# REPUBLIC OF TURKEY <br> SAKARYA UNIVERSITY <br> INSTITUTE OF SOCIAL SCIENCES 

# THE ROLE OF SOCIAL CAPITAL IN ENHANCING THE ACADEMIC PRODUCTIVITY OF FEMALE FACULTY IN HIGHER EDUCATION INSTITUTIONS OF ETHIOPIA 

MASTER'S THESIS

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Department: Sociology

Supervisor: Assist. Prof. Dr. Adem BÖLÜKBAŞI

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"The examination was held online on 25/08/2020 and approved unanimously by the following committee members"

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## ACRONYMS

AA : Affirmative Action

DDU : Dire Dawa University
FDRE : Federal Democratic Republic of Ethiopia
HEIs : Higher Education Institutions
HU : Haramaya University
QUAL : Qualitative
QUAN : Quantitative
RQ : Research Question

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Sakarya University
Institute of Social Sciences Abstract of Thesis


Keywords: Social Capital, Female Faculty, Higher Education, Academic Productivity, Ethiopia


## INTRODUCTION

## Background of the Study

The increasing interest on social capital as an illustrative pillar of cooperation, collaboration, and knowledge sharing has been widely recognized over the last decades. Evidenced by its application to various disciplines, social capital has become a crucial factor in enhancing economic growth, social welfare, educational attainment, career success, as well as organizational performance as a whole. However, this multidisciplinary concept does not yet have commonly agreed-upon definition due to the complex interactions between the disciplines.

Politicians, academics, and other social commentators embrace and explore the concept of social capital, each with their agenda and selected definition. In this context, social capital is one of the critical means of enhancing academic productivity in higher education. Building social capital in higher education can be essential to academic career advancement where it stands for the ability of faculty members to secure benefits or utilize career resources through their participation in social networks or other social structures in the institution. Angervall et al. (2018) revealed that social capital is the base resource for the creation of academic career and advancement. Moreover, social capital may serve as an indicator of the knowledge resources that a person has contact with, which reciprocate their potential productivity(Pezzoni et al., 2012). Social capital is, thus, a means of a resource that researchers at universities gain access to through their participation in social networks or other social structures (Angervall et al., 2018b).

Although social capital has been considered as a means of academic resource gaining to faculties in higher education, the formation, utilization, and access to the flow of social capital by female faculties has been relatively unexplored. This study, therefore, assesses the role of social capital in enhancing the academic productivity of female faculties in two higher education institutions of Ethiopia, Haramaya, and Dire Dawa Universities. The results of this study point to some benefits of social capital in academic career dimensions that enhance productivity as well as many other contextual factors that impact this academic productivity.

## Statement of the Problem

Women constitute $50 \%$ of the world population. But despite their number their participation in different sectors is minimum. Especially in the case of higher education, the number of women who succeed to join higher education as their career are few. Even though government of different countries have been taking different policy measures to increase the number of females participating and joining higher education institutions as faculties, the academic productivity of female faculties is not as equal as to their male counterparts.

The Ethiopian government has embarked on expanding the enrollment and coverage of higher education in all parts of the country, the government has also prepared various policies and strategies that recruit and increase the number of female academicians at higher education levels. However, the underrepresentation of female faculties in higher education has been particularly pervasive in academic productivity, which is in the areas of research publications, academic promotion, tenure, and academic leadership due to the unequal flow of social capital compared to their male counterparts. In higher education system of Ethiopia, female faculties constituted $10.5 \%$ of the academic staff and $5.3 \%$ of senior academic positions (Tesfaye et al., 2017)

Different studies were conducted to assess and identify factors contributing for low performance of female faculty members. Women academics face numerous challenges in promotion than male academics. Some even argue that there are policies that work against the advantages of women academics (Oforiwaa and Afful- Broni, 2014). The low hierarchical position of women in academic arena could be attributed to patriarchal set up of most organizations (Yousaf and Schmiede, 2017). It is further suggested that regardless of women's qualification and education, organizations prefer male for management position (Sadl, 2009). Similar to female faculties, younger male academics also face discrimination in pursuing academic career (Sadl, 2009). Moreover, male networks also limit the academic promotion of women academics by acting as gate keeper groups (Sadl, 2009).

Some studies indicate networking of women academics contribute to career development, fast career mobility and create win-win situation for individuals and the institutions they partner with (Ismail and Rasdi, 2007). It is stated that networks based on professional
interaction are highly important for academic productivity (Sadl, 2009). However, these durable network which is characterized by strong ties are considered by interviewed women as over protective and highly controlled by male senior academics (Sadl, 2009). It is also indicated that women are not strategic with regard to networking and are hesitant to use network resources. Being hesitant to engage in strategic networking that is dominated by male academicians undermine Slovenian women academic achievement (Sadl, 2009).

Some studies show that lecturers do not optimally utilize information sources which affect the productivity of the lecturers (Haliso and Laja-Ademola, 2013). The findings further showed that there is positive relationship between information source availability and academic productivity of lecturers. The study also discovered significant relationship between information source utilization and academic productivity of lecturers. Moreover, there is significant positive influence of information availability on lecturer's information use.

Work environment also highly affect the job satisfaction of lecturers. Moreover, employer-employee relationship is also highly important for work environment in private business universities of Pakistan (Muhammad et al., 2015). Similarly, studies also indicate that sexual harassment at work could adversely affect the academic productivity of female faculties (Yousaf and Schmiede, 2017).

Most of the previous studies tried to assess the essential factors contributing for academic productivity and affecting academic productivity. But much studies has not been conducted in a comprehensive manner to assess the role of social capital that can be understood in the context of networking, promotion and work environment in terms of enhancing academic productivity. Besides, as far as to the knowledge of the researcher, studies of such kind has not been conducted in higher education of Ethiopia. Therefore, this study focused on the role of social capital in enhancing the academic productivity of female academicians in higher education of Ethiopia, particularly in Haramaya and Dire Dawa Universities.

## Objective of the Study

## General Objectives

Examining the role of social capital in enhancing the academic productivity of female academicians in higher educations.

## Specific Objectives

Assessing the role of networking, promotion and working environment in enhancing academic productivity of female academicians.

Identifying personal and organizational factors that inhibit the academic productivity of female academicians from a social capital perspective.

Evaluating social capital provisions and policies of the universities in enhancing the academic productivity of female academicians.

## Research Questions

1. What is the role of social capital (networking, promotion and, working environment) for the academic productivity of female academicians?
2. What are personal and organizational factors that inhibit the academic productivity of female academicians from social capital perspective?
3. What are organizational social capital provisions and policies that empower the academic productivity of female academicians in the university?

## Significance of the Study

The findings of this study is redound to the benefits of academicians considering that social capital plays an important role in fostering and progressing academic productivity in academia. As past studies predominantly look at social capital from student level perspectives, the additions of a social capital concept from teachers (academicians) perspective in higher level will bring an additional understanding of social capital. This study will also help to provide invaluable information to various stakeholders such as Ministry of Education, higher education institutions and also government policymakers in order to invest in establishing social ties for academicians within and outside their
institutions. Moreover, for researchers, the study can serve as a starting point to undertake further research in related other areas.

## Scope and Limitations of the Study

The study focused on the role of social capital in enhancing the academic productivity of female academicians in higher education of Ethiopia. To meet this objective, the study was confined only in two public universities, namely, Haramaya and Dire Dawa University and to female academic faculty members who are currently on-duty at both universities in 2018/19 academic year. Besides, to understand social capital in the study area, an attempt was made to measure it in terms of networking, promotion and work environment in order to identify its contribution to the academic productivity.

Regarding limitation, the researcher faced several challenges during data collection period that made the researcher to collect data and interview to be below the plan. The first was related to absence of compiled data about where and how to get female faculties in both universities. As a result, the researcher is forced to use snow ball technique that consumed much time to get the respondents. The other challenge was related to not returning back the questionnaire by some respondents after they promised to fill it. This made the researcher to do frequent phone calls that was costly and took much time. The researcher also could not conduct an interview in Dire Dawa University with senior and experienced female faculty that could have provided the researcher valuable information due to tight schedule of the faculty making it difficult to arrange an appointment. Besides, in the middle of the data collection, there was instability in the university due to political problem of the country. As a result, teaching and learning activities was interrupted that made some of the respondents not to come to the universities' compound. Despite those limitations, the researcher managed to analyze and made some recommendations based on the information provided by the respondents.

## Organization of the Study

This study is comprised in six parts. The first part is the introduction chapter that includes background of the study, statement of the problem, objective of the study, significance of the study and scope and limitation of the study. The second part (Chapter 1) is the literature review that provide various theoretical concept of social capital and explain it
items of networking, promotion and work environment. The third part (Chapter 2) describes the study area and the methodological approach that will be used in the study. The fourth part(Chapter 3) presents results obtained from qualitative and quantitative data. The fifth part (Chapter 4) presents the discussion of the results obtained from qualitative and quantitative data in relation to the findings of other studies. Finally, the sixth part presents the summary of the findings, conclusion and recommendations.

## CHAPTER 1: LITERATURE REVIEWAND

## CONCEPTUALFRAMEWORK

### 1.1. Social Capital Theory

### 1.1.1. Bourdieu's Approach to Social Capital

In the early twentieth century, the term social capital has originated and the initial theoretical development of the concept is attributed to Pierre Bourdieu and James Coleman. Bourdieu (1986), first proposed the concept of social capital with his attempt to distinguish from the economic, social, and cultural capital(Pierre Bourdieu, 1986). Pierre Bourdieu gave the important concept of social capital concerning economic, cultural, and symbolic capital at the individual level (Yüksek, 2018). Moreover, the functions of these forms of capital are framed based on the concept of social space and practices (Bourdieu, 1980, 1977, 1984, 1991). Hence Bourdieu believed it is through social practices that one can mobilize social capital or transform it into another form of capital. Bourdieu defined social capital as:

The aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition-or in other words, to membership in a group-which provides each of its members with the backing of the collectivity owned capital, a "credential" which entitles them to credit, in the various senses of the word.(Bourdieu, 1986).

This definition reveals the extent of the individual's networks predict the size of the capital and the person's ability to use or mobilize that capital. On the other hand, Bourdieu asserts social capital as the tool of elite groups ( upper and middle classes) that binds people to enter their circle's structure.

### 1.1.2. Coleman's Approach to Social Capital

Besides Bourdieu's definition of social capital, American sociologist James Coleman opened up social capital to a broader concept where he linked social capital with economics and sociology to combine the insight of both fields into one interrelated concept. For Coleman

Social capital is defined by its function. It is not a single entity but a variety of different entities, with two elements in common: they all consist of some aspect of social structures, and they facilitate certain actions of actors-whether persons or corporate actors-within the structure. Like other forms of capital, social capital is productive, making possible the achievement of certain ends that in its absence would not be possible(Coleman, 1988).

Coleman lined functionalist view which is determined by social structure and rationalist view which is about self-interest in seeking and fulfilling an individual goal (Coleman, 1988). Like Bourdieu, Coleman conceptualizes social capital as a base to access a resource through the social structure of connections among groups. However, he focused on group collective resources of social capital rather than structural constraint and unequal distributions of capital based on class, gender, and race. Coleman points out three forms of social capital:- obligation and expectation which includes when a person make a favor to others and expect a return (reciprocity) which Coleman describes as credit slips, information channels which is important in providing information to facilitate action, and the third and the last one is norms and effective sanctions that perform and constitute a powerful form of social capital (Coleman, 1988). In general sense, for Coleman, social capital is a resource based on trust and shared values and develops from good relations of people in communities.

### 1.1.3. Putnam's Approach to Social Capital

Putnam focuses on organizational dimension of social capital (volunteering and civic action) including networks, trust, and norms that facilitate action and cooperation for mutual benefits ( Putnam et al., 1994; Putnam, 2000). For Putnam, social capital is a productive resource that perform through social events within the organization or community. The societies with a higher level of social capital are highly and easily engaged in volunteering and civic actions due to norms of reciprocity within the networks of those who are active in the community (Putnam, 2000). Furthermore, Putnam classifies social capital into two broad concepts which are bonding and bridging social capital. According to Putnam (2000), bonding social capital is a social relation that lies within a community or group that has a similar background, interest, information, viewpoint, and close networks. Besides bonding social capital is a form of capital that ties close networks together based on their similarities. Accordingly, bonding social capital is characterized
by strong ties and high density that exist between close people like families, friends, neighbors, etc. Whereas bridging social capital is a form of capital that ties social relation between a community, social group, social class, and organization with contrasting social identity. It refers to network with resources that extend outside of one community to another community with different backgrounds. It is characterized by the exchange of social relationships between people with similar attitudes and interests but different backgrounds.

### 1.2. Social Capital in Academic Perspectives

Social capital theory suggests social capital as "a social resource that generates reciprocities to a person or group in a community" (Lin \& Erickson, 2008). Social capital is not a physically existent resource, rather it's the result of social networks and norms of reciprocity that build based on the trust among the society. Similarly, Light (2004) states how social capital theory explores how the connections of trust embedded in social relations help individual's or society's productivity and capacity to plan future activities and succeed aimed goals (Light, 2004).

In the context of education and academia, different scholars have viewed social capital as a means and resources for individuals to reach higher levels of educational attainment and academic career success through social networks and social structures. According to Adler and Kwon (2002), social capital is a significant factor for a person's success, which is the result of goodwill found through strong ties in the social structure for which the person is located. Similarly, Angervall et al., (2018), reveal social capital as the base resource for the creation of academic career and advancement (Angervall et al., 2018). For instance, in terms of student's educational attainment view, social capital is considered as a key factor that facilitates family composition, parental school involvement and student's friendship networks that play a positive role in student's educational achievement.

In an academic career view, social capital allows and facilitates access to career resources for academicians such as funding, time, promotion, networking, publications, etc. Furthermore, social capital may serve as indicator of the knowledge resources that a person has contact to, which reciprocate their potential productivity (Pezzoni et al., 2012).

Thus, social capital is a resource that researchers at universities gain access to through their participation in social networks or other social structures (Angervall et al., 2018b)

### 1.2.1. Women's Social Capital in Academic Perspective: Women and Social Capital in Higher Education

In academia, social capital plays vital role by being a factor that brings networks and involvement in external organizations, which are essential for personal and professional advancement as well as getting access to opportunities for promotion (Turner, 2002). However, numerous studies have shown that women faculty have less access to social capital due to fewer network relations that cause them to be outsiders in academia with a low level of social capital compared to their male counterparts (Barthauer et al., 2016; Burt, 1998; Lutter, 2015; McDonald, 2011). Besides, they have low contact to access social capital in both written and unwritten rules, which have the role of a negative impact on advancing their careers and achieving tenure track than their male colleagues (Gilmer et al., 2014).

Burt (1998) suggested that strong social network is essential for career advancement. Hence, it is necessary for women to borrow social capital by attaching themselves to strong interconnected ties or powerful mentors (Burt, 1998). However, being borrowed doesn't reduce the striking gap of the network between faculties perhaps it enhances the possibility of dependency on being connected to strong groups. In contrast, Ibarra (1997) argues that the lack of social capital within a colleague may give women the chance to create a more diverse network. Similarly, Lutter (2015) found the strengthening of weak ties and extending external diverse social relations and the enhancements of close structural holes and network diversities are the three crucial advantages that women benefited from using diversity networks (Lutter, 2015).

Therefore, concerning social capital theory and the framework of the present study, this thesis assessed specifically and reviewed relevant studies on the role of networking, promotion and working environment on enhancing academic productivity of female faculty in two Ethiopian higher education institutions, namely Haramaya and Dire Dawa University.
a) Networking

Networking is a technique that fetches information, opportunities, and resources from within and outside the organization (Hassan et al., 2017). Networks are represented as a collection of nodes and connections between these nodes, which have impacts to influence on an individual's academic careers (Benschop, 2009). Similarly, Wolff and Moser (2009) state that networking is a process of building, maintaining and using connections that aim to achieve career success (Wolff \& Moser, 2009).

Moreover, Lin (2002) sees social capital as a formal and informal connection between groups, where the informal network is created through close personal relations and arrangements (Lin, 2002). These connections and networks are necessary resources in that an individual can come up with tangible and intangible benefits and supports (Šandl, 2009a). For example, Lin (2002) offers four reasons that networks may be beneficial for the individual, including 1) information: individuals with high social capital can be better informed through knowledge gained from social ties 2 ) influence: members may be able to count on their network membership to influence decisions and other fellow network member's advocacy 3) social credentials: members may provide added resources beyond their own personal capital by holding strong relationship ties with others in the network and 4) reinforcement: public acknowledgment of belonging to a group can provide emotional support establishing a claim to certain resources (Lin, 2002).

The more effectively connected people are through networking, the higher the level of their social capital increases from the smallest units of social relations to a more national and global community. In academia, through networking and external organizational participation, the link of faculties may extend to other universities or organizations to attend or present their works in conferences, to collaborate with others, and engage in community services (Kholis, 2018). Moreover, networking plays a vital role in publishing for the purpose of gaining promotion (Todd \& Bird, 2000).
b) Promotion

Promotion is a career development of an employee in an organization to another job commanding greater responsibility and better status with higher opportunities in an organization (Njagi, 2012). Further promotion in the academic aspect is a process of
upward movement from lower academics ranks to higher ranks within the university's structural hierarchy. These higher ranks and better status, in academic labor markets, are intent on an individual's academic productivity, which is determined by teaching, research or publication, and public services. The more effectively faculties are performing in educational outputs such as teaching, research, and publication and public services, the easier they get promoted to higher rank levels.

However, achieving the highest academic rank is difficult for many faculties in general and women in particular. As previous studies have shown, the gap in academic promotion among female and male faculties is determined by female academics generally being younger with less experience, inadequate networking, lower publication and fewer Ph.D. holders, and mostly in lower rank levels. Ward (2001) found differing average gap and challenges of female promotion in higher education as factors that determine the low levels of female faculties comparing with that of their male counterparts. Moreover, other studies indicated the gap in gender achievement is partially attributed to marriage and family responsibility. Similarly, Long et al. (1993) showed that female faculty with childrearing responsibilities get promoted more slowly than men with children. The average of female faculties in lower rank levels leads to a gap in salaries resulting in unequal payment.

## c) Leadership Promotion in Academia

The social capital theory has a well strong link with sociological and organizational theory studies (Burt, 1998; Coleman, 1988; Lin, 2002), but there is a lack of academic works concerning the role of social capital and its effect to women in senior leadership positions in tertiary levels. These could be considered as factors for the underrepresentation of female faculties in the higher rank and senior leadership positions. Kloot (2004b) categorize pipeline effect, institutional discrimination, fewer ambitions of female faculties and invisible effect as four important explanations for the absence of women in an academic leadership position. Similarly, Howe-Walsh and Turnbull (2016) found double burden, challenge to enter old boy's network, intimidation and harassment as organizational factors and lack of confidence as individual factors hinder female faculties to occupy senior leadership positions.

Furthermore, women who are already in leadership positions are not as well recognized or appropriately rewarded within their institutions. Although many women are found in leadership position within the university, they appear to be less recognized and respected as leaders by their colleagues or by others within the university. To compensate these,Golmoradi \& Ardabili (2016) suggest that the appropriate use of social capital may enhance the academic leadership of female faculties which has a positive impact on the promotion ladders of faculties (Golmoradi \& Ardabili, 2016). Zhao \& Jones (2017) state that there is a need to work on supportive environment where risk-taking is encouraged, fearless and open discussion is conducted and the person is also required to examine assumptions and biases and also assume a leadership identity.
d) Working Environment

The working environment can be described as a setting and environment in which people carry out an activity. The working environment ensures the healthy conditions or environments of the workers that allow them to perform their responsibility with all vigor and motivate them to achieve high productivity in the organization (Akinyele, 2007). According to previous literature psychosocial resources such as job control, rewards or promotion, and social support at work determine a good working environment and engagements of workers.

The work environment can be perceived in three perspectives which include: the technical environment, the human environment, and the organizational environment. Technical environment refers to tools, equipment, technological infrastructure, and other physical or technical elements. This environment creates elements that enable employees to perform their respective responsibilities and activities. The human environment refers to peers, others with whom employees relate, team and work groups, interactional issues, the leadership, and management. A human environment should be designed in such a manner that encourages informal interaction in the workplace so that the opportunity to share knowledge and exchange ideas could be enhanced. The organizational environment includes systems, procedures, practices, values and philosophies.

### 1.3. Conceptual Framework

The aim of this study was to assess the role of social capital in enhancing female academic productivity in higher education of Ethiopia. In this study, social capital is defined as the ability of faculty members to secure benefit or utilize career resources through their participation in social networks or other social structure in the institution. Social capital is expressed as networking, promotion and work environment. The assumption was that the existence of social capital among female faculties in terms of strong social network, being promoted and having better working environment has the power to enhance academic productivity of female faculties.

The existence of good social network among female faculties may increase access to information, good social interaction, and the development of growth of mindset, competence development, and negotiation skill. Being promoted to leadership position is associated with acquaintance with more people, practicing leadership skill, increased negotiation power, increased ability to command resource and better pay. Academic promotion is associated with high status, ability to generate new knowledge, better payment, increased publication, enhanced research conducting capacity and creation of new social network. The work environment of universities implies the existence of suitable and supportive work environment, availability of sufficient fund and resources, attractive reward and incentive system, collaborative environment, proximity to home, gender diversity at the top and availability of safety and security.

Academic productivity can be observed if female faculties engage more in research, participate in conference, publish more articles in academic journals, assume leadership and promoted to higher academic rank.


Figure 1: Conceptual Framework

## CHAPTER 2: RESEARCH METHODOLOGY

### 2.1. Description of the Study Area

The study was conducted in Haramaya and Dire Dawa Universities in eastern Ethiopia. Ethiopia is a country in eastern Africa and the easternmost extension of African land, which is known as the Horn of Africa. It is accredited as being the origin of mankind and covers an area of 426, 260 square miles. The country has the second largest population in the continent next to Nigeria. Ethiopia is one of the two countries in Africa that has never been colonized in the history of African colonization. As a result, the country celebrates victory day called "Adwa victory" instead of an "Independent Day" celebrated by countries that were under colonization.

The study location is in east-central Ethiopia, namely Dire Dawa and Haramaya. It lies at the intersection of roads from Addis Ababa (capital city), Harar and Djibouti. These cities with diverse cultures host thousands of tourists and visitors from all over the world. The majority of people inhabiting this part of the country speak Afan Oromo, which is spoken by more than about 50 million people in Ethiopia.

The two universities chosen for this study were all public research and teaching universities in Ethiopia that offer both graduate and undergraduate programs with more than 40,000 student population. The first one is Haramaya University, with approximately 30,355 students and one of the oldest learning institutions in Ethiopia strives to be among the leading universities recognized nationally and internationally for excellence in learning, teaching and community engagement. Another University, in the study, is a public university located in Dire Dawa city, Ethiopia. It is the youngest university established in 2007 and with over 15,000 students in 40 different academic programs. It has also 7971 students in the evening, weekend and summer programs.


Figure 2: Research Sites in Dire Dawa and Haramaya City in the East-Central Part of Ethiopia (In the Eastern Yellow Part with Three Close Stars)

### 2.2. Types of the Research Design

This study adopted a mixed-method design (Creswell, 2017; Morse, 2016). A QUAN+ QUAL explanatory sequential approach was used to conduct the study. The study explained how social capital played a vital role in enhancing the academic productivity of female faculties in higher educations. Hence, both quantitative and qualitative methods were used, and from both sources, data were conducted consecutively (Morse, 2016).

Table 1: Explanatory sequential approach

| Design type | Timing | Mix | Weighting <br> /Notation |
| :--- | :--- | :--- | :--- |
| Triangulation | Concurrent: <br> quantitative and <br> qualitative at the same <br> time | Merge the data during <br> interpretation or <br> analysis | QUAN + <br> QUAL |
| Embedded | Concurrent and <br> sequential | Embed one type of <br> data <br> within a larger design <br> using Or the other <br> type of data | QUAN(qual) <br> Or <br> QUAL(quan) |
| Explanatory | Sequential: <br> Quantitative followed <br> by qualitative | Connect the data <br> between <br> the two phases | QUAN_qual |


| Exploratory | Sequential: <br> Qualitative followed <br> by quantitative | Connect the data <br> between the two <br> phases | QUAL_quan |
| :--- | :--- | :--- | :--- |

Source: Adopted from Creswell \& Plano Clark (Creswell \& Clark, 2017)

### 2.3. Rational for the Design

The aim of the study and the literature base on which it was founded led to the selection of the mixed-method research design described in this chapter. The study used an explanatory sequential design based on mixed method design. The rationale and appropriateness of each component of this mixed design is that neither quantitative nor qualitative methods are abundant by themselves to capture the trends and details of the situation. When used in combination, quantitative and qualitative methods complement each other and allow for more complete analysis (Greene et al., 1989; Tashakkori et al., 1998).

When choosing the study design, the researcher focuses on three key decisions that required choosing an appropriate mixed-method design: such as priority, implementation (timing or sequence) and integration of method design (Creswell, 2014). Priority refers to which approach the researcher gives importance and attention to address the research questions or problems. Then in the implementation stage, the researcher decides the timing order (sequence) for collecting the data which is whether quantitative or qualitative data come in multiple phase combinations, sequence, or concurrently (Creswell, 2014).

In this study, the researcher decided to give attention or priority to quantitative data collection and analysis. This is related with identification and interpretation of the role of social capital, personal and organizational factors that inhibit the academic productivity of female faculty members. Social capital was considered from the perspective of networks, promotion and working environment.

Since the study followed explanatory sequential design, the data was collected in sequence. First, quantitative data was collected and analyzed, then qualitative data was collected to explore the result in depth based on the purpose and questions of the study. The last step is integrity, which is the stage in which we decide where and how these two methods data get mixed and combined. Therefore, the researcher mixed the quantitative
and qualitative phases at the interpretation stage which is at the final stage after collecting and analyzing the data.

### 2.4. Stages of Explanatory Sequential Design (QUAN-QUAL)

| Quantitative <br> data <br> collection |
| :---: |
| Quantitat <br> ive data <br> analysis |$\Longrightarrow$| Qualitativ |
| :--- |
| e data |
| collection |$\Longrightarrow$| Qualitati |
| :---: |
| ve data |
| analysis |$\Longrightarrow$| Interpretation |
| :---: |
| how |
| qualitative |
| explains |
| quantitative |

Figure 3: Stages and Procedures of Explanatory Sequential Design (Adopted Based On A Concise Introduction to Mixed Methods Research)

Table 2: Stages and procedures of explanatory sequential design

| Procedures | Procedures | Procedures | Procedures |
| :--- | :--- | :--- | :--- |
| Female faculties | Coding data | Senior female faculty | Transcribing data |
| HU=91, DDU=54 | SPSS <br> version 25 | HU=3, DDU=2 |  |
| Questionnaire <br> distributions, Semi <br> structured <br> interview | Inferential <br> statistics | Descriptive statistics | Content analysis |
| Products | Products | Products | Products |
| Database based on <br> survey | Statistical <br> results <br> Significance <br> results | Translating for <br> interview analysis | Themes and <br> quotes |

### 2.5. Research Procedures

### 2.5.1. Quantitative phase

In the quantitative phase of the study, the researcher aimed to answer the first two research questions. First, finding quantitative numeric data concerning the role of social capital as conceptualized by networking, promotion and working environment in enhancing academic productivity. Second, examining the personal and organizational factors that inhibit the enhancement of academic productivity from social capital perspectives (networking, promotion, and working environment).

### 2.5.1.1. Target Population and Sampling Techniques

The target population in this study was female faculties who are currently on-duty (active) at two public universities of Ethiopia, which are Haramaya and Dire Dawa University in the 2018/19 academic year. The universities chosen in this study were purposefully selected to identify and distinguish the crucial role of social capital in enhancing the academic productivity of faculties in the two universities with different years of establishment. Haramaya University was initially established as college of agriculture in 1954 while Dire Dawa university is a younger university which was established in 2005.

For the first phase of the quantitative analysis portion, simple random sampling technique was used to choose female faculties from each department of the two universities. A simple random sampling is a type of probability sampling where each member of the study population has an equal chance being selected with less possibility of sampling bias. The sample size was drawn based on the basis of the 2017/2018 academic year. According to Haramaya University (2017) database, out of 1,022 active academic staff at Haramaya University, 119 were female and according to Dire Dawa University (2017), from a total of 834 faculties, only 63 were active female faculties. Therefore, the sample size of this study with a 5\% margin of error, a $95 \%$ confidence level and a $50 / 50$ probability of the sample's feature comprise 91 female faculties staff from Haramaya University and 54 female faculties from Dire Dawa University.

### 2.5.1.2. Data Collection Instrument

Quantitative numeric data for this phase was collected through a self-administered questionnaire with five-point Likert-scales ranging from strongly disagree to strongly agree (Babbie, 2007). The questionnaire was distributed to a sample of female faculties in each department of the two universities. The questionnaire was made up of 70 questions including the descriptive part which comprise demographic and socio economic characteristics. The questionnaire further include three sections: general backgrounds of the respondents ( demographic information), personal networking, promotion and working environment-related questions of respondents, and followed by personal and organizational factors that hinder career advancement in general, as well as academic productivity of female faculties in particular. The reliability of the items for each section
of the questionnaire was checked by Cronbach Alpha. The value of Cronbach Alpha of 0.7 is considered adequate.

The researcher first contacted the department heads and secretaries to make sure that the sampled participants are available and active on duty during the data collection time, which is 2019 spring semester. This is because the sample of the study was taken based on the Ministry of Education (MOE) 2017/2018 academic year report. Then the questionnaires were distributed to the participants to be filled in both Haramaya and Dire Dawa Universities.

### 2.5.1.3. Data Analysis

The collected data from the questionnaires was first coded for statistical analysis and was entered into SPSS software version 25 package for both data screening and demographic analysis. To answer the first research question (RQ1), the researcher analyzed networking construct by using ten items. The items scored with the five-point likert scale ranging from "strongly disagree" to "strongly agree" to analyze the agreement degrees of participants with the given items to generate an overall picture of the participants' network structures in the academia.

Second, to determine the system of academic promotion and reveal the scarcity of female faculty in leadership hierarchies at higher education, the researcher classified promotion into academic promotion and leadership promotion. Then thirdly, the working environment items were generated to examine the vital role of work-life balance from the perspective of social capital in the academia. The second research question's items (RQ2) were coded and analyzed to determine the personal and organizational factors that hinder the academic productivity of female faculties.

### 2.5.2. Qualitative Phase

In an explanatory sequential mixed method, after conducting and coding numeric data at the initial stage, the next stage is qualitative analysis to further maximize and complement the quantitative analysis. Hence the qualitative analysis was used to triangulate the quantitative findings. Therefore, phase two of the qualitative analysis was aimed to answer research question three (RQ3). This is done by further exploring qualitative data
to determine the role of organizational social capital provisions and policies of the respective universities to enhance the academic productivity of female faculties.

### 2.5.2.1. Target Population and Sampling Techniques

Target participants in this phase were five senior female faculties from both Haramaya and Dire Dawa Universities. Even though the researcher planned to interview six participants, this was not possible due to the tight schedule of the interviewed faculties. The researcher employed purposive sampling to select the participants based on their academic status, management position and their experience both in teaching and research. These interviews were conducted to determine how the social capital provisions or incentives and policies of the universities contributed to their academic achievement in particular and career progression of female faculty in general.

### 2.5.2.2. Data Collection Instrument

To explore an in-depth understanding and experiences of the participants regarding the aforementioned concepts based on their views, the researcher preferred to use semistructured in-depth interviews. The researcher first examined the Ethiopian higher education's gender-sensitive policies and incentives designed to increase the participation of female faculty in administration positions at higher education. This was the result of document analysis. Then the researcher developed the interview questions to address research question three (RQ3). The semi-structured interview questions were based on a semi-structured scheme and format that enabled respondents to share their knowledge as well as life experience (Seidman, 2006).

### 2.5.2.3. Data Analysis

The researcher conducted a face to face interview with all five participants. With the participant's agreement, the researcher interviewed them using voice memos, and took additional detailed notes during the interview. The interviews ranged in time from just over 30 minutes to slightly less than 60 minutes. The recorded file from voice memo was transferred to a computer. Following the transfer, all five interviews were translated from Amharic language to English by transcribing verbatim and then were sent to the participants to verify their accuracy. The thematic analysis were used to identify and
present the pattern themes of the data by following the steps presented in the figure below (Braun \& Clarke, 2006a).

Table 3: Phases of qualitative analysis (Braun \& Clarke, 2006b)

| Phase | Description of the process |
| :--- | :--- |
| 1.Familarization | Reread the data and jot down preliminary ideas |
| 2.Generating initial <br> codes | Assigning codes for interesting features of the data in <br> the systematic fashion across the entire data, collating <br> data relevant to each code |
| 3. Searching for themes | Collating codes into potential themes, gathering all data <br> relevant to each potential theme |
| 4. Reviewing themes | Checking in the themes work in relation to the coded <br> extracts (Level 1) and the entire data set (Level 2), <br> generating a thematic "map" of the analysis. |
| 5.Definingand naming <br> themes | Ongoing analysis to refine the specifics of each theme, <br> and the overall story the analysis tells; generating clear <br> definitions and names for each theme |
| 6. Producing the report | The final opportunity for analysis. Selection of vivid, <br> compelling extract examples, final analysis of selected <br> extracts, relating back of the analysis to the research <br> question and literature, producing a scholarly report of <br> the analysis |

### 2.5.3. Validity and Reliability

To ensure the validity and reliability of phase one, first, the Likert scale items were delicately designed and piloted to refine the wording and layout of the questionnaire. Cronbach's alpha value was used to test the internal consistency reliability of the items that estimate the interrelated degrees of the multiple items as a set of a group under a specific section (Thorndike and Thorndike-Christ, 2010). Cronbach's alpha for scales of Likert scale type items ranged from 0.761 to high level of internal consistency 0.924 with $95 \%$ of the coefficients, which is well above the acceptable limit of 0.70 (Cortina, 1993).

Secondly, strategies to validate the credibility and trustworthiness of the qualitative data were applied (Ivankova, 2014). Interview questions were created based on research question three (RQ3) as well as quantitative results and delicately worded and held based on a semi-structured scheme and format that enables respondents to share their knowledge as well as lived experiences (Seidman, 2006). The process included the first coding of the transcripts and then reviewing and defining themes to produce and present the report. Informant feedback checked to validate the accuracy of the recorded data of participants.

### 2.5.4. Ethical Considerations

To protect participants from being harmed or threatened ethical consideration forces the researcher to respect the rights of participants such as informed consent, respect for anonymity and confidentiality as well as privacy. In this study, the researcher used the following precaution to minimize the risk of harm to the participants:
a) Approving Permission from Each Department

To gain access to respondents, the researcher first, ensured the availability of the participants from the department secretaries' list during the data collection time. Then sought the permission from department heads in both Haramaya and Dire Dawa Universities. After permission was obtained, the researcher respected the pre-requirement of ethics, which is the participant's right to comply as well as refuse to participate.
b) Informed Consent from Participants

Upon obtaining permission from the department heads, the researchers attempted to create contact with the participants by visiting each prospective respondent's office to request their consent and distribute the required questions to fill based on the sections and return it to the researcher. To protect the confidentiality of the participants, the researcher ensured the safety of the data by using pseudonyms for the participants and the department's understudy in the research report.

## CHAPTER 3: DATA PRESENTATION AND ANALYSIS

This chapter presents the findings concerning the three research questions. In the first phase, the quantitative findings associated with the general role of social capital as well as the analyzed procedures were presented using numeric statistical methods by answering research question one (RQ1) and two (RQ2). Then the qualitative findings were presented to answer research question (RQ3) and discussed in detail along with study results. Table 4.1 below shows the entire data set process, which includes both quantitative and qualitative data collected as well as analyzed in chapter four.

Table 4: Data Collection and Analysis Chart

| Data Types | Data Sources | Collection | Analysis |
| :--- | :--- | :--- | :--- |
| Quantitative | Questionnaires | $\begin{array}{l}\text { Random sampling } \\ \text { HU }=91 \text { collected } \\ \text { questionnaires }\end{array}$ | $\begin{array}{l}\text { Cronbach's alpha analysis } \\ \text { to quantitative analysis }\end{array}$ |
|  | $\begin{array}{l}\text { DDU }=54 \text { collected } \\ \text { questionnaires }\end{array}$ | $\begin{array}{l}\text { Cronbach's alpha analysis } \\ \text { to quantitative analysis }\end{array}$ |  |
|  | $\begin{array}{l}\text { Semi- } \\ \text { Structured } \\ \text { Interview }\end{array}$ | Purposive sampling | $\begin{array}{l}\text { Five final participants in } \\ \text { two universities }\end{array}$ |
|  | 4 hours, 30 minutes |  |  |
| in total |  |  |  | \(\left.\begin{array}{l}Translating, transcribing, <br>

coding, searching and <br>
naming themes, and <br>

presenting the report\end{array}\right]\)|  |
| :--- |

## Source: Own Survey

### 3.1. Research Questions

This study was designed to seek the vital role of social capital in enhancing the academic productivity of female faculties through examining the role of social capital concerning networking, promotion, and working environment. To meet these objectives, the study ought to address the following research questions:

What is the role of social capital (networking, promotion, working environment) for the academic productivity of female academicians?

What are personal and organizational factors that inhibit the academic productivity of female academicians from a social capital perspective?

What are the organizational social capital provisions and policies that help to empower the academic productivity of female academicians in the university?

### 3.2. Phase One: Quantitative Results

Descriptive and statistical analyses were used to analyze quantitative numeric data. Descriptive statistics were used for arranging or configuring as well as describing the collected data of the sample respondents (Glass and Hopkins, 1996). This phase presented the findings that answer the first two research questions, in which the first section describes the personal and demographic characteristics of participants followed by the findings of the frequencies of three major variables, such as networking, promotion and working environment.

### 3.2.1. Personal and Demographic Characteristics

The self-administered questionnaires included questions that sought to produce specific background data about female faculties within each participating institution. These questions included questions about the age of participants, marital status, educational level, professional title, faculty in which the respondent is currently working, year of experience in the current university as well as leadership position if occupied. Hence, Tables 5 to 12 show the personal and demographic characteristics of the respondents.

### 3.2.1.1. Age-Frequency Distribution of the Sampled Respondents

Discussing the age of the participants in both Table 5 and 6 are important in considering and understanding the views of the participants about particular problems. By and large, age indicates level of maturity of individuals. Hence age becomes more important to examine the response as well as enables to filter out the average age frequencies of female faculties in the studied higher education institutions of Ethiopia.

It is evident from Table 5 that out of 91 respondents, $51(56.0 \%)$ of the respondents were from the age group of $20-29$. This shows that above $50 \%$ of female faculties in HaramayaUniversity are of very young age groups. The next age group is the age group of $30-39$ which constitute $33.0 \%$ of the respondents . The last category is $40-49$ age groups constituting $11 \%$ of respondents.

Table 5: Age-frequency distribution of the samples for Haramaya University (HU)

|  |  | Frequency | Percent | Valid PercentCumulative <br> Percent |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Valid | $20-29$ | 51 | 56.0 | 56.0 | 56.0 |
|  | $30-39$ | 30 | 33.0 | 33.0 | 89.0 |
|  | 10 | 11.0 | 11.0 | 100.0 |  |
|  | Total | 91 | 100.0 | 100.0 |  |

Source: Own Survey
Table 6 shows age distributions of the sample respondents for Dire Dawa University. The result very similar to that of Haramaya University. The average percent of the age group of $20-29$ were $63.0 \%$ with the frequency of 34 out of 54 respondents. Moreover, the age group with the smallest percentage is 30-39 age group with $37.0 \%$ and frequency of 20 . As Table 5 and 6 have showed almost both Haramaya and Dire Dawa Universities have very similar age groups characteristics. For both, the average age group of 20-29 constitute above $50 \%$ of respondents.

Table 6: Age- frequency distribution of the samples for Dire Dawa University (DDU)

|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Valid | $20-29$ | 34 | 63.0 | 63.0 | 63.0 |
|  | $30-39$ | 20 | 37.0 | 37.0 | 100.0 |
|  | Total | 54 | 100.0 | 100.0 |  |

Source: Own Survey

### 3.2.1.2. Marital Status of Sample Respondents

The Figure 4 and 5below show the marital status of sampled respondents. Table 7 indicate that $45.05 \%$ of the respondents from Haramaya University were married. The number of respondents who are single represent $47.25 \%$ of sample. Moreover, $5.49 \%$ and $2.2 \%$ of the respondents in Haramaya University were divorced and widowed respectively.


Figure 4: Marital Status of Sample Respondents - Haramaya University (Source:Own Survey)

Figure 4 indicates that $22.22 \%$ of the respondents from Dire Dawa University were married. The number of respondents who are single represented $66.67 \%$ of sample. Moreover, 9.26 and $1.85 \%$ of the respondents in Dire Dawa University were divorced and widowed respectively.


Figure 5: Marital Status of Sample Respondents - Dire Dawa University (Source: Own Survey)

### 3.2.1.3. Educational Level of Sample Respondents

Figure 6 shows the educational level of sample respondents at Haramaya University. The educational level of the respondents ranged from bachelor to Ph.D. levels. The majority of female faculties ( $n=46,50.55 \%$ ) were holders of master's degree followed by bachelor
( $\mathrm{n}=37,40.66 \%$ ). Female faculties who hold PhD represent $8.79 \%$ of the sampled respondents.


Figure 6: Educational Level of Sample Respondents - Haramaya University (Source: Own Survey)

Figure 7 shows the educational level of sample respondents at Dire Dawa University. The educational level of the respondents ranged from bachelor to Masters levels. The majority of female faculties ( $\mathrm{n}=31,57.4 \%$ ) were holders of master's degree followed by bachelor ( $\mathrm{n}=23,42.59 \%$ ). However, at the time of the survey there were no female faculty members who hold PhD.


Figure 7: Educational level of sample respondents - Dire Dawa University (DDU) (Source:Own Survey)

### 3.2.1.4. Professional Title of Sample Respondents

In terms of professional title or rank of respondents in Haramaya University, substantial numbers of respondents $48.35 \%$ (44), were lecturers. However, $9.89 \%$ (9) of the respondents were assistant professors while the remaining were assistant lecturers and graduate assistants.


Figure 8: Professional Title of sample respondents - Haramaya University (HU) (Source:Own Survey)

As figure 9 shows, more than half of the respondents representing 53.70\% (29) were lecturers at Dire Dawa University. Of the sampled respondents, only $5.56 \%$ (3) of sample respondents were holding the rank of assistant professors. Moreover, assistant lecturers and graduate assistants represented $22.22 \%$ and $18.52 \%$, respectively.

Therefore, from both universities (figure 4.5 and 4.6) none of the female faculties reached the level of professorship. The rank of female faculties for both universities are limited to graduate assistant, assistant lecturer, lecturer as well as assistant professors who were currently on-duty (active) in the university during the data collection time.


Figure 9: Professional Title of Sample Respondents - Dire Dawa University (DDU) (Source: Own Survey)

### 3.2.1.5. Years of experience for sample respondents

Respondents in Haramaya University were asked to report for how long they have been working in their current university. The significant majority of the faculty members were having less working experience ranging from 1 to 5 years ( $n=55,60.44 \%$ ) and followed
by 6 to $10(n=24,26.37 \%)$. However, for seniors, the years of experience were ranging from 11 to 15 years which represented $10.99 \%$ (10) and $2.2 \%(2)$ of them had years of experience of 16 years and above.


Figure 10: Years of experience of sample respondents - Haramaya University (HU) (Source: Own Survey)

The working experiences of female faculties in Dire Dawa University indicated that the overwhelming number of them had years of experience ranging between 1 to 5 years which represented $68.52 \%$ (37) of the respondents sampled. This is followed by respondents having years of experience ranging between 6 to 10 years $31.48 \%$ (37). However, no respondents had more than 10 years of work experience.


Figure 11: Years of Experience for Sample Respondents - Dire Dawa University (DDU) (Source: Own Survey)

### 3.2.1.6. Distribution of Sample Respondents by Faculties and Schools

As Table 7 demonstrated, out of 91 sample respondents from Haramaya University, $20.9 \%$ (19) were from the faculty of agriculture. This is followed by the faculty of social science and humanities which represented $19.8 \%$ (18) of the respondents. The least
number of respondents are found in the faculty of health and medical sciences which represented 18.7 \% (17).

Table 7: Faculties and School Distribution- HU

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | Agriculture | 19 | 20.9 | 20.9 | 20.9 |
|  | Business and Economics | 11 | 12.1 | 12.1 | 33.0 |
|  | Computing and Informatics | 5 | 5.5 | 5.5 | 38.5 |
|  | Education and Behavioral Sciences | 5 | 5.5 | 5.5 | 44.0 |
|  | Law | 2 | 2.2 | 2.2 | 46.2 |
|  | Health and Medical Science | 17 | 18.7 | 18.7 | 64.8 |
|  | Natural and Computational Sciences | 5 | 5.5 | 5.5 | 70.3 |
|  | Social Science and Humanities | 18 | 19.8 | 19.8 | 90.1 |
|  | Institute of Technology | 9 | 9.9 | 9.9 | 100.0 |
|  | Total | 91 | 100.0 | 100.0 |  |

Source: Own Survey
Table 8 below shows a sample of female faculties at Dire Dawa University. The largest concentration of female faculties is found in the faculty of business and economics which represented $25.9 \%$ (14) of the total sample. This is followed by the faculty of social science and institute of technology each representing $18.5 \%(10)$ and $9.16 .7 \% ~(\mathrm{n}=9)$ respectively.

Table 8: Faculties and Schools of Sample Respondents in Dire Dawa University (DDU)

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | Agriculture | 2 | 3.7 | 3.7 | 3.7 |
|  | Business and economics | 14 | 25.9 | 25.9 | 29.6 |
|  | Computing and Informatics | 2 | 3.7 | 3.7 | 33.3 |
|  | Education and Behavioral Sciences | 3 | 5.6 | 5.6 | 38.9 |
|  | Law | 2 | 3.7 | 3.7 | 42.6 |
|  | Health and Medical Science | 5 | 9.3 | 9.3 | 51.9 |


| Natural and <br> Computational Sciences | 7 | 13.0 | 13.0 | 64.8 |
| :--- | :--- | :--- | :--- | :--- |
| Social Sciences and <br> Humanities | 10 | 18.5 | 18.5 | 83.3 |
| Institute of Technology | 9 | 16.7 | 16.7 | 100.0 |
| Total | 54 | 100.0 | 100.0 |  |

## Source: Own Survey

### 3.2.1.7. Position of Sample Respondents

The last question of demographic background is concerned with whether the respondents have a position in their current university. The overwhelming responses of the respondents was "no" with the frequency of $\mathrm{n}=79,86.8 \%$ out of 91 sample of respondents at Haramaya University. However, the remaining respondents answered "yes" with a percentage of $13.2 \%$.

Table 9: Position of Sample Respondents at Haramaya University (HU)

|  |  | Frequency | Percent | Valid PercentCumulative <br> Percent |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Valid | Yes | 12 | 13.2 | 13.2 | 13.2 |
|  | No | 79 | 86.8 | 86.8 | 100.0 |
|  |  |  |  |  | 100.0 |

Source: Own Survey
At the time of the survey, even though they were less in number, the type of position held by respondents were varied at different levels of higher education administration. This included becoming the faculty dean, program coordinator, department head, faculty registrar head, etc. However, as Table 9above only $13.2 \%$ of respondents were in a position for the case of Haramaya University. Moreover, the majority of the respondents were at lower level of administrative position.

As figure 12 demonstrates, the majority of respondents were in lower types of positions, which is coded as "others" in the questionnaires representing 46.15\%. The remaining was program coordinator position accounting for $30.77 \%$ and department head position accounting for $23.08 \%$. The position trend for female faculties require serious attention to the need for promoting female faculty members to higher position given the evolving
role of women in the Ethiopian higher education in general and Haramaya University in particular.

Table 10: Position Types of Sample Respondents -Haramaya University (HU)

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | Program coordinator4 |  | 4.4 | 30.8 | 30.8 |
|  | Department head | 3 | 3.3 | 23.1 | 53.8 |
|  | Other | 6 | 6.6 | 46.2 | 100.0 |
|  | Total | 13 | 14.3 | 100.0 |  |
| Missing | 99.00 | 78 | 85.7 |  |  |
| Total |  | 91 | 100.0 |  |  |

Source: Own Survey


Figure 12: Position type of sample respondents - Haramaya University (HU) Source:

> Own Survey

Female faculties have represented a low percentage of administrative positions in Dire Dawa University. The type of positions held by the respondents were varied and the position occupied by female faculties were $27.8 \%$ in Dire Dawa University which is higher than Haramaya University. The figure 13shows that the program coordinator position is the largest position occupied representing $64.71 \%$. This is followed by department head position with $23.53 \%$ while college dean and registrar's head position represented 5.88\% each.

Table 11: Position of Sample Respondents at Dire Dawa University (DDU)

|  |  |  |  | Cumulative |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Frequency | Percent | Valid Percent Percent |  |
| Valid | Yes | 15 | 27.8 | 27.8 | 27.8 |
|  | No | 39 | 72.2 | 72.2 | 100.0 |
|  | Total | 54 | 100.0 | 100.0 |  |

Source: Own Survey
Table 12: Position Types of Sample Respondents - Dire Dawa University (DDU)

|  |  |  |  | Cumulative |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Frequency | Percent | Valid Percent Percent |  |
| Valid | program coordinator 11 | 20.4 | 64.7 | 64.7 |  |
|  | department head | 4 | 7.4 | 23.5 | 88.2 |
|  | college dean | 1 | 1.9 | 5.9 | 94.1 |
|  | college registrar | 1 | 1.9 | 5.9 | 100.0 |
|  | Total | 17 | 31.5 | 100.0 |  |
| Missing | 99.00 | 37 | 68.5 |  |  |
| Total |  | 54 | 100.0 |  |  |

Source: Own Survey


Figure 13: Position Types of Sample Respondents - Dire Dawa University (DDU) (Source: Own Survey)

### 3.2.2. Research Question One (RQ1) - What is the Role of Social Capital from the Perspective of Networking, Promotion, and Working Environment in Enhancing the Academic Productivity of Female Faculties?

The respondents were asked to answer their perception regarding 34 networking, promotion and working environment role items using a Likert scale ranging from strongly disagree 1 to strongly agree 5 . This is to rate how important each of these items were to them personally in determining their academic productivity along the vital role of social capital (networking, promotion, and working environment) dimension in their academic
career. Each item from the research question one (RQ1) demonstrates whether the participants agree or disagree with each statement in the following tables.
a) Networking - Haramaya University (HU)

Reliability statistics was checked for items in Table 13 by using Cronbach's alpha. This is to test the reliability as well as the internal consistency of the 10 items that estimate the interrelated degrees of the multiple items as a set of a group under the networking variable. The Cronbach's alpha measure verified that internal consistency for the items was 0.924 , which is well above the acceptable limit of 0.70 (Cortina, 1993).

Descriptive statistics for the above 10 items were computed and scored in 5-point Likert scales form. Besides, rank order and percentage comparisons are presented in Table 13. As can be seen in the Table 13 below, the majority of respondents answered item 4 and 5. This is related with access to information (networking helps me to gather new information regarding academic productivity, such as attending conferences or pieces of training and sharing studies as well as articles, etc.) which represented $52.7 \%$ and $30.8 \%$, respectively.

The next highly scored item is item 4 which is intellectual curiosity (Being connected has allowed me to ask questions, be more of a reflective practitioner, and be a better educator). The result indicated that an average of $29.7 \%$ answered agree and $51.6 \%$ answered strongly agree. Similarly, regarding item 8 which is related with improving negotiating skill (having a good network helped me to improve my negotiation skills), $46.2 \%$ answered agree and, $23.12 \%$ answered strongly agree. Hence it could be deduced that the more the participants build strong networks, the more they become a better negotiator.

Item 3 is related with developing a growth mindset (networking allow me to reflect, and continue to have a growth mindset for my learning journey). Hence for this item, 44\% answered agree and $11 \%$ answered strongly agree. Regarding item 6 which is decisionmaking skill (networking enabled me to influence a decision), $41.8 \%$ answered agree. Moreover, the last agreed item for networking was item 2 (networking is just about furthering my career) with an average number of respondents that answered agree was $33 \%$.

Table 13: Distribution of Networking Responses for the Likert Scales (1= Strongly Disagree to 5=Strongly Agree); Perceptions of Faculties (Percent)-HU

| Items | Strongly Disagree (1) | Disagree <br> (2) | Neutral (3) | Agree <br> (4) | Strongly Agree (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Connecting with others has given me the tools, resources, and ideas to reach out to others and try new things. | 9.9\% | 6.6\% | 8.8\% | 41.8\% | 33.0\% |
| 2. Networking is just about furthering my career. | 9.9\% | 6.6\% | 15.4\% | 33.0\% | 35.2\% |
| 3.Having a network with my coworkers, allowing me to reflect and continue to have a growth mindset for my learning journey | 9.9\% | 13.2.\% | 22.0\% | 44.0\% | 11.0\% |
| 4. Being connected has allowed me to ask questions, be more of a reflective practitioner, and be a better educator. | 0.0\% | 9.9\% | 8.8\% | 29.7\% | 51.6\% |
| 5.Networking helps me to gather new information that contributes to enhancing my academic productivity ( such an attending conferences or training, sharing studies and articles, etc) | 1.1\% | 6.6\% | 8.8\% | 52.7\% | 30.8\% |
| 6.Having good networks and contacts enabled me to influence decision | 3.3\% | 9.9\% | 8.8\% | 41.8\% | 36.3\% |
| 7.Networking with others help me to get the experience required to enhance my career | 12.1\% | 6.6\% | 13.2\% | 39.6\% | 28.6\% |
| 8. Having a good network has helped me to improve my negotiation skills | 3.3\% | 16.5\% | 11.0\% | 46.2\% | 23.1\% |
| 9.Having a good network helped me to evaluate my competence to become competent | 15.4\% | 6.6\% | 12.1\% | 39.6\% | 26.4\% |
| 10.Having a good network enabled me to have a good social interaction with others | 9.9\% | 11.0\% | 12.1\% | 36.3\% | 30.8\% |

## Source: Own Survey

b) Networking - Dire Dawa University (DDU)

Table 14 shows the relative frequencies of Likert items concerning networking for the case of Dire Dawa University. As shown in Table 14 below, substantial numbers of respondents chose item 3 . This is related with developing a growth mindset (networking
allowing me to reflect, and continue to have a growth mindset for my learning journey) indicating that on average $66.7 \%$ of the respondents answered agree.

Similarly, over half of the respondents answered agree with an average of $64.8 \%$ for item 9 which is related with self-perceived competence (Having a good network helped me to evaluate my competence to become competent). This followed by item 5 in which $61.1 \%$ of respondents answered strongly agree. Item 5 is related with access to information (networking helps me to gather new information regarding academic productivity, such as attending conferences or pieces of training and sharing studies as well as articles, etc.).

Item 1 is related with access to resources (connecting with others has given me the tools, resources, and ideas to reach out to others and try new things). Item 8 is related with improving negotiating skills (having a good network has helped me to improve my negotiation) in which $55.6 \%$ of respondents answered agree. Moreover, item 6 which is related with decision-making skill (having good networks and contacts enabled me to influence decision) generated agree response of $53.7 \%$. However, item 2 (networking is just about furthering my career) received disagree responses of $3.7 \%$.

Table 14: Distribution of Networking Responses for the Likert Scales (1= Strongly Disagree to $5=$ Strongly Agree) Perceptions of Faculties (Percent) - DDU

|  | Strongly <br> Disagree <br> (1) | Disagree <br> (2) | Neutral <br> (3) | Agree <br> (4) | Strongly <br> Agree <br> (5) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1.Connecting with others has given <br> me the tools, resources, and ideas <br> to reach out to others and try new <br> things | $0.0 \%$ | $20.4 \%$ | $14.8 \%$ | $57.4 \% 7.4 \%$ |  |
| 2.Networking is just about <br> furthering my career | $3.7 \%$ | $9.3 \%$ | $9.3 \%$ | $48.1 \% 29.6 \%$ |  |
| 3.Having network with my <br> coworkers allowing me to reflect <br> and continue to have a growth <br> mindset for my learning journey | $1.9 \%$ | $0.0 \%$ | $3.7 \%$ | $66.7 \% 27.8 \%$ |  |
| 4.Being connected has allowed me <br> to ask questions, be more of a <br> reflective practitioner and be a <br> better educator | $1.9 \%$ | $9.3 \%$ | $16.7 \%$ | $50.0 \% 22.2 \%$ |  |


| 5. Networking helping me to gather <br> new information that contributes to <br> enhancing my academic <br> productivity ( such an attending <br> conferences or training, sharing <br> studies and articles, etc | $0.0 \%$ | $0.0 \%$ | $3.7 \%$ | $35.2 \% 61.1 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 6.Having good networks and <br> contacts enabled me to influence <br> decision | $0.0 \%$ | $9.3 \%$ | $11.1 \%$ | $53.7 \% 25.9 \%$ |
| 7.Networking with others help me <br> to get the experience required to <br> enhance my career | $0.0 \%$ | $7.4 \%$ | $7.4 \%$ | $48.1 \% 37.0 \%$ |
| 8. Having a good network has <br> helped me to improve my <br> negotiation | $0.0 \%$ | $9.3 \%$ | $1.9 \%$ | $55.6 \% 32.3 \%$ |
| 9.Having a good network helped <br> me to evaluate my competence to <br> become competent | $0.0 \%$ | $0.0 \%$ | $5.6 \%$ | $64.8 \% 29.6 \%$ |
| 10.Having a good network enabled <br> me to have a good social | $0.0 \%$ | $3.7 \%$ | $3.7 \%$ | $51.9 \% 40.7 \%$ |

Source: Own Survey
c) Promotion - Haramaya University (HU)

As shown in Table 15, the respondents were asked whether they have been promoted to the leadership position in their career path before. However, out of 91 respondents merely $15.4 \%(14)$ respondents answered yes whereas the remaining majority of respondents representing $84.6 \%$ (77) answered no. Then, the respondents who answered no in the previous yes or no question were not asked the question related with leadership experience. Hence the questions related to the leadership experiences of respondents were addressed to those who were in management position in their current university.

Table 15: Leadership Promotion: Have You Been Promoted to the Leadership PositionHU?

|  |  |  |  | Cumulative |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | Frequency | Percent | Valid Percent Percent |  |  |
| Valid | Yes | 14 | 15.4 | 15.4 | 15.4 |
|  | No | 77 | 84.6 | 84.6 | 100.0 |
|  | Total | 91 | 100.0 | 100.0 |  |

Source: Own Survey

The reliability of 6 leadership related items in Table 16 was checked by using Cronbach's alpha. This is to test the reliability and the internal consistency of the questions to estimate the interrelated degrees of the multiple items as a set of a group under the promotion variable. The Cronbach's alpha measure verified that internal consistency for the piece of questions was 0.835 which is above the required limit of 0.70 .

Table 16 shows the agreement degrees of respondents based on their experience in a leadership position. Over half of the respondents answered agree and strongly agree with an average of $50 \%$ and $42.9 \%$ to item 2 related with leadership execution (it helped me to practice my leadership skill). This is followed by item 1 related with being known (it helped me to meet new people and known to others as well) which represented $57.1 \%$ for agree and $35.7 \%$ for strongly agree.

Item 4 which is related with ability to face challenges (It has improved my ability to face problems, and get a solution for it) represented $50 \%$ for agree and $35.7 \%$ for strongly agree. Item 5 which is related with ability to control resources (it increased my ability to command resources) represented $57.1 \%$ for agree and $28.6 \%$ for strongly agree. Item 3 which is power of negotiation in decision making (it has increased my ability to negotiation and decision-making power) generated agree response of 50.0\% and strongly agree response of $28.6 \%$. Item 6 which is related with raising of income (better payment) generated agree and strongly agree response of $35.7 \%$, and $14.7 \%$ respectively.

Table 16: The Experiences of Being Promoted to a Leadership Position- HU

| Items | Strongly Disagree 1 | Disagree 2 | $\begin{aligned} & \hline \text { Neutral } \\ & 3 \end{aligned}$ | $\begin{aligned} & \text { Agree } \\ & 4 \end{aligned}$ | Strongly Agree 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. It helped me to meet new people and known to others as well | $0.0 \%$ | 0.0\% | 7.1\% | 57.1\% | 35.7\% |
| 2. It helped me to practice my leadership skill | 0.0\% | 0.0\% | 7.1\% | 50.0\% | 42.9\% |
| 3.It has increased my ability to negotiation and decision making power | $7.1 \%$ | 14.3\% | 0.0\% | 50.0\% | 28.6\% |
| 4. It has improved my ability to face problems and get a solution for it. | 0.0\% | 7.1\% | 7.1\% | 50.0\% | 35.7\% |
| 5.It increased my ability to command my resources | 0.0\% | 0.0\% | 14.3\% | 57.1\% | 28.6\% |
| 6.Better pay | 21.4\% | 14.3\% | 14.3\% | 35.7\% | 14.3\% |

## Source: Own Survey

The researcher first followed the same process used by checking the Cronbach's alpha measure for academic promotion related questions. The internal consistency of the items was 0.880 which is above the required limit.

Table 17 presents the perception of agreement of respondents based on the benefits of being promoted in academic careers in Haramaya University. Majority of respondents ranked item 5 which is related with improving research capacity building (Increase my research conducting capacity) with an average of $53.8 \%$ for agree and $15.4 \%$ for strongly agree. This is followed by item 1 which is better rank (I got higher status than before) representing $49.5 \%$ for agree and 13.2 for strongly agree, respectively. The third highly ranked item was item 2 with agree response of $46 \%$ and strongly agree response of $9.9 \%$. Item 4 which is related with engagement and productivity (improve my academic engagement and productivity) generated agree response of $44 \%$ and strongly agree response of $11 \%$. Item 3 which is related with salary increment (better payment) generated agree response of $41.1 \%$ and strongly agree response of $8.8 \%$. Item 7 which is related with developing new social networks (create new social networks and develop experiences) generated agree and strongly agree responses $30.8 \%$ and $16.5 \%$ from the respondents. Moreover, item 6 which is related with increased publication (increase publications) had generated agree and strongly agree response of $29.7 \%$ and $4.4 \%$ from respondents respectively.

Table 17: Academic Promotion-HU

| Items | Strongly <br> Disagree <br> (1) | Disagree <br> (2) | Neutral <br> (3) | Agree <br> (4) | Strongly <br> Agree <br> (5) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1.I got higher status than before $7.7 \%$ | $13.2 \%$ | $16.5 \%$ | $49.5 \%$ | $13.2 \%$ |  |
| 2.Ability to generate new <br> knowledge as well as transfer it <br> to my students | $8.8 \%$ | $15.4 \%$ | $19.8 \%$ | $46.2 \%$ | $9.9 \%$ |
| 3.Better payment | $15.4 \%$ | $4.4 \%$ | $26.4 \%$ | $45.1 \%$ | $8.8 \%$ |
| 4.Develop my academic <br> engagement and productivity | $6.6 \%$ | $15.4 \%$ | $23.1 \%$ | $44.0 \%$ | $11.0 \%$ |
| 5.Increase my research <br> conducting capacity | $5.5 \%$ | $6.6 \%$ | $18.7 \%$ | $53.8 \%$ | $15.4 \%$ |
| 6.Increase publications | $17.6 \%$ | $18.7 \%$ | $29.7 \%$ | $29.7 \%$ | $4.4 \%$ |
| 7.Create new social networks <br> and develop experiences | $11.0 \%$ | $23.1 \%$ | $18.7 \%$ | $30.8 \%$ | $16.5 \%$ |

Source: Own Survey
d) Promotion - Dire Dawa University (DDU)

Table 18 shows the frequencies of female faculties who are in a position or had the experience of leadership in their current institution, which is in Dire Dawa University. Out of 54 sample respondents, $31.5 \%$ (17) of respondents answered yes, whereas over half of respondents representing $68.5 \%$ (37) answered no.

Table 18: Leadership Promotion: Have You Been Promoted to The Leadership Position- DDU?

|  | Frequency | Percent | Valid Percent Cumulative |
| :--- | :--- | :--- | :--- | :--- |
| Percent |  |  |  |

## Source: Own Survey

Table 19 presents the agreement degrees of respondents concerning their leadership experiences in their current university. An overwhelming number of respondents agreed with item 4 , the ability to face challenges (It has improved my ability to face problems, and get a solution for it). This represented $35.3 \%$ for agree and $58.8 \%$ for strongly agree. This is followed by item 2 which is related with leadership execution (It helped me to practice my leadership skill) with an average of $23.5 \%$ for agree and $47.1 \%$ for strongly agree respectively.

Item 3 which is related with power of negotiation in decision making (It has increased my ability to negotiate and make decision) ranked as the third highly ranked item. The respondents answered with agree to item 3 with $35.3 \%$ and strongly agree with $35.3 \%$. Item 5 is related with ability to control resources (It increased my ability to command over resources). The response showed that respondents answered agree with $35.3 \%$ and strongly agree with $29.4 \%$. Item 1 is related with being known (It helped me to meet new people and known to others as well). The item generated a response of agree of $52.9 \%$ and strongly agree of $17.6 \%$. Item 6 is related with raising of income (better pay). The item generated agree and strongly agree responses of $35.3 \%$ and $0 \%$ from respondents.

Table 19: The Experiences of Being Promoted to a Leadership Position-DDU
$\left.\begin{array}{l|l|l|l}\hline \hline \begin{array}{l}\text { Items }\end{array} & \begin{array}{l}\text { Strongly } \\ \text { Disagree (1) }\end{array} & \begin{array}{l}\text { Disagree } \\ \text { (2) }\end{array} & \begin{array}{l}\text { Neutral } \\ \text { (3) }\end{array}\end{array} \begin{array}{l}\text { Agree } \\ \text { (4) }\end{array} \quad \begin{array}{l}\text { Strongly } \\ \text { Agree (5) }\end{array}\right]$

## Source: Own Survey

As shown in Table 20, considerable numbers of respondents agreed with item 2 which is related with knowledge transfer (ability to generate new knowledge as well as transfer it to my students). This represented $79.6 \%$ for agree and $14.8 \%$ for strongly agree. Similarly, over half of respondents agreed with item 1 which is related with better rank (I got higher status than before). The response of agree accounted for $75.9 \%$ and strongly agree accounted for $13.0 \%$.

The next highly ranked item was item 4 which is related with engagement and productivity (Develop my academic engagement and productivity). The response indicates that $70.4 \%$ answered agree while $11.1 \%$ answered strongly agree. Item 5 is related with improve research capacity building (Increase my research conducting capacity). The item generated agree response of $64.8 \%$ and strongly agree response of $14.8 \%$. Item 7 is related with develop new social networks (Create new social networks and develop experiences). The item generated agree response of $63.0 \%$ and strongly agree response of $9.3 \%$. Item 3 is related with salary increment (Better payment) and had an agree response of $51.9 \%$ and strongly agree response of $11.6 \%$. Item 6 is related with higher publications (Increase publications) and generated agree and strongly agree response of $57.4 \%$ and $9 . \%$ from respondents respectively.

Table 20: Academic promotion- DDU

|  | Strongly <br> Disagree <br> (1) | Disagree <br> Items | Neutral <br> (3) | Agree <br> (4) | Strongly <br> Agree <br> (5) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1. I got higher status than <br> before | $0.0 \%$ | $1.9 \%$ | $9.3 \%$ | $75.9 \%$ | $13.0 \%$ |
| 2. Ability to generate new <br> knowledge as well as <br> transfer it to my students | $0.0 \%$ | $0.0 \%$ | $5.6 \%$ | $79.6 \%$ | $14.8 \%$ |
| 3. Better payment | $0.0 \%$ | $14.8 \%$ | $22.2 \%$ | $51.9 \%$ | $11.1 \%$ |
| 4. Develop my academic <br> engagement and <br> productivity | $0.0 \%$ | $0.0 \%$ | $18.5 \%$ | $70.4 \%$ | $11.1 \%$ |
| 5. Increase my research <br> conducting capacity | $0.0 \%$ | $1.9 \%$ | $18.5 \%$ | $64.8 \%$ | $14.8 \%$ |
| 6. Increase publications <br> 7. Create new social <br> networks and develop <br> experiences <br> 5.6\% | $0.0 \%$ | $14.8 \%$ | $13.0 \%$ | $57.4 \%$ | $9.3 \%$ |

## Source: Own Survey

e) Working Environment - HU

The third and the last element of research question one (RQ1) was the working environment from the social capital dimension. The reliability statistics was checked by following the same process as previous items. The result of Cronbach's alpha for internal consistency of 16 items $($ Cronbach alpha $=0.761)$ indicated that the result was less than the networking and promotion question items. However, the estimated number is still above the acceptable limit of 0.70 (Cortina, 1993).

The following discussion is related to the working environment construct indicated in Table 21. Over a quarter of respondents answered agree with $35.2 \%$ and strongly agree with $29.7 \%$ for item 5 . Item 5 is related with the closeness of the workplace (The proximity of the campus to home and family contributes to better work-life balances of female faculties). This is followed by item 2 which is related with adequate resources (Sufficient reading materials for the teaching and learning process foster the productivity of faculties). The result indicated that an average of $37.4 \%$ answered agree and $16.5 \%$ answered strongly agree. Item 10 is related with safety and security of the
workplace (proper workplace security). The item was third-ranked with agreed response of $33.0 \%$ and strongly agree response of $19.8 \%$.

Table 21: Working Environment - Haramaya University

| Items | Strong <br> Disagr | Disagree )(2) | Neutral <br> (3) | Agree <br> (4) | Strongly <br> Agree (5) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1.A convenient physical working environment contribute to working efficiency and wellbeing of faculties | 11.0\% | 28.6\% | 15.4\% | 28.6\% | 16.5\% |
| 2. Sufficient reading materials for teaching and learning process foster the productivity of faculties | 6.6\% | 16.5\% | 29.7\% | 37.4\% | 16.5\% |
| 3. An attractive reward and incentives encourage faculties to keep actively working as well as remaining in the university | 6.6\% | 27.5\% | 19.8\% | 29.7\% | 16.5\% |
| 4. Facilitating collaborative environment such as research works among faculties increases internal competencies as well as enhance publications. | 8.8\% | 24.2\% | 29.7\% | 26.4\% | 11.0\% |
| 5. The proximity of the campus to home and family contributes to better work-life balances of female faculty. | 5.5\% | 14.3\% | 15.4\% | 35.2\% | 29.7\% |
| 6. Suitable office space and arrangements based on department foster the interaction as well as building relationships among faculties | 5.5\% | 31.9\% | 19.8\% | 24.2\% | 18.7\% |
| 7. A supportive and flexible culture of the working environment creates a positive morale to faculties | 12.1\% | 25.3\% | 18.7\% | 37.4\% | 6.6\% |
| 8.Positive working environment inspire faculties to take part in creativity and innovation activities | 4.4\% | 37.4\% | 15.4\% | 5.5\% | 37.4\% |
| 9. Sufficient funds and material resources inspire faculties to build and expand their research capacity level | 5.5\% | 27.5\% | 15.4\% | 37.4\% | 14.3\% |
| 10. Proper work-place security | 12.1\% | 17.6\% | 17.6\% | 33.0\% | 19.8\% |
| 11.Gender diversity at the top leadership level | 9.9\% | 14.3\% | 22.0\% | 42.9\% | 11.0\% |

Source: Own Survey

## f) Working environment - Dire Dawa University

Over half of respondents representing $51.9 \%$ answered agree while $14.8 \%$ answered strongly agree to item 10 in Dire Dawa University. Item 10 in Table 22 is related with safety and security of the workplace (proper workplace security) which is the most important item since it motivates female faculties to stay and work long hours in the office thereby fostering their academic productivity. Similarly, over two thirds of respondents answered agree with $66.7 \%$ and strongly agree with $1.9 \%$ for item 7 . Item 7 is related with the flexibility of the workplace policies (a supportive and flexible culture of the working environment creates positive morale to faculties). This is followed by item 6 which is related with office arrangement (suitable office space and arrangements based on department foster the interaction as well as building relationships among faculties). The third-ranked item represented agree response of $66.7 \%$ from the respondents.

Table 22: Working Environment - Dire Dawa University

| Items | Strongly <br> Disagree (1) | Disagree <br> (2) | Neutral <br> (3) | Agree <br> (4) | Strongly <br> Agree (5) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1. A convenient physical working <br> environment contribute to working <br> efficiency and wellbeing of faculties | $9.3 \%$ | $18.5 \%$ | $11.1 \%$ | $61.1 \%$ | $0.0 \%$ |
| 2. Sufficient reading materials for <br> teaching and learning process foster the <br> productivity of faculties |  |  |  |  |  |
| 3. An attractive reward and incentives | $5.6 \%$ | $13.0 \%$ | $16.7 \%$ | $64.8 \% 0.0 \%$ |  |
| encourage faculties to keep actively <br> working as well as remaining in the <br> university |  |  |  |  |  |
| 4. Facilitating collaborative <br> environment such as research works <br> among faculties increases internal <br> competencies as well as enhance <br> publications. | $9.3 \%$ | $3.7 \%$ | $22.2 \%$ | $63.0 \%$ | $1.9 \%$ |
| 5. The proximity of the campus to <br> home and family contributes to better <br> work-life balances of female faculty. | $20.4 \%$ | $5.6 \%$ | $16.7 \%$ | $55.6 \%$ | $1.9 \%$ |
| 6. Suitable office space and <br> arrangements based on department <br> foster the interaction as well as <br> building relationships among faculties | $11.1 \%$ | $13.0 \%$ | $9.3 \%$ | $66.7 \% 0.0 \%$ |  |
| 7. A supportive and flexible culture of <br> the working environment creates a <br> positive morale to faculties | $7.4 \%$ | $11.1 \%$ | $13.0 \%$ | $66.7 \%$ | $1.9 \%$ |


| 8. Positive working environment <br> inspire faculties to take part in <br> creativity and innovation activities | $13.0 \%$ | $7.4 \%$ | $16.7 \%$ | $59.3 \% 3.7 \%$ |
| :--- | :--- | :--- | :--- | :--- |
| 9. Sufficient funds and material <br> resources inspire faculties to build and <br> expand their research capacity level | $14.8 \%$ | $18.5 \%$ | $9.3 \%$ | $55.6 \% 1.9 \%$ |
| 10. Proper work-place security | $1.9 \%$ | $13.0 \%$ | $18.5 \%$ | $51.9 \%$ |
| 1. Gender diversity at the top <br> leadership level | $13.0 \%$ | $9.3 \%$ | $16.7 \%$ | $57.4 \% 3.7 \%$ |

Source: Own Survey

### 3.2.3. Research question two (RQ2) - What are the personal and organizational factors that inhibit the academic productivity of female academicians from a social capital perspective?

The second research question assessed the major personal and organizational factors that influence the academic productivity of female faculties from the social capital perspective. The factors are related to networking, promotion, and working environment in both Haramaya and Dire Dawa Universities. Participants responded to questions specific to the two categories of items included in the tables showing personal and organizational factors. The researcher asked respondents to scale the items using a Likert scale ranging from strongly disagree 1 to strongly agree 5 to rate the major causal factors included in the tables below.

Reliability statistics was checked for Table 23 by using Cronbach's alpha to test the reliability as well as the internal consistency of 11 items. The reliability test estimates the interrelated degrees of the multiple items as a set of a group under the personal factor variable. The Cronbach's alpha measure verified that internal consistency for the items was 0.848 which is well above the acceptable limit of 0.70 (Cortina, 1993).
a) Personal factors: Haramaya University

By far, Table 23 shows that the major causal factor that influence the academic productivity of female faculty members was item 6 . Item 6 is related with time management (I have a problem in time management which harms my academic achievements). On average, respondents answered agree with an average of $23.1 \%$ and strongly agree with an average of $31.9 \%$. Similarly, over a quarter of respondents agreed with item 5 which is related with work-life balance (Too much family responsibility is
affecting my academic productivity). This represented $33.0 \%$ for agree and $20.9 \%$ for strongly agree. This is followed by item 1 which is related with fewer conference participations (I do not participate in research conferences) with an average of $24.2 \%$ for agree and $25.3 \%$ for strongly agree.

The issue of security and safety problem is related with item 11 (I feel insecure to work in the university's environment). This represented $25.3 \%$ for agree and $24.2 \%$ for strongly agree. Teaching and mentoring is related with item 10 (I consume much of my time in teaching and mentoring). The result indicated that $14.3 \%$ answered agree and $28.6 \%$ answered strongly agree.

Item 8 is related with the communication skill and the result showed that $47 \%$ of the respondents answered agree while $0 \%$ answered strongly agree. Item 4 is related with the effort to access information flow. The result indicated that $39.6 \%$ answered agree while only $1.1 \%$ responded with strongly agree. Item 7 is related with lack of computer skills to access internet service. The result indicated that $16.5 \%$ of respondents answered agree and while $13.2 \%$ of them answered strongly agree. Regarding exerting inadequate effort to get promoted, $24.2 \%$ of the respondents answered agree while $1.1 \%$ answered strongly agree. Finally, lack of confidence which is item 2 and inadequate research skill which is item 9 were the items that generated the least agreed responses. The result show that an average of $17.6 \%$ and $9.9 \%$ of respondents answered agree for both items respectively.

Table 23: Personal Factors -Haramaya University

|  | Strongly <br> Disagree (1) | Disagree <br> $(2)$ | Neutral <br> (3) | Agree <br> (4) | Strongly <br> Agree (5) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1.I do not participate in research <br> conferences | $4.4 \%$ | $28.6 \%$ | $17.6 \%$ | $24.2 \%$ | $25.3 \%$ |
| 2.I have a lack of self-confidence <br> to create new networks of <br> cooperation | $33.0 \%$ | $37.4 \%$ | $12.1 \%$ | $17.6 \%$ | $0.0 \%$ |
| 3.I exert less effort to promote <br> myself in an academic career | $27.5 \%$ | $33.0 \%$ | $14.3 \%$ | $24.2 \%$ | $1.1 \%$ |
| 4.I do not exert enough effort to <br> seek information for my <br> academic advancement | $29.7 \%$ | $15.4 \%$ | $14.3 \%$ | 39.6 | $1.1 \%$ |
| 5.Too much family responsibility <br> is affecting my academic <br> productivity | $6.6 \%$ | $22.0 \%$ | $17.6 \%$ | $33.0 \%$ | $20.9 \%$ |


| 6.I have a problem in time <br> management which has negative <br> impact on my academic <br> achievements | $14.3 \%$ | $20.9 \%$ | $9.9 \%$ | $23.1 \%$ | $31.9 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 7.I have difficulty in browsing <br> internet to access relevant <br> academic websites that would <br> help me boost my academic <br> achievements | $34.1 \%$ | $31.9 \%$ | $4.4 \%$ | $16.5 \%$ | $13.2 \%$ |
| 8.I have a limitations of <br> communication skills | $37.4 \%$ | $6.6 \%$ | $8.8 \%$ | $47.3 \%$ | $0.0 \%$ |
| 9.I do not have the required skill <br> to engage in research activities | $36.3 \%$ | $50.5 \%$ | $3.3 \%$ | $9.9 \%$ | $0.0 \%$ |
| 10.I consume much of my time in <br> teaching and mentoring | $1.1 \%$ | $44.0 \%$ | $12.1 \%$ | $14.3 \%$ | $28.6 \%$ |
| 11.I feel insecure to work in the <br> university's environment | $22.0 \%$ | $6.6 \%$ | $22.0 \%$ | $25.3 \%$ | $24.2 \%$ |

Source: Own Survey
b) Personal Factors - Dire Dawa University

Table 24 demonstrates that over a quarter of respondents answered agree with an average of $25.9 \%$ and strongly agree with an average of $33.3 \%$ for item 6 which is related with time management (I have a problem in time management which harms my academic achievements). This is followed by item 11 which is related with the issue of security and safety problem (I feel insecure to work in the university's environment). The result indicated that an average of $46.6 \%$ answered agree while an average of $14.8 \%$ answered strongly agree.

Item 10 is related with teaching and mentoring (I consume much of my time in teaching and mentoring). The result indicated that $48.1 \%$ answered agree while $5.6 \%$ answered strongly agree. Item 1 on the other hand is concerned with attending fewer conferences (I do not participate in research conferences). The result of the survey show that $46.3 \%$ answered with agree while no respondents responded with strongly agree. Item 7 is related with lack of enough computer skills to access internet (I have difficulty in browsing internet to access relevant academic websites that would help me boost my academic achievements). To this, $38.9 \%$ of the respondents answered agree while $5.6 \%$ of them answered with strongly agree.

Item 4 is related with exerting less effort to access information (I do not exert enough effort to seek information for my academic advancement). The result of the survey show that the item generated $42.6 \%$ of agree response and $1.9 \%$ of strongly agree response. Moreover, item 3 is related with exerting inadequate effort to get promoted (I exert less effort to promote myself in academic career). The item generated agree and strongly agree responses $44.4 \%$ and $0 \%$ from respondents. Finally, item 9 which is related with inadequate research skill and item 2 which is related with lack of confidence are the least scored items in the table. The items generated agree response of $(1.9 \%, 0 \%)$ and strongly agree response of $(1.9 \%, 1.9 \%)$ to the respective items.

Table 24: Personal Factors - Dire Dawa University

| Items | Strongly <br> Disagree (1) | Disagree <br> (2) | Neutral <br> (3) | Agree <br> (4) | Strongly <br> Agree (5) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1.I do not participate in research <br> conferences | $16.7 \%$ | $27.8 \%$ | $9.3 \%$ | $46.3 \%$ | $0.0 \%$ |
| 2.I have a lack of self-confidence to <br> create new networks of cooperation | $64.8 \%$ | $29.6 \%$ | $3.7 \%$ | $0.0 \%$ | $1.9 \%$ |
| 3.I exert less effort to promote myself <br> in academic career | $27.8 \%$ | $18.5 \%$ | $9.3 \%$ | $44.4 \%$ | $0.0 \%$ |
| 4.I do not exert enough effort to seek <br> information for my academic <br> advancement | $20.4 \%$ | $24.1 \%$ | $11.1 \%$ | $42.6 \%$ | $1.9 \%$ |
| 5.Too much family responsibility is <br> affecting my academic productivity | $3.7 \%$ | $59.3 \%$ | $3.7 \%$ | $16.7 \%$ | $16.7 \%$ |
| 6.I have a problem in time <br> management which has negative <br> impact on my academic achievements | $11.1 \%$ | $24.1 \%$ | $5.6 \%$ | $25.9 \%$ | $33.3 \%$ |
| 7.I have difficulty in browsing internet <br> to access relevant academic websites <br> that would help me boost my <br> academic achievements | $14.8 \%$ | $29.6 \%$ | $11.1 \%$ | $38.9 \%$ | $5.6 \%$ |
| 8.I have a limitations of <br> communication skills | $22.2 \%$ | $7.4 \%$ | $44.4 \%$ | $24.1 \%$ | $1.9 \%$ |
| 9.I do not have the required skill to <br> engage in research activities | $59.3 \%$ | $29.6 \%$ | $7.4 \%$ | $1.9 \%$ | $1.9 \%$ |
| 10. I consume much of my time in <br> teaching and mentoring | $18.5 \%$ | $27.8 \%$ | $0.0 \%$ | $48.1 \%$ | $5.6 \%$ |
| 11.I feel insecure to work in the <br> university's environment | $0.0 \%$ | $33.3 \%$ | $5.6 \%$ | $46.3 \%$ | $14.8 \%$ |

Source: Own Survey
c) Organizational Factors - Haramaya University

Table 25 shows the organizational factors that influence the academic productivity of female faculties at Haramaya University. A considerable number of participants agreed with item 9 which is related with inefficient gender concessions policies (The University does not have family-friendly policies such as daycare service assistance, location support, flexible time, etc.). The result indicated that an average of $22.0 \%$ for agree and $50.5 \%$ for strongly agree. Similarly, over a quarter of respondents (33.0\% agree, 28.6\% strongly agree) consented with item 6 which is related with lack of recognition (Less institutional rewards to acknowledge the performance of female staff).

Item 7 is related with deficiency in geographic mobility (Lack of academic mobility) representing $27.5 \%$ for agree and $26.4 \%$ for strongly agree. Item 2 (The existence of glass ceiling (invisible barriers) towards female faculties at top leadership positions) is concerned with the unseen obstacles female faculties confront at the top leadership position. This is indicated by the agreement of over a quarter of respondents (36.3\%) to the issue while $18.7 \%$ of the respondents even strongly agreed. The other issue that respondents gave more concern was the issue of informal network that excluded female faculties and represented by item 3. To this, $42.9 \%$ agreed to the issue while only $6.6 \%$ of them strongly agreed to the issue.

Item 8 is related with lack of women role model at a senior rank (Leaky pipeline or the continuous loss of senior female faculties at higher position). The item generated agree response of $28.6 \%$ and strongly agree response of $17.6 \%$. The issue of insufficient training and incentives is represented by Item 5. Over a quarter of respondents (28.6\%) agreed to the constraint while $17.6 \%$ highly rated the extent of the problem. Improper diffusion of information (Deficient information transparency) which is represented by item 1 generated agree and strongly agree responses of $29.7 \%$ and $14.3 \%$ from respondents. The concern related with course overload is represented by item 4 to which $13.2 \%$ and $15.4 \%$ of respondents respectively answered agree and strongly agree to the issue.

Table 25: Organizational Factors - Haramaya University

|  | Strongly <br> Disagree (1) | Disagree <br> (2) | Neutral <br> (3) | Agree <br> (4) |
| :--- | :--- | :--- | :--- | :--- |
| Strongly <br> Agree (5) |  |  |  |  |
| 1.Deficient information transparency | $11.0 \%$ | $18.7 \%$ | $26.4 \%$ | $29.7 \%$ |
| $14.3 \%$ |  |  |  |  |
| 2.The existence of glass ceiling <br> (invisible barriers) towards female <br> faculties at top leadership positions. | $8.8 \%$ | $26.4 \%$ | $9.9 \%$ | $36.3 \%$ |
| 3.Informal socialization (like <br> grouping) that exclude the <br> participation and contributions of a <br> female as well as minority faculty <br> members. | $11.0 \%$ | $17.6 \%$ | $22.0 \%$ | $42.9 \%$ |
| 4.The university gives me overload <br> courses that consume my time | $25.3 \%$ | $42.9 \%$ | $3.3 \%$ | $13.2 \%$ |
| 5.There is no sufficient training in <br> the university that improves the <br> academic productivity of female | $13.2 \%$ | $24.2 \%$ | $17.6 \%$ | $29.7 \%$ |
| faculty |  |  |  |  |
| 6.Less institutional rewards to <br> acknowledge the performance of <br> female staffs | $7.7 \%$ | $11.0 \%$ | $19.8 \%$ | $33.0 \%$ |
| 7.Lack of academic mobility | $8.8 \%$ | $17.6 \%$ | $19.8 \%$ | $27.5 \%$ |
| 8.Leaky pipeline ( the continuous loss <br> of senior female faculties at higher <br> position or rank) | $13.2 \%$ | $22.0 \%$ | $18.7 \%$ | $28.6 \%$ |
| 9.The university does not have <br> family-friendly policies such as <br> daycare service assistance, lactation <br> support( private place for <br> breastfeeding), flex time, etc. | $6.6 \%$ | $6.6 \%$ | $14.3 \%$ | $22.0 \%$ |

Source: Own Survey
d) Organizational Factors - Dire Dawa University

Table 26 shows the following organizational-related factors that influence networking, promotion, and working environment of female faculties at Dire Dawa University. Over seven tenth ( $7.4 \%$ agree, $70.4 \%$ strongly agree) of respondents agreed with item 9 which is related with inefficient gender concession policies. They cite it as a major causal factor that negatively influence the academic productivity of female faculties at a higher education institution. Similarly, a considerable number of respondents agreed with item 6 which is related with lack of recognition (Less institutional rewards to acknowledge the performance of female staff). The result show that $24.1 \%$ answered agree and $50.0 \%$
answered strongly agree. The issue of improper diffusion of information represented by Item 1 generated $51.9 \%$ of agree response and $13.0 \%$ of strongly agree response.

Item 7 ( $53.7 \%, 7.4 \%$ ), deficiency in geographic mobility (Lack of academic mobility), and item $5(20.4 \%, 13.0 \%)$, training and incentives (There is no sufficient training in the university that improves the academic productivity of female faculty) were the next highest-ranking factors in terms of the major organizational factors that influence the academic productivity of respondents. Four other factors, out of a total of 9 , were ranged as the last ranked items by respondents in terms of agreement. Informal network (9.3\%, $3.7 \%$ ), course overload (5.6\%), and glass ceiling or unacknowledged barriers (3.7\%, $3.7 \%$ ) represented items that registered lower agreement score consecutively. Lastly, item 8 which is related with leaky pipeline or lack of women role model at a senior position level was an item that generated the least agreement response with an average of ( $1.9 \%$ ).

Table 26: Organizational Factors - Dire Dawa University

| Items | Strongly <br> Disagree (1) | Disagree <br> (2) | Neutral <br> (3) | Agree <br> (4) | Strongly <br> Agree (5) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1. Deficient information transparency | $3.7 \%$ | $16.7 \%$ | $14.8 \%$ | $51.9 \%$ | $13.0 \%$ |
| 2. The existence of glass ceiling <br> (invisible barriers) towards female <br> faculties at top leadership positions. | $13.0 \%$ | $61.1 \%$ | $18.5 \%$ | $3.7 \%$ | $3.7 \%$ |
| 3. Informal socialization (like grouping) <br> that exclude the participation and <br> contributions of a female as well as <br> minority faculty members. | $9.3 \%$ | $61.1 \%$ | $16.7 \%$ | $9.3 \%$ | $3.7 \%$ |
| 4. The university gives me overload <br> courses that consume my time | $18.5 \%$ | $68.5 \%$ | $7.4 \%$ | $5.6 \%$ | $0.0 \%$ |
| 5. There is no sufficient training in the <br> university that improves the academic <br> productivity of female faculty | $0.0 \%$ | $18.5 \%$ | $48.1 \%$ | $20.4 \%$ | $13.0 \%$ |
| 6. Less institutional rewards to <br> acknowledge the performance of female <br> staffs | $1.9 \%$ | $9.3 \%$ | $14.8 \%$ | $24.1 \%$ | $50.0 \%$ |
| 7. Lack of academic mobility | $3.7 \%$ | $18.5 \%$ | $16.7 \%$ | $53.7 \%$ | $7.4 \%$ |
| 8. Leaky pipeline ( the continuous loss <br> of senior female faculties at higher <br> position or rank) | $9.3 \%$ | $64.8 \%$ | $24.1 \%$ | $1.9 \%$ | $0.0 \%$ |
| 9. The university does not have family- <br> friendly policies such as daycare service <br> assistance, lactation support( private <br> place for breastfeeding), flex time, etc. | $1.9 \%$ | $9.3 \%$ | $11.1 \%$ | $7.4 \%$ | $70.4 \%$ |

Source: Own Survey

### 3.3. Qualitative Results

The quantitative phase above demonstrated the general role of social capital as well as the analyzed procedures using numeric statistical methods by answering research question one (RQ1) and two (RQ2). In this qualitative phase, the researcher assessed research question three (3) which is organizational social capital policies and provisions of the institution as well as how these incentives play a role in enhancing the academic productivities of female faculties. This was done by conducting semi-structured in-depth interviews with five (5) senior female academic staffs from both Haramaya and Dire Dawa Universities.

Therefore, the purpose of research question three is to deeply understand the sustained governmental policies and efforts to overcome the overwhelming gender differences in academic productivity based on the lived experience; and assess how senior women faculties perceived the role of social capital in enhancing academic productivity of female academic staffs ( concerning networking, promotion, and working environment) and identify the limitations on policy as well as strategy implementation of the institutions.

### 3.3.1. Demographic Data of Interviewed Participants

The qualitative phase of the study interviewed five (5) women who are currently teaching at long-dated Haramaya University and the recently established Dire Dawa University in Ethiopia. Three of the participants were from Haramaya University and two are from Dire Dawa University. Four of the women were Assistant professors, and one was a senior lecturer.All of the participants, had at one point, an additional management position in academia. Three of the participants are currently in a position in the university management.

The ages of the participants ranged from 32-43 years old with more than 10 years of employed experience. The sample of the study consisted of participants from Business and Economics, Agriculture, Institute of Technology, and Social Sciences faculties. Three were married and mothers and had between one and three children. Of the remaining two, one was single while the other one was divorced.

### 3.3.2. Research Question Three (RQ3) - What Is the Effect of Organizational Social Capital Provision (Policies) to Enhance the Academic Productivity of Female Academicians in the University?

During the analysis of in-depth interviews in addressing research question three (RQ3), the results were coded and categorized into two broader themes. The two themes that emerged were; institutional gender-responsive policy and provision of social capital and its flow.
a) Institutional gender-responsive policy and provision

Gender-responsive policies and interventions such as national policy on Ethiopian women, education and training policy, family law, and revised criminal code are designed to achieve gender equality and take measures to recruit as well as enhance women's participation in decision-making positions. Moreover, Ethiopian education and training policy which was enacted in 1994 state the need to give special attention to females in all levels of the educational system. In response to these, affirmative action program has been introduced and recorded under Article 35(3) of the FDRE constitution to address the historical disadvantages that Ethiopian women has gone through. Moreover, the government has enacted legislation and ratified an article to compensate and remedy women at all level of social, economic, and political spheres of life.

Affirmative action refers to a considerable strategy implemented by employers, university admissions offices, and government institutions, intending to enhance the economic and educational status of a certain group member such as minorities and women (Holzer \& Neumark, 2006). Based on this policy intervention, all the public universities in Ethiopia are committed in one way or the other to increase the female student's enrollment by awarding $15 \%$ score points in the entrance examinations to join the universities with lower average scores compared to male students. On the other hand, a similar strategy has been undertaken by university management to deal with the issue of gender disparity during recruitment. For example, when the competition is among faculty candidates in recruitment, preference would be given for female applicants with a 3\% advantage under all competitive situations. This is done since female faculties are comparatively less represented in all management positions of the university.

In line with such institutional provisions, Haramaya and Dire Dawa Universities are implementing similar AA initiative policies, especially during the recruitment of new academic staff. Haramaya university senate legislation (July 2013) Article 49 (49. 1.2), clearly states that:

The appointment and promotion of academic staff shall be implemented based on the requirements indicated below for each academic rank. However, during the appointment process, female academic staff shall get three (3) additional points as affirmative action and given priority when they have tie points with male candidates.

Similarly, revised senate legislation of Dire Dawa University (April 2017) Article 141 (3), states that;

Female candidate who fulfills the minimum requirement shall get an additional 3\% of the total points she has scored on top of her total calculated points until the academic staff gender ratio reaches 50:50 at the university level.

As a result of AA provisions, some progress has been made regarding the provision of opportunities to hire more female academic staff at higher education institution levels. As Ethiopian Education Statistics Annual Abstract by Ministry of Education (MOE, 2017) indicated, the share of female academic staff in higher education has increased from $10.9 \%$ in $2013 / 14$ to $13.6 \%$ in $2016 / 17$, increasing by $2.7 \%$. However, there is limited quantitative and qualitative evidence that indicates the extent to which affirmative action plays a role in improving career advancement in general and academic productivity (research, publication, and decision making position) in particular at Ethiopian higher educational institutions.

Besides affirmative action, the FDRE constitution has introduced the Strategic Plan Agreement to all public universities of Ethiopia to address the existing inequality to access as well as succeed in higher education institutions (Molla, 2018).Based on the strategic plan agreement, the Ethiopian Higher education proclamation under Article 65 (2), indicates that:

Social goals, such as measures to enhance the nationality composition of its academic staff, increase the proportion of senior positions held by women, and assistance to disadvantaged sections of its students (FDRE constitution, 2009).

In light of the article cited above, all higher education institutions in Ethiopia are obliged to follow a five-year plan, agreement with the government, to receive the grant budget based on the strategically planned funding formula (Molla, 2018). However, due to dysfunctional and improper policy implementation, the grant provisions in higher education institutions have not been realized as was stated in the agreement (Molla, 2018; Semela et al., 2017). As a result, the proportions of female faculties in decision making positions remains far below the planned level, with no progress since 2009/10.

The implementation of the affirmative action program signifies a major step towards promoting new arenas of gender equality in enabling women to have equal access to the resources as well as achieve a higher position in the community (Gordon, 1996; Vickers, 2002). Majorities of the participants were appreciative of the fact that all public universities had recognized the underrepresentation of female faculties and implementing affirmative action, which opens the window for those who have the potential to compete and participate based on equality with their male counterparts.

Dr MB, an Assistant professor at Haramaya University, who has been working in different management positions in the university, revealed how gender responsive policy (affirmative action) plays a role in breaking the glass ceiling that exists at higher management positions:
hmm, if you see in the context of our country, yes, affirmative action is necessary at all levels, especially in the situations that the glass ceiling still exists and the networks are blocked regardless of your potential and capability to compete and fit for the required position, there is a need to break this bond by any means either through affirmative action or other measures. However, in the short term, AA may create misconceptions about women's capability which needs to be prevented through awareness creation, since it drives the unintended consequences of AA. (Dr. MB).

Ms SA echoed these sentiments about the implementation of gender-responsive policies in higher education:

The implementation of gender-responsive policies such as affirmative action in higher education through hiring and promotion creates an inclusive environment that fosters diversity as well as redress gender inequality at all levels, especially in
management positions. However, there is a limitation in practice, especially in creating a family-friendly policy that would be a factor to the solution for our 50\% of the problem, which holds us back in making progress.

In endorsing the initiatives of the universities provision policy in recruitment, Ms. KS another academic staff intimated:

For me, I consider AA as a gate way or opportunity to show the direction that enabled women how to compete while looking for a position or get succeed in the academic world. Because our problem is not about being capable or not, it is about getting equal opportunities (KS).

Dr. MG also shares her experience on the benefits of university provision through affirmative action.

I got a chance to attend my postgraduate study in the program called Sida, which was the Swedish International Development Agency in collaboration with Haramaya University. At the time, it was only opened to 40 female students to compete based on their GPA as well as take an exam to win the program. That was my first turning point that starts to attract the academic career that I have now (MG).

But, according to one of participant (Ms NS), the implementation of affirmative action policy is more necessary at lower-level schools such as in elementary and high schools. Ms NS, who was serving as the head of a department at the time of the interview, explains why she holds this view:

In my opinion, the necessity of $A A$ action depends on the level of education that we belong to, for example, as we get to use or see in our culture, girls are neither getting equal access to education nor time to do their homework due to family multiple loads, in this situation there a need to apply AA policy until they become at a level that they are able to stand in their feet and manage their time based on their studies, which is at lower elementary and high schools. Whereas in the academic management level, there is no need for $A A$ since we are all at a similar level and able to compete for the position that we want. In this level, AA action undermines our capability in performing our work. which harms our academic productivity as well as competency.(NS)
b) Social Capital and Its Flow

Numerous studies stated social capital in relations to academic productivity (Bozionelos, 2014; Salaran, 2010; Šandl, 2009b; Turner, 2002) and attributed efficiency and effectiveness in academic profession to active social capital involvement through social networks which tends to be connected between faculties via strong ties that provide the access to information, opportunities as well as social resources in higher education institution. The accumulations of social capital may facilitate the production of intellectual skills (stimulating research and publication) as well as career resources such as developmental networks, funding, time, merit etc(Angervall et al., 2018b). On the other hand, unequal distributions or flow of social capital in higher education institutions based on class, gender, and race create a division of power or rank as well as limit the ability to complete objectives such as increasing one's status or gaining additional capital within the academy.

In this vein, the interview with both Haramaya and Dire Dawa university female faculties clearly showed that social capital (networking, promotion, and working environment) did play a crucial role in their career path in general and academic productivity in particular. Majority of participants described a positive influence on their social networks with other colleagues that provided an opportunity to accumulate social capital, but several also mentioned how being multi loaded as well as unequal flow of social capital is the major factor that blocked female faculties from reaching to professorship or tenure-track which is the result of active academic productivity and performance.

Of all participants, KS was the clearest about how networking has a role in gathering information between faculties in academia: "Networking is like a pipeline of information in academia. The more a dense pipeline of a network you have with others, the quick information you get". (KS)

Similarly, Dr. MG noted how she had benefited from the reciprocal relationship that the formal and informal network has in enhancing her academic productivity:

Networking has a great role in my academic productivity. I am active in both formal and informal networks. Because we female faculties are mostly affected by informal networks, even though formal networks are in one way or another are accessible to us. Through the formal you can be appointed to informal one b/c when you show
your willingness to the requested task and perform it in the given time, you win the trust of others on you. Since, as a married woman, we can't sit and have a drink to engage in informal networks with male faculties due to family responsibility as well as our cultural complexity, we need to be active at least on the formal one. (MG)

In this regard, Dr MB described how her career based network is partially attributed in connecting her to a broader network that enabled her to be promoted for the university's management position:


#### Abstract

were at the time among senior faculties in this University about work experience besides teaching, I have told him that I worked in the finance sector at Ethiopian Airlines before joining the academic profession. And just My relation based network is so poor because mostly my networks are strategic or career-based that had some influence to get a chance to be promoted or recommended by others for a specific position, which was mostly by chance. For instance, while in a conversation with one of my colleagues who after a week, I got selected to participate in the World Bank training for a month that ended in an offer of the interim finance head position. (MB)


Ms. NS shared her perceived importance of creating social networks with colleagues that facilitates access to broader sources of information, control over resources, and a short way to gain rank and power in the academic career path:

To be productive or have active participation besides teaching, you must have a good connection with your colleagues. That's where you generate certain benefits that help grow your social capital, such as information and resources. (NS)

Many shared similar feelings that networking, through its informal relation among faculties, provided opportunities such as grants of the university, group project, publication, potential job openings, etc. On the other hand, the restricted nature of the network with lower degrees of diversity and information flow between faculties can sever career disadvantages in group-based works. SA described how limited information flows in the university, especially among faculties have impacted her academic productivity:

Especially in my field STEM, where you can't find a single female role model (colleague) to exchange experience and information with, you feel like somewhat stuck
professionally and accept the already created male-dominated network that you can't easily fit to enter.(SA)

What SA mentioned is consistent with Rosser's (2004) assertion, which points out that a low number of female faculties with limited network ties with other colleagues in STEM, may result in females feeling isolated, lack of access to role models and mentors as well as misrecognition. Similarly, when probed as to how lack of proper information transparency influences her academic productivity, NS explained:

> If you are lucky and have good bonding relations with other faculty members, especially with the male staff, you get benefits from the universities' provisions as well as incentives. There is limited information transparency from the university management. Once we all female faculties agreed to create a network and form our association, which was called "Lewt Ambassador" but due to different university' bureaucracy, it failed.(NS)

For Dr. MB, the unequal flow of social capital in which female faculty members mostly face due to the exclusion from the existing strong ties in academia, has in contrast, positively motivated her to foster her productivity as an independent and single author:

You get informed or be part of work such as a project and researches if you have something that they don't have. In this situation, they invite you to contribute unless the network is close. That's why I am a single author in case if you see most of my works. (MB)
believe that the unequal flow of social capital is the factor that blocked female to reaching to professorship or tenure-track levels. Besides the chilly climate and unequal flow of social capital as a factor to poor academic productivity, Dr. MG and KS from Haramaya University, as well as NS from Dire Dawa University had mentioned personal factors also contributed to the Dr. MB's experiences are in line with Ibarra's (1997)view, in which he argues that the lack of social capital within a colleague may create an opportunity for female faculty members to a more diverse and broad network (Ibarra, 1997). The majority of participants 'failure to establish strong ties among female faculty members as do male counterparts:

[^0]recognize in this university is female faculties seem like they accept the already existing old boy's network. And you don't see them strive to be part of that network. Every time I ask, I just got the answer of I don't have time to fight for the thing that I will not be part of it. (MG)

Similarly, KS mentioned inactiveness and improper use of the time among female faculties while creating a social network between them has a contribution to the failure to have strong ties:

When we female faculties meet mostly give moral support to each other due to our extra load that we have, whereas male staff get focused on updating new information that they have each time they meet. (KS)

NS noted her belief that female faculties spend more time on teaching and mentoring than scholarly productivity, such as research works compared to their male counterparts, which could impact their academic rank in academia.

I can say most of the female staff here devote much of their time over teaching and get busy with class loads than research even though the university gives grants to research works and innovations. That's why if you consider most of us at lecturer rank and very few on assistant professor levels. And those who got promoted get disappeared as soon as they receive the title, and you rarely see their participation.

Overall, it's evident from the qualitative first theme findings that gender-responsive policy and provision through affirmative action including access to equal opportunities to female academic staffs in all higher education institutions of Ethiopia could play vital role in breaking the glass ceiling, create inclusive environment such as diversity at management positions, motivate competencies, as well as provide educational opportunities (scholarships) to female faculties. However, the policy interventions have exclusively emphasized closing the quantitative gap (recruitment), rather than the qualitative gap, which is enhancing the academic productivity as well as ranks of female faculties by creating family-friendly policies. Moreover, in the second theme, which is social capital and its flow, the majority of participants agreed on the fact that the proper and equal flow of social capital, especially through networking, could be academically beneficial in enhancing productivity in academia.

### 3.3.3. Integration of Quantitative and Qualitative Results

The quantitative and qualitative phases of the study were combined, and connected during the interpretation section, which was at the final stage when the interview protocol was finalized, after the first phase numeric data analysis was completed. Phase two questions were confirmed based on research question three (RQ3) as well as the quantitative results since the qualitative section in explanatory mixed method seek to explain phase one by offering respondents the opportunity to answer the questions in more detailed manner. Therefore, in this section, data findings of phase one and phase two confirmed that each of the quantitative research questions presented in the first phase was supported by the follow-up qualitative results.

### 3.3.3.1. Answering the Research Questions

This study focused on the role of social capital in enhancing the academic productivity of female faculties in two higher education of Ethiopia, namely Haramaya and Dire Dawa University. The study was guided by the research questions: What is the role of social capital (networking, promotion, working environment) for the academic productivity of female academicians? What are the personal and organizational factors that inhibit the academic productivity of female academicians from a social capital perspective? and, What are the organizational social capital provisions and policies that empower the academic productivity of female academicians in the university?

To answer the research questions in connecting the quantitative findings with qualitative interview results, the researcher contemplates the following question: what was the value of adding the qualitative phase to complement the quantitative findings through understanding the organizational social capital provisions and policies provided by the university to empower the academic productivity of female faculties? The value of adding the qualitative phase of the study was twofold, such as a broad explanation for quantitative findings, and additional views that emerged from the interviews. Each of the two are explained as follows.

### 3.3.3.2. The Broad Explanations of Quantitative Findings

The main aim in which the quantitative findings of phase one connected to phase two was that the qualitative findings further expanded and complemented on the structured
numeric results of the quantitative phase. An example of this was KS's explanation from Haramaya University. In response to item 5 (access to information) under the section of networking, indicated in the survey, over half of respondents reported that networking helped them to gather new information that contributed to foster their academic productivity. This finding was further supported in the qualitative phase of the study by KS's remarks when she explained in great detail the role of networking as a "pipeline of information" as well as " short and quick way to access information." Furthermore, the participants detailed the enhancement of their academic productivity through networking, such as attending conferences or training, mentoring relationships, creating opportunities for leadership positions, sharing studies and articles, etc.

Another example that illustrates how the qualitative results further explained the quantitative results was drawn from research question 2 (RQ2). This is related with item 6 regarding time management which is one of the factors influencing the academic productivity of female faculties in the two public universities. The majority of participants in phase one agreed with the time management problem as one of the personal factors that contributed to their inactiveness in creating networks that could enhance their academic productivity in academia. The interview conducted in the second phase of this study provided opportunities for participants to explain in detail how improper use of the time among female faculties while creating a social network between them has contributed to the failure to have strong ties. For example, various factors combined with time management associated with academic productivity, such as work-life balance due to family responsibilities as well as class loads.

Furthermore, NS mentioned devoting excess time to teaching than research has contributed to lower career advancements of female faculties compared to their male counterparts. NS's explanation has explained further item 10 which is related time allocation (I consume much of my time in teaching and mentoring) under the personal factor categories in phase one. Besides, NS, in response to item 1 (information transparency) under organizational factors in phase one, has further explained how lack of proper information transparency has influenced her academic productivity in limiting her to get the benefits from the universities' provisions as well as incentives.

### 3.3.3.3. Additional Views Expressed During the Interview

During the interview, participants introduced new perspectives or ideas that were not included in the questionnaire. For example, the majority of participants mentioned the role of informal networking in fostering social capital as well as its flow in enhancing the academic productivity of female faculties in academia. In response to section two of the questionnaire about factors affecting academic productivity of female faculty from the perspective of social capital, SA raised as a factor the issue of lack of role model. According to her, this created the feeling of isolation and stuck the female faculties from advancing professionally. Moreover, this resulted also in inhibiting the female faculty from enjoying mutual career benefits of the university such as incentives as well as provisions through networking and information exchange between faculties.

Despite the negative impacts of unequal distributions of social capital for female faculties, MB revealed the possibility of strengthening the weaker ties by looking at alternative routes such as external ties that leads to a higher proportion of strong ties than their male counterparts. This idea was not included in the questionnaire, and the interviews conducted in the second phase of the study allowed participants to go beyond their responses to the questions posed in phase one. Perhaps this participant had considered the possibility of extending strong external ties by taking the unequal flow of social capital within faculties as an advantage to create a more diverse network. The questions raised during the interview prompted the participant to talk about how the exclusion from the existing network has positively motivated her to foster her productivity as an independent single author and also direct her to the possibility of extending her external network in the future.

### 3.3.3.4. Summary

In summary, this chapter presented the quantitative and qualitative findings of the study. The results from the first phase of the study helped to answer the RQ1 and RQ2 that guided the study. Moreover, the second phase of interview questions had the purpose of answering RQ3 as well as add additional value to quantitative results. The chapter concluded with an explanation of integrating quantitative and qualitative findings as well as the value of adding the second phase in a sequential mixed-method study. This method
helped provide additional explanation to the quantitative findings and also address additional views that emerged from the interviews.

# CHAPTER 4: DISCUSSIONOF QUANTITATIVE AND QUALITATIVE RESULTS 

### 4.1. Overview of the Study

The purpose of this explanatory mixed methods design was to assess the role of social capital in enhancing the academic productivity of female faculties in higher education, with regards to networking, promotion, and working environment in their career advancement. This chapter includes the discussion of results and findings of the study as related to the previous studies on women in the academic career, concerning the role of social capital in enhancing the level of research involvement, publication, community engagements, management position, and what implications may be valuable for use by legislatures, organizational policies, and women who plan to pursue as well as advance in the academic profession. A discussion on connection to this study and social capital theories and organizational policies regarding incentives and provisions are also included. The theoretical framework that framed this study is based on social capital theory. Social capital is the accumulation of a resource that thrives on strong social ties, which plays a vital role in creating access to professional opportunities as well as its advancement. The study first conducted a quantitative phase, the data for the first two research question (RQ1 and RQ2)were collected through a self-administered questionnaire with five Likertscales ranging from strongly disagree, disagree, neutral, agree, to strongly agree (Babbie, 2007). Then the questionnaire was distributed to sample of female faculties in each department of the two universities. In the second phase, qualitative study that included five in-depth semi-structured interviews with senior female faculties were held based on the first phase result as well as to address research question three (RQ3).

The following three research questions were used to guide this study:

1. What is the role of social capital (networking, promotion, working environment) for the academic productivity of female academicians?
2. What are the personal and organizational factors that inhibit the academic productivity of female academicians from a social capital perspective?
3. What are organizational social capital provisions and policies that empower the academic productivity of female academicians in the university?

The first research question (RQ1) assessed the perception of respondents regarding the 34 statement items for networking, promotion and working environment using a Likert scale ranging from strongly disagree 1 to strongly agree 5 . This is to rate how important each of the items were to them personally in determining their academic productivity along with the vital role of social capital (networking, promotion, and working environment) dimension in their academic career.

The second research question investigated the major personal and organizational factors that influenced the academic productivity of female faculties from the perspective of social capital, particularly factors related to networking, promotion, and working environment in both Haramaya and Dire Dawa Universities.

The third question explored to understand the sustained governmental policies and efforts to overcome the overwhelming gender differences in academic productivity based on the lived experience; and assess how senior women faculties perceived the role of social capital in enhancing academic productivity of female academic staffs and identify the limitations on the policy and strategy implementation of the institutions.

### 4.2. Discussion of Quantitative Results

### 4.2.1. The Role of Social Capital from Perspective of Networking, Promotion and Working Environment in Enhancing Academic Productivity

a) Networking

Respondents from both Haramaya and Dire Dawa universities commonly and highly ranked items 3 , 5 and 8 and have positive influence on academic productivity. Item 3 is concerned with having a network with coworkers which enables the individual to reflect and develop a growth mindset in his/her learning journey. Item 5 is related with the role of networking as information gathering tool to enhance academic productivity. Information is gathered by attending conferences, training and sharing studies and articles. Item 8 is concerned with the role of networking in improving negotiation skill.

The result is in line with literature on networking which show that female faculty staff develop growth mindset. The development of growth mindset enables the individual to embrace challenges and show perseverance when confronted with problems (Krakovsky, 2007). This makes the individual to believe that effort exerted eventually yields result. Developing a growth mind set help to appreciate comments and feed backs from friends and colleagues (Atwood, 2010). Individuals with growth mindset also learn from mistakes and are also inspired by the success of others (Ziegler and Stoeger, 2010). Hence due to the aforementioned reasons, individuals with growth mindset are able to reach higher levels of achievement (Krakovsky, 2007).

Networking facilitates access to information. The availability of up-to-date, relevant and timely information to teachers helps in improving their academic productivity (Haliso and Toyosi, 2013). The study also suggests that library administrators make sure the availability of up-to-date, timely and relevant information to lecturers. It is also further stated that the provision of the up-to-date information should be aided by the use of modern technology facilities. Similarly, Lin (2002) further indicates that individuals create social network in order to access information. He states that individual who enjoy high social capital are better informed through knowledge gained from social ties.

Networking also contributes to the improvement of negotiation skill. It is indicated that faculty are not always proactive in the sense that they are not aware of when and how to negotiate until opportunities pass them especially early in their careers (Sambuco et al., 2013). There is also limitation on the part of some faculty in that they don't approach institutional leaders to initiate negotiation to access resources that are critical for their success. Sambuco et al., (2013) state that this is particularly true for women academic faculty. Similar to female faculty members, junior faculty members also lack the awareness and the skills to negotiate and access resources that are integral to their academic success.
b) Administrative Promotion

Respondents from both Haramaya and Dire Dawa universities commonly and highly ranked items $2,3,4,5$ and 6 as factors that have positive influence on academic productivity. Item 2 is concerned with exercising leadership skill. Being promoted to administrative position enables the individual to practically engage in the management of
the institution. Item 3 is related with increased ability to negotiate and make decision. Being promoted to leadership position results in increased ability to negotiate and make decision. Item 4 is related with the ability to face problems and seek solution for the problems that has arisen. Engaging in administrative duties provides the chance for an individual to deal with real problems and the way of addressing these problems. Item 5 is related with increased command of resources. Individuals appointed to administrative position develop the ability and the skill to command resources. Appointment to administrative position is also associated with increased remuneration (item 6).

Getting promoted to management position help female faculty members to practice their leadership skill. If they get the chance they can exercise and demonstrate their ability and achieve organizational objective. Being in management position gives them the chance to participate in different trainings that build their capacity. They also get the opportunity to work and gain experience with those who are in senior position.

Studies show that when women are promoted to administrative position, their power of negotiation and decision making increases. O'Neil and Domingo (2015) indicated that when women highly participate in political project, this will enhance the influence of women in decision making. They further state that the appointment of women to top position boosts their power of negotiation in decision making. Hence their representation at the top management level would enable them to influence the decision of the top management.

When women are appointed to administrative position, they confront various problems and challenges in their work. In this regard the study by Kennedy (2018) indicated that women in management position face 5 biggest challenges:

1. They are held to high standard.
2. They fight gender stereotype.
3. They are challenged to play the game.
4. They are expected to manage many roles.
5. They are expected to take risk.

The results of the analysis further also show that women in management position are abler to control resources. Most of the time female managers are entrusted to sensitive management position since they are considered as stricter in management of resources. The literature also indicated that firms that employed more women to management position performed better financially (Blackburn et al., 1994; Throup, 1994). Shrader et al. (1997) discovered that the percentage of women managers employed were positively correlated with financial profitability measures of the studied firms. The finding by Shrader et al. (1997) is in harmony with the result obtained by Rosener (1995) and Katzenbach et al. (1995) who contend that the healthy performance of firms highly depends on women and middle level managers.

As was also confirmed by respondents, promotion of a given employee is associated with an increase in pay. A raise in pay is often offered for employees in connection with an increase in responsibilities or as a performance incentive (Career Guide Indeed, 2020). A bonus is different from a raise in salary. A raise in salary affect the amount an employee receives in payment each pay period. The size of the raise depends on several key factors including the years of experience of the employee, geographical location and the type of the industry (Career Guide Indeed, 2020).

## c) Academic Promotion

Respondents from both Haramaya and Dire Dawa University commonly ranked item 1, $2,3,4,5,6$ and 7 as factors that positively influence academic productivity. Item 1 is related with achieving higher status and rank while item 2 is concerned with knowledge transfer and ability to generate new knowledge. Academic promotion is also associated with salary increment (item 3). Academic engagement and productivity would also contribute to academic productivity (item 4). Improving research capacity also contributes to ascendance in academic rank (item 5). The increase in publication of an individual also contribute to academic promotion of an individual (item 6). As one participates extensively in research and publication, one develops new social network (Item 7).

Academic promotion for female faculties result in increased rank according to the response of respondents. However, empirical results indicate that being a woman is negatively associated with the level of academic rank attained (Santos, G. and Dang Van

Phu, S., 2019). The exception to the result is if parenthood is planned with career consideration. In this case, being woman will have a positive influence on academic rank achieved.

Researchers get promoted when they are able to discover new knowledge and transfer their knowledge to their peers and students. For example, Boston university school of medicine used as criteria for promotion scholarship, productivity, achievement and excellence recognized within or outside the institution (Boston University School of Medicine, 2020). Hence the new knowledge that one generates through research is the criteria required for promotion. This is the case if the research output is published in internationally recognized journal (Ibid, 2020).

Getting promoted academically is also associated with salary increment. The studies dealing with salary increment indicate that rank titles are used as determiners. For instance, Baker Gibbs and Holmstrom (1994b) conducted regression using personal data from a large firm in the US. The data has multiple levels in the hierarchy and rank titles was regressed on wages. The result indicated that $70 \%$ of the variation in wages is explained by ranks and that individuals wage experienced large increase due to promotion. They used this result as evidence to indicate that the firms used promotion as incentives.

The concept of engagement has been defined to include reciprocal benefit for the community and the university (AUCEA, 2008; Holland, 2009). The literature on academic engagement focused on measuring engagement at the institutional level, rather than at an individual level. Hence it was suggested that both individual and institution level quantifying, reporting and documenting the benefits of academic engagement is important (Smith et al., 2014). Without this, engagement cannot be considered as one of the core businesses of universities and it will be difficult to evaluate the promotion application of faculty members based on their academic engagement.

The improvement of research capacity building of the individual would also contribute to academic promotion. A study in Nigeria showed that marital status, religion, academic position and the number of hours of lectures per week had an impact on their ability to carry out research and publish results (Ogbogu, 2009). Moreover, it was found that as
female staff progressed in rank, their research productivity also increased (Ogbogu, 2009).

As the publication of anindividual increases, the probability of getting promoted also increases. The study by Tien (2007) indicated that academic promotion is highly predicted by the number of research publication. Moreover, Long et al. (1993) discovered that the quantity of publications highly determined promotion among American biochemists. Using the discrete time logit models, Long et al. (1993) discovered that the number of research publication predicted the odds of promotion well after controlling for the effect of demography, educational institutions and seniority.

As can be understood from the response of respondents to item 7, we can deduce that as a researcher engages extensively in research, he/she develop new social network which would contribute to the promotion of an individual. Social capital is a resource gained by university academic via participation in social structures and networks (Angervall, 2018). The accumulation of social capital isconsidered as an important resource for academic career success (Broadbridge, 2010; Maritz and Prisloo, 2015). It is also argued that there is a relationship between social capital and the outcome of academic career (Maritz and Prisloo, 2015; Walker, J. and Yoon, E., 2017). The study by the aforementioned authors further note that network structures and social resources result in benefits such as access to career sponsorship, more information and access to resources. This accrued benefits result in accelerated individual career success as indicated by career satisfaction, promotion, research grants and increased publication (Maritz and Prisloo, 2015).
d) Working Environment

The common item chosen by both the respondents of Haramaya and Dire Dawa University is the issue of safety and security of the work place (item 10). Safety and security of the work environment is very essential for the proper functioning of the teaching and learning process. Female faculties need to have a safe and secure environment without feeling insecure because of their gender. If they feel the environment is insecure, they will not be able to sit in their office for longer hours to execute their academic duties and enhance their career. Besides, if their task involves going around the campus for different reasons and if the environment is not safe, this will have negative influence in using their potential capacities.

### 4.2.2. The Personal and Organizational Factors that Inhibit Academic Productivity

### 4.2.2.1. Personal Factors

The common personal factors ranked by both the staff of Haramaya and Dire Dawa University are item 1, item 6 and item 11. Item 1 was related with few conference participations which affected academic productivity negatively. The other critical factor for academic productivity is time management which is represented by item 6. Moreover, the factor that is also highly critical is the issue of safety and security of the working environment which was represented by item 11 .

Women faculty members have greater tendency to turn down the offer to participate at prestigious conferences. The reason could be due to the presence of few female faculty among senior academic ranks (Jump, 2013). A study conducted by the University of Sheffield (2013) indicated that the proportion of female authors of high profile papers was significantly more than the proportion of female invited speakers at prestigious congresses of the society for evolutionary biology. They also discovered that in 2011, $50 \%$ of women declined an invitation as compared to $26 \%$ of men. The study suggested that the disproportionately low exposure of women's research at highly prestigious conferences could be the reason for why very few female faculties rise to the top of academic position.

Time is the most precious thing in the world. Hence time management is one of the most important skill that result in success of academic career. Mismanaging this precious resource by the female faculties result in failure to progress academically. The study by Chung (1988) indicated that the age of the faculty member, academic appointment that included time for research and time conflict among work roles were significant predictors of time management strategies used at work.

The result of Pearson product moment correlation analysis indicated that several time management strategies were significantly correlated with faculty research productivity (Chung, 1988). The use of prioritizing/scheduling job task was positively related to the number of presentation made, books written and grants obtained from institutions that are outside one's own.

Positive relationship was also discovered between goal setting as a strategy and the number of presentations made, articles published and working as a reviewer for a journal. The other strategy to manage time wisely is the strategy associated with reducing responsibility. This strategy was positively related with the number of presentations made and involvement in professional journals as an editor or associate editor.

Safety and security is critical in a university environment to support the academic productivity of female faculties. According to Mishra (2013), there is a need to insure a safe working environment for women employees in the office for their academic and professional responsibilities. To insure the safety and security of the work place, University Grants Commission of India ordered all Higher Education Institutions to organize a dedicated task force that comprise senior colleagues to constantly monitor the existing condition in the university premises. Without constant supervision, female faculty members of the university would not be able to engage and become productive in their academic career (Mishra, 2013).

### 4.2.2.2. Organizational Factors

Respondents from Haramaya and Dire Dawa universities commonly ranked item 5, 6, 7 and 9 as determining factors of academic productivity. Among the organizational factors, insufficient training and incentives inhibit the academic productivity of female faculty members. Less institutional recognition of female academic staff's achievement also inhibits productivity. Lack of academic mobility also affects the productivity of female faculties. The other factor that inhibits the productivity of female faculties is the lack of family friendly policy that supports the teaching and advisory duties of female faculty members.

Offering incentives boost the teachers' academic productivity in terms of effort they exert in teaching and research. In the US, numerous schools adopted performance based incentives and the scheme has increased by over $40 \%$ since 2004 (Imberman, 2015). The other study was done by Dufle et al. (2010) who tested whether monetary and financial incentives reduce teachers' absence and increased learning in rural India. They found that teachers' absence has been reduced compared to the control group and the students' test score has also improved.

The study by Cross et al. (2019) focused on the necessity of mentoring to enable female academic faculties to be productive. The review by the author provide compelling evidence for institution to invest in mentoring programs as a mechanism to support role transition, retain and empower new faculty and build the capacity for mentoring of female faculties.

The result of the review further showed that the provision of effective mentoring for female health academician depend on work place structures and relationships, organizational environment and the scheme can be considered as a long term investment that can benefit both the academics and their mentors (Cross et al., 2019). Moreover, it is stated that mentorship highly support the higher education institutions effort to address the shortages of faculty, increase productivity and retention, support female academic careers and build the capacity of female mentoring (Ibid., 2019).

Inequity in higher education leadership and top position impacted women in two ways (Obeirs, 2014). Firstly, the way to promotion chosen by female faculties is not equally regarded as determining promotion by others. Secondly, the shortage of women at the top of the academic rank impacts on supportive spaces, role model for women, women's level of self-esteem and mentors. According to Obeirs (2014), psychological mentoring is important to women as it boosts self-esteem thereby enabling them to get promoted academically and be productive in research.

The researcher further notes that the under representation of women in top academic position affected the amount and nature of the support and mentoring they receive. Mentoring was seen to influence the participants research careers. Hence there seems to be a link between the shortage of women in leadership position and their research productivity. There is a correlation between a robust self-esteem and higher levels of research productivity which imply that women who produce less research have low levels of self-esteem(Brooks, 1997; Geber, 2009).

One of the many challenges to retain the work force is employee satisfaction. Specially, faculty satisfaction is very critical within higher education institutions for retention and productivity (Tack and Patitu, 1992). The retention and productivity of female and color faculty provide numerous benefits such as mentorship and could be a source of inspiration for female and students from a minority group (Turner and Myers, 2000). The retention
of these faculty members relies highly on self-reported satisfaction. One of the methods to evaluate the satisfaction of the faculty is appreciation and recognition. Previous research indicated that the turnover of employees could be higher when employees feel unappreciated (Johnsrud, 1996; Austin and Gamson, 1983).

The study by Sahl (2016) examined appreciation and recognition of the faculty members based on teaching effort, school work and service contribution. The study also examined the appreciation and recognition that the faculty member received from the department chair and colleagues. The result indicated that racial differences were found in these measures, especially for Asian faculty members. The racial differences indicated that the level of validation (self-efficacy) and acceptance from others (social acceptance) is lower for Asian faculty than for White faculty. The lower satisfaction with appreciation and recognition correlated with lower satisfaction for the institution as a whole. The lower satisfaction for an institution has an implication for retention.

Geographic mobility contributes to women faculties' job promotion. The result by Mclean et al. (2013) show that $24 \%$ of women that chose to relocate geographically achieved career advancement. It is stated that mobile researchers have a large international network and perform relatively better than non-mobile ones (Cruz-Castro and Sanz-Menendez, 2010; Franzoni et al., 2012). Moreover, mobile faculty staffs publish and get cited more often (Aksnes et al.,2013; Barufaldi and Landoni, 2012; Teodorescu, 2000) and enjoy more access to funding (Canibano et al., 2008).

Mobility offers for a scholar an opportunity to interact with other scholars and get further training. The interaction created throughmobility enables the scholar to build a network (Cruz- Castro and Sanz-Menendez, 2010) gain more skills and experience in environments that are outside one's own (Kerey and Naef, 2004). Especially for African scientists, mobility allows to have access to world renown researchers in a specific field and also enable them to use the best laboratories in the world (Beudry et al., 2018).

The last common factor that inhibits the productivity of female academic staff is the inefficient gender concession policy. The study by Feeney (2014) discovered that family leave policies (e.g. paid maternity leave, paid paternity leave and adoption) are significantly related to productivity, but the relationship differs for women and men. The result showed that for women leave policies are associated with increased journal
publication and maintenance of teaching loads. However, for men leave policies is also related with reduced teaching loads.

The presence of family friendly policies is positively related with the commitment to the organization. For example, Thomason et al. (1999) found that the availability of these type of benefits coupled with a supporting work-family culture attracts the faculty to the organization and negatively related to the intention to resign from the organization.

### 4.3. Discussion of Qualitative Results

In the qualitative study, 5 female faculty members were interviewed about their experiences with regard to the existing institutional gender responsive policy and provision and the flow of social capital in the HEIs. It has been attempted to see the link of female faculty academic development with gender responsive affirmative action policy and networking. The discussion in the following paragraphs analyzes the views expressed by the participants in light of the literature related to the topics examined.
a) Institutional gender-responsive policy and provision

Participants have stressed the importance of AA (Affirmative Action) provision for female faculties to participate and get promoted in academic institutions. The policy provision should be implemented in situations where there is glass ceiling that inhibits the promotion of female faculty. Moreover, participants also further stated that AA policy redress gender inequality in management position.

The education and training policy of Ethiopia which was enacted in 1994 emphasized the need to give more attention to females in the education system (FDRE, 1994). Based on this policy initiative, AA strategies were introduced in employment, university entrance requirements and placement in the civil service. The strategies supported female faculties and resulted in impressive results in terms of female participation in the public sector (Addamu, 2009).

Even though the results registered are encouraging, the percentage of women academics in the Ethiopian HEIs is still low. This is true even in faculties that traditionally women are expected to highly participate like social science \& humanities, health sciences and agriculture (Semela, 2017). Moreover, the finding by Semela (2017) in HEIs in Ethiopia
showed that females are still underrepresented in top leadership and academic position. When compared with other sub-Saharan African countries like South Africa, Nigeria, Ghana and Kenya, the scale of absence of women in leadership position in Ethiopian HEIs is more severe.

The study conducted by the European Commission (2016) recommended the extensive implementation of affirmative action since the representation of women is very low in leadership and academic position in universities. For example, only $20.1 \%$ of heads of institutions were women in the European Union even if variation existed across the member states. The extent of female marginalization is relatively more severe in the case of sub Saharan Africa (Girmaw, 2013; Tebeje and Cuthbert, 2014).

Similarly, in the case of Zimbabwe, it was found that very few women occupied leadership position in HEIs (Mugweni et al., 2011). It was stated that there is a culture of fear among female faculties to apply for vacancies. Moreover, the study further showed that men did not support the promotion of female faculty to top leadership position.

In the case of Uganda, affirmative action was implemented since the 1990s to increase the number of female faculties in top leadership position (Kagoda, 2011). The result registered was impressive as the policies have achieved their goal in terms of gender parity in participation and enrolment. However, the gender parity achieved was not reflected in educational leadership. The main reason cited for this imbalance included male domination in recruiting agencies, lack of self-esteem, fear of responsibility and women's self-limitation (Kagoda, 2011).

It was also indicated by participants that AA policies are considered as the gate way that show direction toward academic career success. AA encourages female faculty to exploit their potential and achieve career success. Female faculties can plan their career path and work diligently towards realizing their dreams. Since the policy is streamlined in all levels of educational institution, this presents an opportunity for female faculties to do their maximum and rise through the ranks.

However, there were differences of opinion among participants with regard to the starting level of AA. Some of the participants argued the policy should be implemented only in elementary and high school levels. Others supported the implementation of the policy in
all levels of the education sector. Those who held the former view reasoned that implementing the policy at higher education level send the wrong message regarding women's capability.

Moreover, it was also further argued that the policy should only be implemented in the short run and phased out gradually. If the policy is continued to be implemented in the long run, this undermines the female faculties' capability to compete and succeed on equal footing as men in the academic arena. The other important point raised related to the family friendly policies that could solve the majority of the problems that female faculties face and help the female faculties become productive.
b) Social capital and its flow

Participants stated that both formal and informal social network to access social capital is important to access information, resource, and power. Accessing information and resources help one to be productive in the academic arena. Moreover, through accumulating social capital through both formal and informal network, female researchers may get promotion and assume leadership position.

Scholarly research also indicates that networking is positively related to subjective and objective measure of career success (Forret and Dougherty, 2004; Langford 2000; Michael and Yukl, 1993; Orpen 1996). Favorable performance rating is also associated with networking (Sturges, Conway, Guest and Liefhooghe, 2005; Thompson, 2005). Networking behaviors may also be available for job search strategy (WanbergKanfer and Banus, 2000). Moreover, networking behaviors are highly essential to build, maintain and expand informal contacts that contribute to career success (Forret and Daugherty, 2004; Luthans, Rosenkrantz and Hennesey, 1985; Michael and Yukl, 1993).

The study by Ismail and Rasdi (2007) confirms the impact of networking which is a source of social capital on career development of high-flying women academics in Malaysia. The interviewed university faculty members stated that networking enabled them to advance their career mobility. They also attributed their academic career success to graduate study which helped them acquaint with international and institutional partners helping create win-win situation.

The interview participants suggested also that men's network resulted in benefit and incentive. A female faculty that collaborated with men's network got benefit and achieved career success. However, some of the participants also indicated that it is difficult to integrate into the already male dominated network operating in academic institutions. This is in line with the perception that institutions of higher education are men dominated and it is difficult for female faculty to be integrated into both informal and formal networks (Husu, 2004; Hearn, 2004; Gupta et al., 2004; Fogelberg et al., 1999; Etzkowitz, Kemelgor and Brian, 2000). Husu (2001) also argue that many senior women interviewed in her study noted that male colleagues help each other through their networks. Furthermore, academic women are at a disadvantage since they are excluded from academic networks (Vaquez-Cupeiro and Elston, 2006; Kaufman 1978). It is also argued that male networks are universal and prevalent in universities and extra university research institution in Western Europe and North America (Ledwith and Manfredi, 2000).

Majority of the participant also indicated that there is lack of strong ties among women faculties in higher education institutions. The primary reason cited was the personal factor of individual female faculty members. This would be attributed to family responsibilities that female faculties handle in addition to their academic duties. Moreover, due to poor communication, female faculties don't share information and resources.

The other problem cited is the limited information transparency from the top management. The reason for this was the lack of commitment of the top management to support the female faculty. For instance, it was cited that the female faculty members established associations but due to bureaucratic challenges the association did not succeed.

The other point raised is the lack of role model in STEM (Science, Technology Engineering and Mathematics) colleges which is the cause for poor network that female faculties experience. Since they don't get information and resources, they may not be successful academically. Other studies also indicated that women's professional and academic capital are undermined and misrecognized which affect women's academic careers (Morley, 2006). Heward (1996) contend that men enjoy advantage in building academic reputation, networking and mentoring while women's efforts are undervalued.

To support the endeavors of female faculties, mentoring and supportive environments are the possible mechanisms to have more women represented in higher education institutions. This could be done by increasing the number of role models and mentors (HESA, 2011; Christiansen and Slammert, 2006). Mentoring would also help in professional development and in equipping faculty members with the means to become productive in research (Shulze, 2010).

The other point discussed in the interview focused on the effort that one exerts to be a productive researcher. It was stated that it is not always logical to blame the top management or the existing male dominated network. Rather, it is important to demonstrate one's ability through publication. As argued by one participant one is valued highly in the academic arena if one has something that others don't. Hence one needs to improve one's profile to get the attention of fellow colleagues in the academic community. Moreover, rather than distancing oneself from the existing network, it is important to try to integrate and build social capital.

## CONCLUSION AND RECOMMENDATIONS

The increasing participation female faculties in the academic arena is highly important. However, it is not only the quantitative increase that is critical but the qualitative aspect of their productivity which is highly significant and also demand attention. Following the regime change in Ethiopia in 1991, proclamations and regulations that make sure the equal participation of women have been enacted. Following this, encouraging results have been registered due to the AA policies to increase the participation of women in the public sector. As part of the initiative, the government has implemented AA policies in the education sector to encourage the enrollment and participation of women in the education sector. Hence the participation of women in the education sector has increased as both students and teachers.

This study was initiated to fill the gap on lack of information on factors that contribute to female faculties academic productivity in Haramaya and Dire Dawa universities. Simple random sampling technique was used to collect data from a sample of 91 female faculties from HU and 54 female faculties from DDU. For qualitative analysis, purposive sampling was used to select five senior female faculties for an interview. The explanatory sequential mixed method research was used to address the research questions. The analysis used for quantitative phase was Cronbach's alpha analysis while participant discussion was used for qualitative phase.

The result of the descriptive statistics revealed that the majority of female faculties from both universities were from the young age group. The number of female faculties that were married is higher in HU than DDU while the number of single female faculties were higher in DDU than HU. Regarding the educational level, the majority of the female faculties were at a master's level while few of them were holders of PhD .

Regarding the professional title, majority of the female faculties were lecturers while few of them were assistant professors in both universities. Majority of the Respondents from both HU and DDU had smaller years of work experience. With regard to the distribution of sample respondents, majority of female faculties from HU belonged to faculties of agriculture and social science and humanities. However, for DDU the majority belonged to the faculty of Business and Economics and social science and humanities. The majority
of the respondents did not occupy management position in their current university. However, the number of female faculties in position in HU is lower than those of DDU. The position occupied by the majority of the respondents from both universities were lower positions.

The quantitative aspect of the study answer research question 1 and 2 . The respondents were asked to answer the perceptions to statement items related to networking, promotion and working environment. The items were measured using the five-point likert scale ranging from strongly disagree 1 to strongly agree 5 . In subsequent paragraphs the commonly selected items by both universities were summarized.

Respondents from both HU and DDU commonly chose item 5 (Access to information), item 8 (Improved negotiation skill) and item 3 (Developing growth mindset). Item 3 is related with growth mindset. Networking enables the individual respondent to develop growth mindset. Individuals with growth mindset turn challenges into opportunity. These types of individuals also learn from their mistakes and motivated by the success of others.

Having a good network of friends help an individual to easily access information. The availability of up to date information contributes to academic productivity of female faculties immensely. Maintaining a good network of friends also capacitates the negotiation skill of the female faculties. Approaching institutional leaders may facilitate the negotiation process to access resources that are key to career success.

Getting promoted to administrative position help female faculties to practice leadership skill. In management position, the respondent faces different challenges. The respondent uses different leadership skill to address the challenges. The promotion of female faculties to management position strengthen their negotiation in decision making. If female faculties are represented in management position, they would influence the decision making process.

Assuming management position by female faculties enable them to face challenges. Grappling with different challenges while in position they would gain experience on how to handle challenges and resolve problems. Getting promoted to management position also enable female faculties to gain more experience in controlling resources. Assuming
management position is associated with an increase in income. This could be due to the assumed new responsibilities or due to commendable performance.

Achieving academic promotion for female faculties is associated with higher status and prestige. Ability to generate new knowledge through research and knowledge transfer to students and colleagues is also associated with academic promotion. Female faculties gain recognition by exerting effort to publish new knowledge through publication. Developing academic engagement and productivity also promotes female faculties. Assuming responsibility for university-community and university-industry relationship is part of an academic duty of the female faculties.

Improving research capacity building contribute to academic promotion. If the female faculties capacity increase in research, this would mean more publication and academic promotion. Widening one's social network also contribute to individual's research productivity. As the individuals social network expands, his/her probability of collaborating to conduct research would also increase.

Safety and security of the work environment contribute to the academic productivity of the female faculties. The occurrence of violence disrupts the normal teaching and learning process. Moreover, the growing uncertainty due to safety and security concerns also affect the conduct of research and community engagement activities.

The commonly ranked factors that inhibited the academic productivity of female faculties are the personal and organizational factors. The commonly ranked personal factors include item 1(conference participation), item 6 (time management) and item 11(safety and security). Time management is critical in academic arena. Failure to manage time properly adversely affects academic career. Participation in academic conferences allow female faculties to gain experience and motivation to engage in research. However, lack of conference participation may undermine the motivation to develop growth mindset. The issue of safety and security also negatively affects the academic productivity of female faculties. The insecurity of the work environment panics female faculties and diverts their attention.

The organizational factors that were identified to inhibit academic productivity include insufficient training and incentives, less institutional recognition of female faculty, lack
of academic mobility and family friendly policies. Training and incentives increase academic productivity by capacitating and motivating female faculties to engage more on research and other activities. The lack of training and incentives may discourage female faculties from exerting the required effort to achieve higher academic productivity.

Less institutional recognition of female faculties affect productivity. The satisfaction of female faculties is assessed by appreciation and recognition they are given for the works they have done. Researches indicate that faculty turnover would be high if the female faculties are unappreciated and unrecognized.

Academic mobility may affect the productivity of female faculties. Mobility offers an opportunity for a scholar to interact with scholars outside one's own institution and country. The interaction with others builds network which leads to acquiring more skills and experience. Especially for scholars from low income countries mobility allows to interact with world known researchers and facilitates for them to use more sophisticated and best laboratories in the world. Hence, less mobile researchers may not have the opportunity to exploit the aforementioned benefits.

Lack of family friendly policy also negatively influence the academic productivity of female faculties. The presence of family friendly policies will attach the employees to the organization. Studies also indicate that family friendly policies influence the academic productivity of female faculties. The presence of family friendly policies allows the female faculties to balance the family-work responsibilities. The lack of family friendly policies negatively affects the academic productivity of female faculties.

The qualitative phase of the study involved the interview with participants from female faculties on the institutional policy provision of affirmative action and the social capital and its flow due to networking. Policy provision relating to affirmative action is important for leaders in situation where there is glass ceiling and to redress gender inequality in management position. AA policies show the direction toward academic career success. However, there is disagreement with regard to the starting level of the policy and whether the policy should be only implemented in the short run and phased out gradually. It was indicated that implementing the policy in all levels and through to the long run send the wrong message that female faculties are incapable of competing on equal footing with men faculties.

Participants also stated that both formal and informal network of accessing social capital is important to access information, resource and power. Accessing information and resource in turn would help the female faculties to be productive academically. It was indicated also that male created networks are dominant in the university. Male faculties help each other and female faculties that collaborate with male dominated network also get benefit.

The problem cited by female faculties include lack of strong tie among female faculties and limited information transparency from the top management. The other problem concerns the lack of role model in STEM Science, Technology, Engineering and Mathematics) colleges. This results in poor network and lack of necessary mentoring. However, some the participants also stressed that it is not appropriate to give up effort. Female faculties members should strive to integrate into the existing male dominated network. Moreover, it is also necessary to exert effort to be productive in terms of research publication which would help one to gain respect and recognition.

## Conclusion and Recommendations

The main objective of the study was to identify the role of social Capital on enhancing academic productivity. The findings of the study revealed that social capital when it is understood in terms of networking, promotion and work environment contributes to the improvement of academic productivity. The study also explains that the personal and organizational factors may contribute to low academic productivity. In addition, the organizational social capital provisions have also impact in affecting academic productivity. Based on the result and discussion of the study, the following recommendations are forwarded.

The majority of the respondents were in a young age group which has an implication for their potential productive capacity. Most of the female faculties were holders of master's degree indicating that they should further extend their level of education to the highest level in order to become competent and productive. So to achieve this the universities should assist them to enhance their productivity such as through trainings, facilitating scholarship etc.

Regarding the years of experience of the respondents, most of them have few years of experience. So, if they want to proceed in their academic carrier, they have to be productive. Most of the female faculties were from the collage of Agriculture, Social Science and Business and Economics. This implies the number of female faculties were fewin natural science stream suggesting the government need to work a lot at lower level of education to increase the participation of female in natural science stream.

Majority of the respondents did not occupy management positions. Hence, to increase the participation of female, the universities should give more attention to the participation of female faculties in all aspects especially in leadership through building their capacity and in offering them opportunities for leadership.

Networking contributes to develop growth mindset, access to information and capacitates negotiation skill. Policies and strategies of universities should place more emphasis in the establishment of strong network among female faculties. The Top managements should make sure that every department heads encourage their female staff to actively participate in in decision making, research and community engagement.

Assuming management position help female faculties to practice leadership skill, face challenge, develop power of negotiation skill, improve ability to control resource and gain high income. Therefore, universities should give priority to encourage the female staff to assume management position by giving trainings to build leadership skill and providing various incentives.

Academic promotion is associated with achieving higher rank, ability to generate new knowledge, better payment, improving research capacity building, increased publication and developing new social network. So, to increase the female faculty staff level of education, scholarship should be offered to them under affirmative action. Besides, to increase the participation of female staff in research activity, they need to be mentored and given trainings to build their confidence.

The work environment should be safe and secure in order for the female staff to conduct their day to day activities smoothly. The universities should strengthen security system in the campus. Besides, they should also establish legal structure to which female faculty staff sue in case of violence and protect their right.

Few conference participation is adversely affect academic productivity. Hence, to increase their participation, those who have ability should be encouraged to participate in presenting papers in conference and those who have knowledge gap in conducting research should be given training on research methodology and other relevant topics.

The factors that inhibited the academic productivity of female faculty members was improper time management. They complain that they are busy with household chores and family responsibilities. Hence, training on time management should be given. For those who have high family burden, the universities should design family friendly policies and strategies so as to help them minimize their burden.

Training and incentives are important to motivate female faculty members to engage in academic productivity. The universities should conduct need assessment to identify the areas of demand for training. Proper rewarding system for those who participate indifferent productive academic activities and also should establish different incentives so as to motivate female faculties to participate in academically productive activities.

Female faculty staff complains of the inefficient gender concession policies. The university should investigate the major problems of the female faculties and design policies and strategies to address their concern. Most of the female staff demanded day care, housing, access to training, scholarship and housing.

There is difference of opinion regarding the policy provision of affirmative action. There were two opposing views regarding the policy provision of affirmative action. The first view favors the implementation of AA policies in all levels of education to make female members of society competent with their male counterparts. The second view stated that the policy should only be implemented at elementary and secondary level. Moreover, regarding the timing, some of the participants stated that the policy of AA should only be implemented for shorter period. These different views imply that the advantage and disadvantage of AA policies on women capability can be studied further.

Since female faculty staffs don't have strong network, they need to establish strong network to share information and resources. Having strong social network is essential either virtually or physically so as to boost their negotiation power. Female faculty members should also strive to change themselves even within the existing system so as
to make themselves competent and productive rather than waiting for something to come without doing any effort.

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# APPENDICES 

Questionnaire<br>Sakarya University<br>Institute of Social Science<br>Department of Sociology

This questionnaire is developed to conduct study on 'The role of Social Capital in Enhancing the Academic Productivity of Female Academicians' as a partial fulfillment of MA degree in Sociology. The information that will be filled by the respondents will be used only for academic purpose with a great confidentiality. So, I, kindly, request you to provide accurate information about the questions bellow.

I would like to thank you for your cooperation in advance.
Please put tick $\qquad$ where applicable to you

## Part1: General Background of the Respondents

1.1 What age group are you in:

1.2. What is your marital status?

1.3 What is your current educational level?


PhD


Other (please specify) $\qquad$
1.4 What is your current professional title (Rank)?

Graduate Assistant


Assistant Lecturer
Assistant Professor
1.5. In which department are you working currently?

Name of department $\qquad$
1.6. For how long have you been working in your current university?
$\qquad$ (years)
1.7. Do you have any position at your university?

Yes $\square$ No $\square$

Part Two: Information Related to Networking, Promotion and Working Environment Related With Social Capital

### 2.1. Networking

| Items | Strongly <br> disagree | Disagree | Neutral | Agree | Strongly <br> agree |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1. Connecting with others has <br> given me the tools, resources, <br> and ideas to reach out to others <br> and try new things. |  |  |  |  |  |
| 2. Networking is just about <br> furthering my career |  |  |  |  |  |
| 3. Having network with my <br> coworkers allowing me to reflect <br> and continue to have a growth <br> mindset for my own learning <br> journey |  |  |  |  |  |
| 4. Being connected has allowed <br> me to ask questions, be more of <br> a reflective practitioner and be a <br> better educator |  |  |  |  |  |
| 5. Networking helping me to <br> gather new information that <br> contributes to enhancing my <br> academic productivity ( such an <br> attending conferences or <br> training, sharing studies and <br> articles, etc). |  |  |  |  |  |
| 6. Having good networks and <br> contacts enabled me to influence <br> decision |  |  |  |  |  |


| 7. Networking with others help <br> me to get the experience <br> required to enhance my career |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 8. Having a good network has <br> helped me to improve my <br> negotiation |  |  |  |  |  |
| 9. Having a good network <br> helped me to evaluate my <br> competency to become <br> competent |  |  |  |  |  |
| 10. Having good network <br> enabled me to have a good social <br> interaction with others. |  |  |  |  |  |

### 2.2 Promotion

2.2.1 Have you been promoted to the leadership position recently?
Yes $\square$
No $\square$
2.2.2 If yes, at what level? $\qquad$ .
2.2.3 What are the experiences of being on leadership position?

| Items | Strongly <br> disagree | Disagree | Neutral | Agree | Strongly <br> agree |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1. It helped me to meet new <br> people and known to others <br> as well |  |  |  |  |  |
| 2. It helped me to practice <br> my leadership Skill |  |  |  |  |  |
| 3. It has increased my ability <br> to negotiation and decision <br> making power |  |  |  |  |  |
| 4. It has improved my ability <br> to face problems and get <br> solution for it |  |  |  |  |  |
| 5. It increased my ability to <br> command resources |  |  |  |  |  |
| 6. Better pay |  |  |  |  |  |

2.2.4. Have you got academic promotion recently?

Yes $\square$ No
2.2.5. If yes what level? Please answer below.

| Rank | Put a " $\sqrt{ }$ "mark |
| :--- | :--- |
| 1. GA 1to GA 2 |  |
| 2. GA 2 to Assistant Lecturer |  |
| 3. Assistant Lecturer to Lecturer |  |
| 4. Lecturer to Assistant Professor |  |
| 5. Assistant Professor to Associate <br> Professor |  |

2.2.6. What are the benefits you have after being promoted?

| Items | Strongly <br> disagree | Disagree | Neutral | Agree | Strongly <br> agree |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1.I got higher status than before |  |  |  |  |  |
| 2.Ability to generate new <br> knowledge as well as transfer it <br> to my students |  |  |  |  |  |
| 3. Better payment |  |  |  |  |  |
| 4.Develop my academic <br> engagement and productivity |  |  |  |  |  |
| 5. Increase my research <br> conducting capacity |  |  |  |  |  |
| 6. Increase publications |  |  |  |  |  |
| 7. Create new social networks <br> and develop Experiences |  |  |  |  |  |

2.3. Working environment

| Items | Strongly <br> disagree | Disagree | Neutral | Agree | Strongly <br> agree |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1. A convenient physical working <br> environment contribute to working <br> efficiency and wellbeing of <br> faculties |  |  |  |  |  |
| 2. Sufficient reading materials for <br> teaching and learning process <br> foster the productivity of faculties |  |  |  |  |  |
| 3. An attractive reward and <br> incentives encourage faculties to <br> keep actively working as well as <br> remaining in the university |  |  |  |  |  |
| 4.Facilitating collaborative <br> environment such as research <br> works among faculties increases <br> internal competencies as well as <br> enhance publications. |  |  |  |  |  |


| 5.The proximity of the campus to <br> home and family contributes to <br> better work-life balances of female <br> faculty. |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 6. Suitable office space and <br> arrangements based on department <br> foster the interaction as well as <br> building relationships among <br> faculties |  |  |  |  |  |
| 7. A supportive and flexible <br> culture of the working <br> environment creates a positive <br> morale to faculties |  |  |  |  |  |
| 8.Positive working environment <br> inspire faculties to take part in <br> creativity and innovation activities |  |  |  |  |  |
| 9. Sufficient funds and material <br> resources inspire faculties to build <br> and expand their research capacity <br> level |  |  |  |  |  |
| 10. Proper work-place security |  |  |  |  |  |
| 11. Gender diversity at the top <br> leadership level |  |  |  |  |  |

Part Three: Information Related to Personal And Organizational Factors Affecting
Academic Productivity.

### 1.1. Personal factor

| Items | Strongly <br> disagree | Disagree | Neutral | Agree | Strongly <br> agree |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1. I don't participate in <br> research conferences |  |  |  |  |  |
| 2. I have a lack of self- <br> confidence to create new <br> networks of cooperation |  |  |  |  |  |
| 3. I exert less effort to promote <br> myself in academic Career. |  |  |  |  |  |
| 4. I don't exert enough effort <br> to seek information for my <br> academic advancement |  |  |  |  |  |
| 5. Too much family <br> responsibility is affecting my <br> academic productivity |  |  |  |  |  |
| 6. I have a problem in time <br> management which has |  |  |  |  |  |


| negative impact in my <br> academic achievements |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 7.I have difficulty in browsing <br> internet to access relevant <br> academic Websites that would <br> help me boost my academic <br> achievements |  |  |  |  |  |
| 8.I have a limitations of <br> communication skills |  |  |  |  |  |
| 9. I don't have the required <br> skill to engage in research <br> activities |  |  |  |  |  |
| 10. I consume much of my <br> time in teaching and <br> mentoring |  |  |  |  |  |
| 11. I feel insecure to work in <br> the university's environment |  |  |  |  |  |

### 3.2 Organizational factors

| Items | Strongly <br> disagree | Disagree | Neutral | Agree | Strongly <br> agree |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1. Deficient information <br> transparency |  |  |  |  |  |
| 2.The existence of glass ceiling <br> (invisible barriers) towards female <br> faculties at top leadership positions. |  |  |  |  |  |
| 3. Informal socialization (like <br> grouping) that exclude the <br> participation and contributions of a <br> female as well as minority faculty <br> members. |  |  |  |  |  |
| 4. The university gives me overload <br> courses that consume my time. |  |  |  |  |  |
| 5.There is no sufficient training in <br> the university that improves the <br> academic productivity of female <br> faculty. |  |  |  |  |  |
| 6.Less institutional rewards to <br> acknowledge the performance of <br> female staffs |  |  |  |  |  |
| 7. Lack of academic mobility |  |  |  |  |  |
| 8. Leaky pipeline ( the continuous <br> loss of senior female faculties at <br> higher position or rank) |  |  |  |  |  |

9. The university does not have family-friendly policies such as daycare service assistance, lactation support( private place for breastfeeding), flex time, etc.

## Sakarya University

Institute of Social Science

## Department of Sociology

## Semi- structured interview Questions to study 'The role of Social Capital in Enhancing the Academic Productivity of Female Academicians’

I. Introducing myself and briefing about the research aim and objectives.
II. Warm up session

1. Before we begin, it would be better if you tell me a little bit about yourself, your name, the position that you occupy, how long have you been working in the university. III.Questions regarding incentives and policies of the university
2. How do you see the role of the university's incentives and gender responsive policies such as affirmative action in your academic career path?
3. How do you describe your experience with these provided policies?
4. Did applying these policies influence women's pursuit of career success with in the academy? If yes, how?
IV. Questions related to access to social capital in higher education
5. Depending on your experience, do you think social capital has played a great role in your academic success. If yes, how?
6. What factors do you think inhibit the proper flow of social capital with in faculties, especially female faculties?
7. Is there anything important you want to share and did not cover in this interview?

## ABOUT THE AUTHOR

Wezira Ali Ahmed is currently a master's student in Sociology at Sakarya University, Turkey. She obtained her Bachelor of Arts in Gender and Development at Haramaya University in 2015, Ethiopia. After graduating in Bachelor of Arts Degree, She taught at Haramaya University as a graduate Assistance for one year.

Wezira completed her preparatory (11-12) school at Aboker Preparatory school in 2012; secondary education (9-10) at Aw-Abdal Secondary School in2010; Primary (5-8) education at Aw-Abdal primary school in2008; primary (1-4) school at Sheikh Abubeker School in 2004.


[^0]:    I think personal problems such as the feeling of giving up as well as time management are influencing the proper flow of social capital. For example, what I

