisors foster strong relationships and have a positive influence on the academic achievements of students. Peers also provide essential support through motivation, collaborative learning and social activities, all of which contribute to the learning process in higher education.

Chapter 4 provides an overview of the percentages of respondents stating that, in their experience, each of the main categories of social support factors determined access to and equity in higher education. What can be inferred from these percentages is that students and lecturers identified the family as the most influential factor supporting access to higher education, while support-staff members assigned the greatest importance to mentoring. Whereas lecturers and support staff agreed that peers have less impact on access to higher education, 57.7% of stated that peers play an important role, all students indicated that peers were important. Teachers (including counsellors) were ranked second (84.6%) after family (100%) by students, while 54.5% of the support staff agreed that teachers play an important role in access to higher education. Almost all students (92.3%) agreed that mentoring plays an important role in access to higher education, while 68.8% of lecturers held this view.

With regard to equity, almost all respondents stated that lecturers were important, with peers identified by students and lecturers as the second most important equity-promoting factor. Only a small proportion of the lecturers (25%) and support-staff members (27.3%) stated that the family influences equity, while no students said that family had played a role in their learning process once they had entered the university. Most of the students (61.5%) and support staff (72.7%) agreed that mentoring programmes have an influence on higher education, but none of the lecturers mentioned this.

Chapter 5: Further insight into social factors affecting access to and equity in higher education for students with low SES: Experiences of alumni in Indonesia

Chapter 5 focuses on factors that either facilitate or hinder access to and equity in higher education, based on the experiences of Bidikmisi scholarship alumni. The experiences of these alumni were valuable, as they provided a comprehensive understanding of access to and equity in higher education, drawing on their reflections on their past university experiences. The study examines the experiences of alumni across three phases: pre-university life, university life during the admission period, and learning processes at the university.

The primary objective of this study is to identify the social actors and factors that influence access to and equity in higher education for students from low SES backgrounds in Indonesia, based on the experiences of alumni. The main research questions for this study were as follows: (i) ‘What roles do social factors play in access and equity for students with low SES (Bidikmisi alumni) within the Indonesian university context?’ and (ii) ‘What do the experiences of successful Bidikmisi alumni reveal about the role of social factors?’ The study is based on a qualitative approach and draws on narrative interviews to explore the experiences of six alumni from different degree programmes at one large-scale university (the same university as in Chapter 4). These alumni received financial aid during their studies, and potential respondents were identified through university staff members responsible for managing the financial aid.

The main findings reported in Chapter 5 indicate that emotional support (e.g. motivation and reinforcement of the ability to pursue higher education), instrumental support (e.g. assistance with registration fees and photocopies) and informational support (e.g. understanding the terms and conditions of the Bidikmisi programme) provided by various actors helped the respondents to complete their university degrees successfully and to secure relatively good employment.

Emotional support was identified as the most consistent and crucial form of support during both secondary school and university. All respondents in the study presented in Chapter 5 mentioned the significance of emotional support from their families during secondary school and from their lecturers during their university studies. This type of support played a role in both access to and equity in higher education. Instrumental and informational support provided by families, teachers, and lecturers was also identified as important to the promotion of access and equity, albeit to a lesser extent.

As reported in Chapter 5, some respondents had faced resistance from their parents when deciding to pursue university education, for a variety of reasons, including financial concerns, housing issues and distance from the parental home. This finding indicates, as the most immediate environment for students with low SES, the family can either support or hinder the educational aspirations of these students. The results of the study underscore the importance of collaboration and synergy amongst schools, teachers, staff and families to support access to and equity in higher education for students with low SES.

The study presented in Chapter 5 highlights the significant role that local governments can play in supporting students with low SES in Indonesia. Some local governments provide instrumental support by offering free boarding schools at the level of secondary school and by creating free student dormitories at the university level. It is important to note, however, that not all regions in Indonesia have benefited from this type of support, possibly due to the implementation of a policy of decentralization in 2001. This policy was intended to empower local governments, thereby enabling them to make decisions that would better suit the needs of their community's needs, in addition to improving governance. The decision of a local government to provide boarding school facilities and student dormitories can be seen as

a crucial policy for enhancing access to and equity in higher education, in alignment with the broader objective of decentralization to empower local authorities to address local issues effectively.

The findings reported in Chapter 5 align with previous evidence emphasizing the importance of social factors (e.g. family, teachers, lecturers and peers) in promoting access to and equity in higher education for students with low SES. In addition, the research identifies the contributions of additional social factors, including secondary-school administrative staff, university student organizations, university scholarship or student-office staff, and local governments. The study reveals that, without this comprehensive support network, students with low SES are likely to encounter difficulties in successfully completing university education.

Discussion, implications and limitations

The research presented in this dissertation is based on a multi-stakeholder perspective by involving a variety of key actors, including students, senior lecturers and support staff. By exploring their viewpoints on social support factors concerning access to and equity in higher education, the study highlights the significant role of family support and the impact of lecturers in facilitating the educational journeys of students. This inclusive approach broadens existing understanding concerning factors that influence access to and equity in higher education for students with low SES.

As emphasized in this dissertation, there is a need for interventions from a variety of stakeholders at different levels (e.g. teachers, peers, administrative staff in secondary schools, lecturers and financial aid staff in universities) to enhance access to and equity in higher education. The results indicate that the process cannot be achieved solely by students themselves. In addition to financial support, students with low SES require social support in multiple forms and at multiple levels.

This dissertation has been compiled based on four studies, each of which makes an important contributions to existing understandings concerning social factors in promoting access to and equity in higher education for students with low SES. Several key findings are presented below.

First, the results of the current research expand the range of stakeholders involved. Whereas previous studies have focused on parents, peers and teachers, the studies involved in this project have identified additional actors (e.g. administrative staff, managers of financial aid programmes, and student organizations) who provide emotional, informational and practical support to students with low SES.

Second, the study highlights the dual role of the family. More specifically, it demonstrates that family support can either help or hinder access to higher education for students with low SES. Collaboration and cooperation amongst schools, teachers, staff and families are crucial to ensuring effective support for these students.

Third, the research emphasizes the importance of local governments. More specifically, it demonstrates the significant role that local governments can play in providing practical support (e.g. free boarding schools and student dormitories) to enhance access to and equity in higher education. Due to decentralization policies, however, the availability of such support may vary across regions.

Fourth, the study focuses on developing countries. Unlike most existing research, which concentrates on developed countries, this study fills a gap by examining challenges faced by students with low SES in accessing higher education within the context of a developing country—in this case, Indonesia. The results underscore the role of social factors and customized support programmes in promoting both access and equity.

Finally, the study builds upon previous research by analysing findings at different levels: the university level, the individual level, the governmental level and the level of ‘education before university’. This comprehensive approach provides a deeper understanding of factors that influence access to and equity in higher education, thus ultimately informing the design of interventions and support systems.

Overall, this study enhances existing understandings concerning the importance of financial assistance, social factors and customized support programmes in promoting access to and equity in higher education, particularly in developing countries. It underscores the need to consider multiple levels of influence and involve various stakeholders to address the complexities of this issue.

The findings of this project have several implications for policy and practice with regard to promoting access to and equity in higher education for students with low SES. First, there is a need to strengthen financial aid programmes and scholarships specifically targeting students with low SES in order to alleviate the financial burden and ensure equal opportunities. Academic support programmes should be established to provide additional resources, mentoring, tutoring and counselling services to enhance academic preparedness and student success. Standardized policy or guidelines should be developed to govern the implementation of financial aid programmes at the university level, thereby addressing issues of coordination and communication.

Family engagement should be emphasized, and initiatives like parent-teacher conferences and workshops should be encouraged, in order to involve parents in their children's education. Priority should be assigned to teacher-training and support programmes that can equip educators with the skills they need in order to provide effective support and guidance to students. Peer-support programmes, mentoring initiatives and collaborative efforts with community organizations can foster a supportive learning environment and enhance outreach initiatives.

Institutions should consider incorporating attractive and application-oriented teaching styles in order to meet the needs of students with low SES. Efforts should be made to expand the promotion of financial aid facilities beyond secondary schools to include school committees, thereby ensuring that families with low SES are aware of available support. The role of some local governments in providing boarding schools, student housing and financial aid should be recognized, and other local governments should establish similar policies to support secondary-school and university students from low SES backgrounds.

Future studies should expand the timeframe of the literature review to include more recent information, given the impact of the COVID-19 pandemic on access to and equity in higher education. In addition, more comprehensive results could be obtained by incorporating a greater number of relevant literature sources, including reputable education journals, books,

government reports and previous research studies, or by including a larger number of universities and involved stakeholders (students, teachers, family, etc.).

This dissertation contributes to the achievement of SDG 4 by examining factors that affect access to and equity in higher education for students with low SES. It could help to identify challenges faced by these students, in addition to informing policymakers and guiding the design of inclusive policies and interventions, thereby advancing the goal of ensuring quality education for all.

Ringkasan

Melakukan penelitian tentang akses dan kesetaraan dalam pendidikan tinggi sangat penting untuk mengidentifikasi hambatan sistemik yang menghambat kelompok tertentu (misalnya, siswa dengan latar belakang ekonomi rendah) dari mendapatkan pendidikan tinggi, serta merumuskan strategi untuk mempromosikan inklusivitas. Memahami faktor-faktor yang menyebabkan akses yang tidak seimbang dan disparitas dalam hasil pendidikan dapat memungkinkan para pembuat kebijakan dan pendidik untuk mengembangkan intervensi dan kebijakan yang terarah untuk menciptakan sistem pendidikan tinggi yang lebih adil dan dapat diakses.

Studi terdahulu menunjukkan bahwa akses dan kesetaraan dalam pendidikan tinggi dapat berpotensi berdampak pada mobilitas sosial dan pembangunan ekonomi. Pendidikan tinggi secara luas dianggap sebagai jalan menuju mobilitas sosial ke atas, karena memberikan individu pengetahuan, keterampilan, dan kualifikasi yang diperlukan untuk mendapatkan peluang kerja yang lebih baik dan meningkatkan status ekonomi mereka. Namun, ketika akses ke pendidikan tinggi terbatas, hal ini mempertahankan ketimpangan sosial yang ada dan menghambat mobilitas sosial bagi kelompok yang kurang beruntung. Dengan melakukan studi pada akses dan kesetaraan dalam pendidikan tinggi, para peneliti dapat mengidentifikasi dan mengatasi hambatan yang mencegah individu dari latar belakang ekonomi rendah untuk mengakses dan berhasil dalam pendidikan tinggi.

Pengetahuan tentang akses dan kesetaraan dalam pendidikan tinggi juga penting untuk mendukung Tujuan Pembangunan Berkelanjutan (*Sustainable Development Goals* 4), yang bertujuan untuk memberikan pendidikan inklusif dan berkualitas untuk semua orang. Namun, sebagian besar penelitian sebelumnya tentang topik ini lebih fokus pada negara-negara maju. Oleh karena itu, studi saat ini menawarkan perspektif unik dengan negara berkembang (yaitu Indonesia). Dengan mengeksplorasi tantangan dan dinamika akses dan kesetaraan dalam pendidikan tinggi di Indonesia, studi ini bertujuan untuk memberikan wawasan berharga yang dapat digunakan untuk mendukung upaya mencapai SDG 4 secara global. Studi ini memperluas pengetahuan yang sudah ada di luar negara-negara

maju untuk memberikan pandangan yang lebih komprehensif tentang masalah dan solusi potensial terkait akses dan kesetaraan dalam pendidikan tinggi.

Berdasarkan alasan-alasan yang diuraikan di atas, tujuan dari disertasi ini adalah untuk menghasilkan pemahaman yang lebih mendalam tentang akses dan kesetaraan dalam pendidikan tinggi, terutama untuk siswa dari latar belakang ekonomi rendah di Indonesia. Disertasi ini terdiri dari empat studi berturut-turut. Dua studi pertama (disajikan dalam Bab 2 dan 3) berfokus pada pertanyaan penelitian utama pertama, yang berkaitan dengan faktor-faktor yang mendukung akses dan kesetaraan dalam pendidikan tinggi. Dua studi terakhir (disajikan dalam Bab 4 dan 5) berfokus pada pertanyaan penelitian utama kedua, yang berkaitan dengan siapa dan bagaimana faktor-faktor ini berkontribusi terhadap akses dan kesetaraan.

Bab 2: Penentu akses dan kesetaraan dalam pendidikan tinggi: Tinjauan literatur sistematis

Bab 2 memberikan gambaran komprehensif tentang faktor-faktor yang mempengaruhi akses dan kesetaraan dalam pendidikan tinggi. Tinjauan ini mengandalkan pencarian literatur secara sistematis menggunakan kata kunci dan basis data, menghasilkan pemilihan 33 artikel yang telah ditinjau oleh rekan sejawat. Setiap artikel ini berfokus pada akses, kesetaraan, atau keduanya. Hal ini tinjauan ini menyoroti lebih banyak faktor yang terkait dengan akses daripada kesetaraan. Faktor-faktor ini dikategorikan berdasarkan empat tingkat: pemerintah, universitas, pendidikan sebelum universitas, dan individual. Ini adalah hasil penelitian yang baru, dibandingkan dengan hasil penelitian sebelumnya yang hanya fokus pada tiga tingkat: pemerintah, universitas, dan individu.

Pada tingkat pemerintah, empat faktor diidentifikasi sebagai mempengaruhi akses ke pendidikan tinggi: kebijakan yang mendukung kelompok yang kurang beruntung; program yang bertujuan meningkatkan rasa percaya diri dan keterampilan akademik; pendidikan wajib hingga usia 16 tahun; dan ketersediaan lembaga pendidikan tinggi. Tidak ada faktor khusus yang ditemukan untuk kesetaraan pada tingkat pemerintah, menunjukkan bahwa kebijakan hingga saat ini lebih menekankan akses daripada kesetaraan.

Jumlah faktor terbanyak yang mempengaruhi akses ke pendidikan tinggi ditemukan pada tingkat universitas. Faktor-faktor positif meliputi dukungan keuangan, persyaratan akademik, dan kebijakan penerimaan. Faktor negatif meliputi dukungan keuangan yang tidak merata atau dianggap tidak adil; proses pendaftaran yang sulit; dan komunikasi yang kurang baik oleh universitas. Untuk kesetaraan pada tingkat universitas, dukungan teman sebaya dan guru; pengajaran akademik pada keterampilan dasar dan strategi belajar; dan dukungan universitas diidentifikasi sebagai faktor positif. Faktor negatif termasuk pencapaian akademik rendah di sekolah menengah, perlakuan negatif terhadap siswa yang kurang beruntung; dan pandangan terbatas tentang bagaimana untuk mengakui perbedaan gender dalam program STEM (*Science, Technology, Engineering, Mathematics*).

Dalam konteks pendidikan sebelum universitas, faktor-faktor yang mempengaruhi akses ke pendidikan tinggi termasuk panduan yang diberikan oleh guru sekolah menengah dan orang dewasa lainnya, serta pandangan sekolah terhadap hutang (misalnya, tingkat penerimaan yang relatif tentang hutang untuk tujuan belajar). Tidak ada faktor terkait kesetaraan yang diidentifikasi dalam konteks ini.

Pada tingkat individu atau mahasiswa, faktor-faktor positif yang mempengaruhi akses termasuk dukungan keluarga, latar belakang ekonomi menengah ke atas, pendidikan orang tua, dukungan keuangan dari anggota keluarga yang lebih luas, kecemasan mahasiswa tentang hutang, dan dukungan masyarakat. Faktor negatif termasuk kurangnya dana, persepsi negatif terhadap pendidikan tinggi, motivasi rendah, informasi yang tidak mencukupi tentang jalur studi, latar belakang keluarga dengan ekonomi rendah, menjadi orang pertama dalam keluarga yang kuliah di universitas, dan keraguan diri. Tidak ada faktor khusus untuk kesetaraan yang ditemukan pada tingkat mahasiswa.

Perlu diingat bahwa studi yang dimasukkan dalam tinjauan ini didasarkan terutama pada perspektif Barat, karena sebagian besar berasal dari Eropa, Australia, atau Amerika. Perspektif dari negara-negara Timur dan negara berkembang kurang terwakili. Secara keseluruhan, tinjauan ini menyoroti lebih banyak faktor yang mempengaruhi akses daripada kesetaraan dalam pendidikan tinggi.

Bab 3: Analisis Program Bidikmisi untuk mahasiswa dengan latar belakang ekonomi rendah di Indonesia dalam hal faktor-faktor yang relevan untuk akses dan kesetaraan dalam pendidikan tinggi

Mengingat bahwa sebagian besar studi yang ditinjau dalam Bab 2 berfokus pada negara-negara maju, dianggap perlu untuk melakukan studi pada negara berkembang seperti Indonesia (lihat Bab 3). Di Indonesia, mahasiswa dari latar belakang ekonomi rendah telah diidentifikasi sebagai memiliki akses terbatas ke pendidikan tinggi. Studi yang disajikan dalam Bab 3 merupakan investigasi khusus dari program bantuan pendidikan tinggi Bidikmisi pemerintah Indonesia.

Perbedaan sosial-ekonomi membuat sulit bagi setiap orang di Indonesia untuk memiliki akses yang sama dan kesetaraan dalam pendidikan tinggi. Untuk mengatasi masalah ini, pemerintah Indonesia memperkenalkan program Bidikmisi pada tahun 2010, dengan tujuan mendukung mahasiswa dari latar belakang ekonomi rendah yang memenuhi kriteria akademik. Hal ini dilakukan dengan menyediakan dana untuk biaya kuliah dan tunjangan hidup bulanan selama empat tahun studi sarjana. Bab 3 menyajikan analisis dari program Bidikmisi sebagai cara untuk mempromosikan akses dan kesetaraan dalam pendidikan tinggi untuk mahasiswa dengan latar belakang ekonomi rendah di Indonesia.

Penelitian ini dipandu oleh pertanyaan berikut: 'Faktor-faktor apa yang relevan dengan akses dan kesetaraan bagi mahasiswa dengan latar belakang ekonomi rendah dapat diidentifikasi dalam konteks program Bidikmisi di universitas Indonesia?' Analisis ini didasarkan pada laporan empiris yang diperoleh dari berbagai sumber, termasuk artikel jurnal, makalah konferensi, dan buku yang diambil melalui Google Scholar, Scopus, dan Web of Science. Hasilnya dikategorikan berdasarkan model CIPP (konteks, input, proses, produk) dan diklasifikasikan sebagai faktor-faktor yang mendukung (+) atau menghambat (-) akses dan kesetaraan.

Seperti yang diindikasikan oleh hasil penelitian yang dilaporkan dalam Bab 3, program Bidikmisi berkontribusi pada pertumbuhan pribadi dan kemajuan karier bagi individu, sambil juga memainkan peran kunci dalam mendorong pembangunan nasional. Bantuan keuangan yang diberikan oleh beasiswa ini memainkan peran penting dalam memfasilitasi masuknya mahasiswa ke pendidikan tinggi dan melanjutkan pendidikan mereka,

sehingga memungkinkan mereka untuk mendapatkan pengalaman akademik dan profesional yang berharga.

Argumentasi telah diajukan bahwa program ini telah meningkatkan pengembangan akademik dengan memberikan kesempatan bagi mahasiswa untuk memperoleh keterampilan dan pengalaman penting. Juga dilaporkan bahwa program ini memiliki dampak positif pada pendidikan secara keseluruhan di Indonesia dengan membantu mahasiswa dengan pencapaian akademik tinggi namun latar belakang ekonomi rendah untuk mengejar pendidikan tinggi. Program Bidikmisi dianggap sebagai instrumen penting dalam mengembangkan tenaga kerja terampil yang berkontribusi pada pertumbuhan dan pembangunan ekonomi, mengingat bahwa menyelesaikan pendidikan tinggi membekali mahasiswa dengan pengetahuan dan keterampilan yang diperlukan untuk profesi yang banyak diminati.

Dalam konteks ini, hasil penelitian menekankan pentingnya memiliki kebijakan yang jelas di tingkat nasional dan universitas. Temuan untuk input menyoroti tantangan yang dihadapi dalam implementasi program dan menekankan pengaruh signifikan yang dimiliki oleh keterlibatan orang tua dan dukungan lingkungan terhadap hasil siswa. Dalam hal proses, hasil ini terutama berkaitan dengan aktivitas siswa, seperti yang dilaporkan dalam sebagian besar studi. Sementara bantuan keuangan penting bagi mahasiswa dengan latar belakang ekonomi rendah, hasil yang dilaporkan dalam Bab 3 menunjukkan bahwa faktor-faktor sosial (misalnya, dukungan orang tua dan lingkungan) juga memainkan peran penting dalam kesuksesan mahasiswa ini. Berdasarkan hasil penelitian mengenai program Bidikmisi ini, diputuskan untuk melakukan investigasi lebih rinci tentang peran faktor sosial dan berbagai aktor dengan memeriksa satu universitas (studi kasus).

Bab 4: Peran faktor sosial dalam akses dan kesetaraan dalam pendidikan tinggi bagi mahasiswa dengan status ekonomi rendah: Studi kasus dari Indonesia

Penelitian tentang mahasiswa universitas dengan latar belakang ekonomi rendah memberikan wawasan berharga tentang pengalaman para pemangku kepentingan yang terlibat dalam akses dan kesetaraan dalam pendidikan tinggi. Untuk tujuan ini, Bab 4 berfokus pada satu universitas negeri besar

di Indonesia, memeriksa pengalaman berbagai pemangku kepentingan, termasuk penerima Bidikmisi, dosen, dan staf pendukung universitas mengenai faktor-faktor sosial yang mendukung akses dan kesetaraan dalam pendidikan tinggi.

Pertanyaan penelitian utama yang diatasi dalam Bab 4 adalah sebagai berikut: ‘Faktor-faktor sosial apa yang berkontribusi terhadap akses dan kesetaraan bagi mahasiswa dengan latar belakang ekonomi rendah (penerima Bidikmisi) dalam konteks universitas Indonesia?’ Pertanyaan ini dieksplorasi lebih lanjut melalui pertanyaan-pertanyaan sub berikut: (i) ‘Apa faktor-faktor sosial yang paling menonjol yang dirasakan oleh mahasiswa, dosen, dan staf pendukung yang mempengaruhi akses dan kesetaraan di universitas?’ (ii) ‘Bagaimana faktor-faktor ini bekerja, dan apa mekanismenya?’ (iii) ‘Apa kesamaan dan perbedaan dalam pengalaman mahasiswa, dosen, dan staf pendukung mengenai faktor-faktor ini?’

Bab 4 dikembangkan berdasarkan pada studi tingkat nasional (Bab 3), berfokus pada tingkat universitas dari persepsi mahasiswa, dosen, dan staf pendukung mengenai akses dan kesetaraan dalam pendidikan tinggi. Melanjutkan dari pendekatan penelitian kualitatif, studi kasus ini berhubungan dengan satu universitas besar di Indonesia. Wawancara semi-terstruktur dilakukan dengan 38 mahasiswa, 16 dosen senior, dan 11 anggota staf pendukung. Studi ini merupakan salah satu dari pertama kalinya yang melibatkan pemangku kepentingan berbagai pemangku kepentingan dan perspektif mereka tentang faktor-faktor yang mempengaruhi akses dan kesetaraan dalam pendidikan tinggi.

Hasil penelitian yang disajikan dalam Bab 4 menyoroti pentingnya berbagai faktor dukungan sosial dan para pelaku—termasuk keluarga, guru, dosen, teman sebaya, dan program mentoring—dalam akses dan kesetaraan pendidikan tinggi. Dukungan sosial memainkan peran penting dalam memotivasi dan membangun kepercayaan diri mahasiswa, yang sangat penting untuk kemampuan mereka dalam mengakses dan berhasil di pendidikan tinggi. Contohnya adalah dukungan keluarga dalam mendorong mahasiswa untuk mengejar pendidikan universitas dan program mentoring yang memberikan bimbingan dan motivasi.

Dalam hal kesetaraan, dosen dan teman sebaya muncul sebagai faktor dukungan sosial yang signifikan dalam proses belajar. Dosen

memainkan berbagai peran yang mempengaruhi kesetaraan, termasuk gaya mengajar, bimbingan skripsi, menjadi panutan, memberikan informasi, dan menawarkan konseling. Gaya mengajar yang menarik dan berorientasi pada aplikatif, yang melibatkan mahasiswa dan menghubungkan materi pembelajaran dengan situasi kehidupan nyata, sangat berpengaruh. Peran dosen sebagai pembimbing akademik dan pembimbing skripsi membina hubungan yang kuat dan memiliki pengaruh positif pada prestasi akademik mahasiswa. Teman sebaya juga memberikan dukungan penting melalui motivasi, pembelajaran kolaboratif, dan kegiatan sosial, yang semuanya berkontribusi pada proses pembelajaran di pendidikan tinggi.

Bab 4 memberikan gambaran persentase responden yang menyatakan bahwa, berdasarkan pengalaman mereka, setiap kategori utama faktor dukungan sosial menentukan akses dan kesetaraan di pendidikan tinggi. Dapat diambil kesimpulan dari persentase ini bahwa mahasiswa dan dosen mengidentifikasi keluarga sebagai faktor paling berpengaruh dalam mendukung akses ke pendidikan tinggi, sementara anggota staf dukungan menempatkan mentoring sebagai hal terpenting. Sementara dosen dan staf setuju bahwa teman sebaya memiliki pengaruh yang kurang terhadap akses ke pendidikan tinggi, 57,7% menyatakan bahwa teman sebaya memainkan peran penting, semua mahasiswa menyatakan bahwa teman sebaya penting. Guru (termasuk konselor) menempati peringkat kedua (84,6%) setelah keluarga (100%) menurut mahasiswa, sementara 54,5% staf dukungan setuju bahwa guru memainkan peran penting dalam akses ke pendidikan tinggi. Hampir semua mahasiswa (92,3%) setuju bahwa mentoring memainkan peran penting dalam akses ke pendidikan tinggi, sementara hanya 68,8% dosen yang memegang pandangan ini.

Dalam hal kesetaraan, hampir semua responden menyatakan bahwa dosen adalah faktor penting, dengan teman sebaya diidentifikasi oleh mahasiswa dan dosen sebagai faktor yang paling penting dalam mempromosikan kesetaraan. Hanya sebagian kecil dari dosen (25%) dan anggota staf dukungan (27,3%) yang menyatakan bahwa keluarga mempengaruhi kesetaraan, sementara tidak ada mahasiswa yang mengatakan bahwa keluarga berperan dalam proses pembelajaran mereka setelah memasuki universitas. Sebagian besar mahasiswa (61,5%) dan staf

dukungan (72,7%) setuju bahwa program mentoring memiliki pengaruh pada pendidikan tinggi, tetapi tidak ada dosen yang menyebutkan hal ini.

Bab 5: Meningkatkan akses dan kesetaraan dalam pendidikan tinggi di Indonesia: Implikasi kebijakan dan rekomendasi

Bab 5 fokus pada faktor-faktor yang memfasilitasi atau menghambat akses dan kesetaraan di pendidikan tinggi, berdasarkan pengalaman para alumni penerima program Bidikmisi. Pengalaman mereka sangat berharga karena memberikan pemahaman menyeluruh tentang akses dan kesetaraan di pendidikan tinggi, mengandalkan refleksi mereka atas pengalaman di universitas. Studi ini mengeksplorasi pengalaman para alumni melalui tiga fase: kehidupan sebelum universitas, kehidupan saat pendaftaran universitas, dan proses pembelajaran di universitas.

Tujuan utama dari penelitian ini adalah mengidentifikasi aktor dan faktor sosial yang memengaruhi akses dan kesetaraan di pendidikan tinggi bagi mahasiswa dari latar belakang ekonomi rendah di Indonesia, berdasarkan pengalaman para alumni. Pertanyaan penelitian utama untuk studi ini adalah sebagai berikut: (i) 'Peran apa yang dimainkan faktor-faktor sosial dalam akses dan kesetaraan bagi mahasiswa dengan latar belakang ekonomi rendah (alumni Bidikmisi) dalam konteks universitas Indonesia?' dan (ii) 'Apa yang pengalaman para alumni Bidikmisi yang sukses ungkapkan tentang peran faktor-faktor sosial?' Studi ini didasarkan pada pendekatan kualitatif dan menggunakan wawancara naratif untuk mengeksplorasi pengalaman enam alumni dari program studi yang berbeda di salah satu universitas besar (yang sama dengan Bab 4). Para alumni ini menerima bantuan keuangan selama studi mereka, dan responden potensial diidentifikasi melalui staf universitas yang bertanggung jawab atas pengelolaan program Bidikmisi.

Temuan utama yang dilaporkan di Bab 5 menunjukkan bahwa dukungan emosional (misalnya, motivasi dan penguatan kemampuan untuk mengejar pendidikan tinggi), dukungan instrumental (misalnya, bantuan dengan biaya pendaftaran dan fotokopi), dan dukungan informasional (misalnya, pemahaman tentang syarat dan ketentuan program Bidikmisi) yang diberikan oleh berbagai aktor membantu responden untuk berhasil menyelesaikan pendidikan universitas mereka dan mendapatkan pekerjaan yang relatif baik.

Dukungan emosional diidentifikasi sebagai bentuk dukungan yang paling konsisten dan krusial baik selama sekolah menengah maupun di universitas. Semua responden dalam studi di Bab 5 menyebutkan pentingnya dukungan emosional dari keluarga mereka selama sekolah menengah dan dari dosen mereka selama studi di universitas. Jenis dukungan ini memainkan peran dalam akses dan kesetaraan di pendidikan tinggi. Dukungan instrumental dan informasional yang diberikan oleh keluarga, guru, dan dosen juga diidentifikasi sebagai penting untuk mempromosikan akses dan kesetaraan, meskipun dengan tingkat kepentingan yang lebih rendah.

Seperti yang dilaporkan di Bab 5, beberapa responden menghadapi resistensi dari orang tua mereka ketika memutuskan untuk mengejar pendidikan universitas, dengan berbagai alasan, termasuk kekhawatiran finansial, masalah perumahan, dan jarak dari rumah orang tua. Temuan ini mengindikasikan bahwa keluarga, sebagai lingkungan terdekat bagi mahasiswa dengan latar belakang ekonomi rendah, dapat memberikan dukungan atau menghambat aspirasi pendidikan dari mahasiswa ini. Hasil studi menekankan pentingnya kolaborasi dan sinergi antara sekolah, guru, staf, dan keluarga untuk mendukung akses dan kesetaraan di pendidikan tinggi bagi mahasiswa dengan latar belakang ekonomi rendah.

Studi yang disajikan di Bab 5 menyoroti peran signifikan yang dapat dimainkan oleh pemerintah daerah dalam mendukung mahasiswa dengan latar belakang ekonomi rendah di Indonesia. Beberapa pemerintah daerah memberikan dukungan instrumental dengan menawarkan sekolah berasrama gratis di tingkat sekolah menengah dan dengan menciptakan asrama mahasiswa gratis di tingkat universitas. Penting untuk dicatat, namun, bahwa tidak semua daerah di Indonesia telah mendapatkan manfaat dari jenis dukungan ini, mungkin karena implementasi kebijakan desentralisasi pada tahun 2001. Kebijakan ini dimaksudkan untuk memberdayakan pemerintah daerah, sehingga memungkinkan mereka untuk membuat keputusan yang lebih sesuai dengan kebutuhan masyarakat mereka, selain meningkatkan tata kelola. Keputusan pemerintah daerah untuk menyediakan fasilitas sekolah berasrama dan asrama mahasiswa dapat dilihat sebagai kebijakan krusial untuk meningkatkan akses dan kesetaraan di pendidikan tinggi, sejalan dengan tujuan desentralisasi yang lebih luas untuk memberdayakan otoritas lokal dalam menangani isu-isu lokal secara efektif.

Temuan yang dilaporkan di Bab 5 sejalan dengan hasil penelitian sebelumnya yang menekankan pentingnya faktor-faktor sosial (seperti keluarga, guru, dosen, dan teman sebaya) dalam mempromosikan akses dan kesetaraan di pendidikan tinggi bagi mahasiswa dengan latar belakang ekonomi rendah. Selain itu, penelitian ini mengidentifikasi kontribusi faktor-faktor sosial tambahan, termasuk staf administrasi di sekolah menengah, organisasi mahasiswa di universitas, staf universitas atau kemahasiswaan, dan pemerintah daerah. Studi ini mengungkapkan bahwa tanpa jaringan dukungan komprehensif ini, mahasiswa dengan latar belakang ekonomi rendah cenderung mengalami kesulitan dalam menyelesaikan pendidikan universitas dengan sukses.

Diskusi, Implikasi, dan Keterbatasan penelitian

Penelitian yang disajikan dalam disertasi ini didasarkan pada perspektif dari beberapa stakeholder dengan melibatkan berbagai aktor utama, termasuk mahasiswa, dosen senior, dan staf pendukung. Dengan mengeksplorasi pandangan mereka tentang faktor dukungan sosial yang berkaitan dengan akses dan kesetaraan di pendidikan tinggi, studi ini menyoroti peran penting dukungan keluarga dan dampak dosen dalam memfasilitasi perjalanan pendidikan mahasiswa. Pendekatan inklusif ini memperluas pemahaman yang ada tentang faktor-faktor yang memengaruhi akses dan kesetaraan di pendidikan tinggi bagi mahasiswa dengan latar belakang ekonomi rendah.

Seperti yang ditekankan dalam disertasi ini, ada kebutuhan untuk intervensi dari berbagai pemangku kepentingan pada berbagai tingkat (misalnya, guru, teman sebaya, staf administrasi di sekolah menengah, dosen, dan staf pengelola bantuan keuangan di universitas) untuk meningkatkan akses dan kesetaraan di pendidikan tinggi. Hasil penelitian menunjukkan bahwa proses ini tidak dapat dicapai hanya oleh mahasiswa itu sendiri. Selain dukungan keuangan, mahasiswa dengan latar belakang ekonomi rendah memerlukan dukungan sosial dalam berbagai bentuk dan pada berbagai tingkatan.

Disertasi ini telah disusun berdasarkan empat penelitian, masing-masing memberikan kontribusi penting terhadap pemahaman yang ada tentang faktor-faktor sosial dalam mempromosikan akses dan kesetaraan di

pendidikan tinggi bagi mahasiswa dengan latar belakang ekonomi rendah. Beberapa temuan kunci disajikan di bawah ini.

Pertama, hasil penelitian saat ini memperluas jangkauan pemangku kepentingan yang terlibat. Sementara penelitian sebelumnya lebih fokus pada orang tua, teman sebaya, dan guru, penelitian yang terlibat dalam proyek ini telah mengidentifikasi aktor tambahan (misalnya, staf administrasi baik di sekolah menengah dan universitas, manajer program pengelola bantuan keuangan, dan organisasi mahasiswa daerah) yang memberikan dukungan emosional, informasional, dan praktis kepada mahasiswa dengan latar belakang ekonomi rendah.

Kedua, penelitian ini menyoroti peran ganda keluarga. Lebih khusus lagi, disertasi ini menunjukkan bahwa dukungan keluarga dapat membantu atau menghambat akses ke pendidikan tinggi bagi mahasiswa dengan latar belakang ekonomi rendah. Kolaborasi dan kerjasama antara sekolah, guru, staf, dan keluarga sangat penting untuk memastikan dukungan yang efektif bagi mahasiswa ini.

Ketiga, penelitian ini menekankan pentingnya pemerintah daerah. Lebih khusus lagi, penelitian ini menunjukkan peran signifikan pemerintah daerah dalam memberikan dukungan praktis (misalnya, sekolah berasrama gratis dan asrama mahasiswa) untuk meningkatkan akses dan kesetaraan di pendidikan tinggi. Namun, karena kebijakan desentralisasi, ketersediaan dukungan semacam itu dapat bervariasi antar wilayah.

Keempat, penelitian ini fokus pada negara-negara berkembang. Berbeda dengan sebagian besar penelitian yang ada, yang lebih fokus pada negara-negara maju, studi ini mengisi kesenjangan dengan mengkaji tantangan yang dihadapi oleh mahasiswa dengan latar belakang ekonomi rendah dalam mengakses pendidikan tinggi dalam konteks negara berkembang, dalam hal ini Indonesia. Hasil penelitian ini menekankan peran faktor-faktor sosial dan program dukungan yang disesuaikan dalam mempromosikan akses dan kesetaraan.

Terakhir, penelitian ini membangun pada penelitian sebelumnya dengan menganalisis temuan pada tingkat yang berbeda: tingkat universitas, tingkat individu, tingkat pemerintah, dan tingkat 'pendidikan sebelum universitas'. Pendekatan komprehensif ini memberikan pemahaman yang lebih mendalam tentang faktor-faktor yang memengaruhi akses dan kesetaraan di pendidikan

tinggi, dan akhirnya memberikan informasi bagi desain intervensi dan sistem dukungan.

Secara keseluruhan, penelitian ini memperkaya pemahaman yang sudah ada tentang pentingnya program bantuan keuangan, faktor-faktor sosial, dan program dukungan yang disesuaikan dalam mempromosikan akses dan kesetaraan di pendidikan tinggi, terutama di negara-negara berkembang. Ini menegaskan perlunya mempertimbangkan keterlibatan di berbagai tingkat dan berbagai pemangku kepentingan untuk mengatasi kompleksitas masalah ini.

Hasil penelitian ini memiliki beberapa implikasi bagi kebijakan dan praktik dalam mempromosikan akses dan kesetaraan di pendidikan tinggi bagi mahasiswa dengan latar belakang ekonomi rendah. Pertama, perlu diperkuat program bantuan keuangan dan beasiswa yang secara khusus ditujukan untuk mahasiswa dengan latar belakang ekonomi rendah untuk mengurangi beban keuangan dan memastikan peluang yang sama. Program dukungan akademik harus dibangun untuk menyediakan sumber daya tambahan, bimbingan, tutor, dan layanan konseling untuk meningkatkan persiapan akademik dan kesuksesan mahasiswa. Kebijakan atau pedoman standar harus dikembangkan untuk mengatur pelaksanaan program bantuan keuangan di tingkat universitas, sehingga mengatasi masalah koordinasi dan komunikasi.

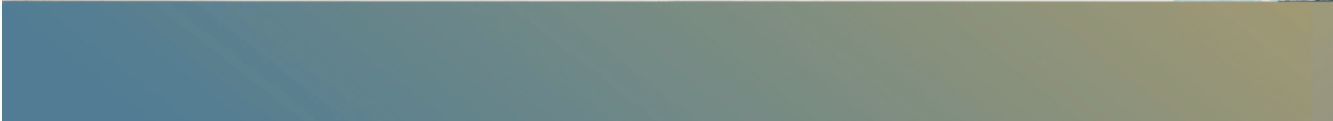
Keterlibatan keluarga harus ditekankan, dan inisiatif seperti pertemuan orang tua-guru dan lokakarya harus dianjurkan, untuk melibatkan orang tua dalam pendidikan anak-anak mereka. Prioritas harus diberikan kepada program pelatihan dan dukungan guru yang dapat membekali pendidik dengan keterampilan yang mereka butuhkan untuk memberikan dukungan dan bimbingan yang efektif kepada mahasiswa. Program dukungan teman sebaya, inisiatif mentoring, dan upaya kolaboratif dengan organisasi masyarakat dapat membantu menciptakan lingkungan belajar yang suportif dan meningkatkan inisiatif jangkauan.

Institusi harus mempertimbangkan untuk mengadopsi gaya mengajar yang menarik dan berorientasi pada gaya mengajar yang aplikatif untuk memenuhi kebutuhan mahasiswa dengan latar belakang ekonomi rendah. Upaya harus dilakukan untuk memperluas promosi fasilitas bantuan keuangan di luar sekolah-sekolah menengah untuk mencakup komite sekolah,

sehingga memastikan bahwa keluarga dengan latar belakang ekonomi rendah mengetahui dukungan yang tersedia. Peran beberapa pemerintah daerah dalam menyediakan sekolah berasrama, perumahan mahasiswa, dan bantuan keuangan harus diakui, dan pemerintah daerah lain sebaiknya membentuk kebijakan serupa untuk mendukung siswa sekolah menengah dan mahasiswa dari latar belakang ekonomi rendah.

Penelitian di masa depan sebaiknya memperluas rentang waktu dari tinjauan literatur untuk memasukkan informasi lebih baru, mengingat dampak pandemi COVID-19 terhadap akses dan kesetaraan di pendidikan tinggi. Selain itu, hasil yang lebih komprehensif dapat diperoleh dengan memasukkan jumlah sumber literatur yang lebih besar, termasuk jurnal pendidikan terpercaya, buku, laporan pemerintah, dan penelitian sebelumnya, atau dengan melibatkan lebih banyak universitas dan pemangku kepentingan yang terlibat (mahasiswa, guru, keluarga, dll).

Disertasi ini memberikan kontribusi untuk pencapaian Tujuan Pembangunan Berkelanjutan (SDG) 4 dengan memeriksa faktor-faktor yang mempengaruhi akses dan kesetaraan di pendidikan tinggi bagi mahasiswa dengan latar belakang ekonomi rendah. Hal ini dapat membantu mengidentifikasi tantangan yang dihadapi oleh mahasiswa ini, serta memberi informasi kepada para pembuat kebijakan dan membimbing desain kebijakan dan intervensi inklusif, sehingga memajukan tujuan untuk memastikan pendidikan berkualitas untuk semua.



Acknowledgement



First, I want to sincerely thank myself, Megawanti, for your incredible efforts and hard work in completing your doctoral study. I am extremely proud of this achievement.

The path to achieving my doctoral degree was far from easy. It began with the challenging task of passing the IELTS test, followed by a hard work of creating a research proposal, finding potential supervisors, and the university. The story of my doctoral journey officially began in Wageningen, in the cold winter of late January 2018. However, the groundwork for this journey was laid long before that year. In reaching this stage, I would like to express my heartfelt appreciation to the individuals and groups who played a crucial role both before and during my PhD journey.

Before PhD:**1. My family**

Dear Ayah and Mama, I want to express my deepest gratitude for supporting my doctoral studies. Om Eri and Tante Ririn, I am immensely grateful for the support you provided during my undergraduate studies and for inspiring me to continue my education at this level. I still remember our conversation during dinner back in 2002 when Om Eri said, “ “You can pursue the highest level of education, not only stopping at a bachelor’s degree but even attaining a doctoral degree”. Dear Om Eri, they say that words are like prayers, and now I have successfully graduated with a doctoral degree. Uni Mega and Uda Riri, thank you for your unwavering support, especially during the times when I felt like giving up. Your support throughout the process of finding a university, developing the research proposal, and finally receiving the Letter of Acceptance that allowed me to pursue my studies in the Netherlands was invaluable. I truly wouldn’t have made it this far without your constant encouragement and assistance.

2. MMPT family

Thank you so much for being with me throughout my journey, from my time at Universitas Gadjah Mada in Yogyakarta to my PhD journey. Mba Wida, I want to express my gratitude for always being there for me. And Erik, I

remember when we started from scratch, spending hours in the library in Jakarta. Those were the days when we were young and full of adventure. The MMPT family members: Opa, Oma, Bunda, mba Prita, mas Amin, mas Amik, mas Daniel, mas Aris, mas Imam, BG, thank you very much for being my Jogja family.

Upon arrival in the Netherlands, I received tremendous support from several parties such as:

1. ELS secretariat team

I would like to express my deepest appreciation and utmost respect to the ELS secretariat team, who have been an incredible source of assistance and support throughout my entire PhD journey. To Nicolette, Marissa, Laura, Didi, and Jolanda, I am truly grateful for your unwavering presence and willingness to lend a helping hand whenever I needed it. Your constant support has been invaluable to me.

2. My dearest supervisors

Renate: Our journey together began towards the end of 2018, and I must admit, I was a little apprehensive about working with you at first. However, as time passed, I grew comfortable collaborating with you. You have become the person I turn to when I feel lost or down, and I value our connection deeply.

Harm: I want to express my genuine appreciation for your comments and feedback, which have been the most valuable challenges throughout the process of preparing my thesis. Your insights have pushed me to grow and improve, and I am grateful for your guidance.

Perry: You, along with Harm, played a significant role in my decision to choose ELS at Wageningen University. Even before we met in person, through Skype meetings, phone calls, and emails discussing proposals, I sensed a strong chemistry between us. That chemistry continues to this day, and I hope we have the opportunity to collaborate further in the future.

3. Education and Learning Sciences Group

I would like to express my sincere gratitude to everyone in the ELS group who has been a part of my journey, although it's difficult for me to mention each person individually. Your collective presence, and support have made a significant impact on my PhD experience. Thank you all for being there and contributing to this memorable journey. Dear Luuk and Arjen, I want to express my deepest appreciation for your companionship during the challenging times of the Covid pandemic in the ELS coffee corner. Your friendship and support have meant a great deal to me. To every colleague who has worked with me in Room 7015 (Yared, Piety, Cici, Ester), your presence has been very meaningful throughout my PhD journey.

4. Super walkers group

Dear Marijke, Cassandra, and Rebekah, thank you for the beautiful moments we've shared, from walks together to heartfelt conversations and enjoyable dinner times. I will cherish these memories, and I will miss each and every one of you. I sincerely hope that we will have the opportunity to create more wonderful memories together in the future.

5. Elvi, Novi, Ikrom, Exma

I would like to express my gratitude to all of the research assistants who have been a part of my PhD journey. Your dedication, hard work, and support have been invaluable in helping me navigate through the research process.

6. Corridor 3A, Asserpark

Asserpark, specifically corridor 3A, has been a witness to the challenges I faced throughout my study process. Room 3A2, in particular, holds countless memories of both tears and laughter shared during this journey.

7. His name also effort group

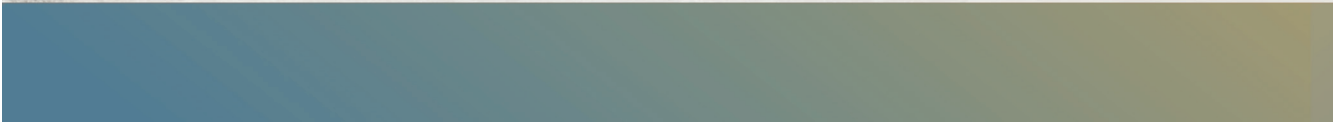
This group consists of four individuals from Indonesia who pursuing their doctoral studies at Wageningen University. Each member brings their own unique qualities and contributions, making them an integral part of our

journey. To my fellow group members, you know who you are, and I want to express my appreciation for the bond we share and the support we provide to one another throughout this doctoral experience.

8. Rois Syarif Qoidhul Haq

To Mas Rois, the man behind the cover and all artistic design, thank you very much for your contribution to the finalization of this thesis book. I highly appreciate your hard work, even until late at night.

Finally, I would like to express my gratitude for the financial support provided by the Indonesian Endowment Fund for Education (LPDP), Ministry of Finance, Indonesia. Thank you for granting me the opportunity and support to pursue my doctoral studies. I would also like to extend my heartfelt thanks to Ibu Ratna Prabandari and Ibu Yudita Maharani for their unwavering motivation and support throughout my PhD journey. I am deeply grateful for your presence in my academic journey.



About the Author



Megawanti, born in 1985 in Padang, West Sumatra, Indonesia, completed her primary and secondary education in Jakarta. She pursued a Bachelor's degree in Education Management Program from the State University of Malang, East Java. Following her studies, Megawanti embarked on a career as a teacher and school administrator, working in various educational institutions including kindergartens, elementary schools, and junior high schools across Indonesia. Her professional experience spanned regions such as Malang, Jakarta, Bekasi, and even a rural area in Teluk Bintuni Regency, West Papua, Indonesia.



Megawanti pursued a Master's degree in Higher Education Management Program at Universitas Gadjah Mada (UGM), Indonesia. Throughout her master's studies, she served as a research assistant, focusing her research on topics such as lecturer profiles in Indonesia, university facility management, and university leadership across different regions in the country.

She also worked as a project staff member in a collaboration program between UGM and USAID (the United States Agency for International Development) about Higher Education Management for fifty universities in Indonesia. After being graduated from UGM, she worked as the head of quality assurance in senior high school in Toba, North Sumatera, Indonesia.

She was awarded the Indonesia Funds for Education (LPDP) scholarship from Indonesian Ministry of Finance for her PhD program at Education and Learning Sciences Group, Wageningen University in January 2018. Her research based on her working experience for several years in rural areas. She found inequalities occur in access and equity in higher education. She wanted to explore more and learn about access to and equity in higher education under the guidance of Perry den Brok, Harm Biemans and Renate Wesselink in Education and Learning Sciences Group, Wageningen University.

During her PhD, she was involved in several voluntary activities such as training for teachers in West Sumatera during the pandemic, socialisation about how to continue study in doctoral degree with LPDP awardee organisation. She was elected as the head of the LPDP awardee in Wageningen University in 2020 and 2021. She was invited to talk about her research finding on access and equity in higher education in several organizations in Indonesia.

She finished her PhD in November, 2023. With support from her supervisors, she published two articles: Determining factors of access and equity in higher education: A systematic review and The role of social factors in access to and equity in higher education for students with low socioeconomic status: A case study from Indonesia.

Currently, she holds the position of Research Director at Lensa Garuda Nusantara, a public policy consulting & research firm founded by dynamic and forward-thinking LPDP alumni from diverse academic backgrounds. Her future research and work in access and equity in higher education, will focus on the further development on different character of disadvantage student in different setting and on a larger scale. She can be contacted through email on m.wanti85@gmail.com

List of publication

Academic Peer-reviewed publications

- Wanti, M., Wesselink, R., Biemans, H., & den Brok, P. (2022). Determining factors of access and equity in higher education: A systematic review. *Equity in Education & Society*, 1(2), 279–296.
- Wanti, M., Wesselink, R., Biemans, H., & den Brok, P. (2023). The role of social factors in access to and equity in higher education for students with low socioeconomic status: A case study from Indonesia. *Equity in Education & Society*, 2(1), 43-60.
- Wanti, M., Wesselink, R., Biemans, H., & den Brok, P. (submitted to *European Journal of Inclusive Education*, 2023). Further insight into social factors affecting access to and equity for low SES students in higher education.

Conference Papers

- Wanti, M., Wesselink, R., Biemans, H., & den Brok, P. The role of social factors in access to and equity in higher education for students with low socioeconomic status: A case study from Indonesia. Paper presented at the European Conference on Educational Research (ECER), 2021. Online
- Wanti, M., Wesselink, R., Biemans, H., & den Brok, P. Determining factors of access and equity in higher education: A systematic review. Paper presented at the European Conference on Educational Research (ECER), 2021
- Further insight into social factors affecting access to and equity for low SES students in higher education. Paper presented at the European Conference on Educational Research (ECER), 2023. Glasgow. UK.
- Wanti, M., Wesselink, R., Biemans, H., & den Brok, P. Determining factors of access and equity in higher education: A systematic review. Paper presented at the Interuniversity Centre for Educational Sciences (ICO) conference. 2021. Online.
- Wanti, M., Wesselink, R., Biemans, H., & den Brok, P. The Bidikmisi programme for students with low SES in Indonesia: Analysis in terms of factors relating to access and equity in higher education. Paper presented at the Interuniversity Centre for Educational Sciences (ICO) conference. 2023. Blankenberge, Belgium.

Wanti, M., Wesselink, R., Biemans, H., & den Brok, P. The role of social factors in access to and equity in higher education for students with low socioeconomic status: A case study from Indonesia. Paper presented at Wageningen School of Social Science (WASS) PhD Day, 2021. Wageningen, the Netherlands.

Talk and Presentations

Tips and Tricks for Successful University Studies. 16 July 2023. Organizer: Jalakara Indonesia (Volunteer Organization). Indonesia.

School-to-Work Transition. 16 June 2023. Organizer: Pusat Studi Pendidikan dan Kebijakan or Center for Education and Policy Studies (Research Center). Indonesia.

Tips and Tricks for Getting a Scholarship. 15 December 2021. Organizer: ngeLESin (Learning Center). Indonesia.

Sharing with Three Doctoral Candidates from Three Continents. 4 October 2020. Organizer: Mata Garuda, West Papua (LPDP Scholarship Recipient Organization). Indonesia.

Access to higher education. December 2019. Organizer: Generasi Cerdas Iklim (Climate Smart Organization). Bogor, Indonesia

Overview of Completed Training Activities

Megawanti
Wageningen School of Social Sciences (WASS)
Completed Training and Supervision Plan



Name of the learning activity	Department/Institute	Year	ECTS
A) Project related competences			
A1. Managing a research project			
Writing the research proposal	WUR	2018	6
WASS Introduction	WASS	2018	1
Scientific writing	Wageningen in'to Languages	2018	1.8
Searching and Organising Literature	WUR Library	2018	0.6
<i>'The role of social factors in access to and equity in higher education for low social economy status (SES) students: a case study in Indonesia'</i>	WASS PhD day	2021	0.5
<i>'The Role of Social Factors in Access and Equity to Higher Education for Low SES Students. A Case Study in Indonesia'</i>	European Educational Research Association Conference	2021	1
<i>'Determining factors of access and equity in higher education: A systematic literature review'</i>	Wageningen Indonesian Scientific Exposure Conference	2019	0.5
Reviewer at EERA Network: Inclusive Education 2021	European Educational Research Association	2021	1
Workshop on national and international journal publication	Universitas Indonesia	2019	0.5
A2. Integrating research in the corresponding discipline			
Qualitative research	ICO	2019	3
Research into higher education	ICO	2019	3
Academic publication and presentation in the social sciences	WASS	2019	4
ICO International Spring School 2021	ICO	2021	3
ICO International Spring School 2023	ICO	2023	3
B) General research related competences			
B1. Placing research in a broader scientific (social sciences and WUR) context			
Introductory ICO	ICO	2018	5
Analysing classroom interactions	University of Groningen, Summer School	2019	2
Research ethics	WGS	2019	0.5

B2. Placing research in a societal context			
Popular science writing	WASS	2021	1.5
Making an Impact	WGS	2021	1
Speaker: tips and tricks about how to get a scholarship for high school student	Ngelesin: Edutech startup	2019	0.3
Speaker: step by step before the doctoral degree	Mata Garuda, Papua Barat	2020	0.3
C) Career related competences			
C1. Employing transferable skills in different domains/careers			
Competence assessment	WGS	2018	0.3
Research data management: part 1,2,3	WUR Library	2018	0.45
Interpersonal communication for PhD candidates	WGS	2018	0.6
Brain training	WGS	2019	0.3
Guest lecturer: access to higher education for elementary school students in a rural area	Generasi cerdas iklim: volunteer organization	2019	1
Guest lecturer: how to give a lesson to elementary school student	Generasi cerdas iklim: volunteer organization	2019	1
Financial Management	Gudang Garam company	2019	0.3
Total			42.45

*One credit according to ECTS is on average equivalent to 28 hours of study load

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