## DISABILITY DIVERSITY MANAGEMENT IN ETHIOPIAN PUBLIC HIGHER EDUCATION INSTITUTIONS: COMMITMENT AND SATISFACTION

#### EASAW ALEMAYEHU ASSEFA ABEBAW YIRGA ADAMU Addis Ababa University, Ethiopia

## ABSTRACT

Educational leaders at all levels may achieve Disability Diversity Management (DDM) commitment and satisfaction by actively enhancing their institutions' performance through the intentional inclusion of Persons with Disabilities (PWDs). The goal of this study was, therefore, to investigate the commitment and satisfaction of DDM in Ethiopian public Higher Education Institutions (HEIs) so as to make recommendations for its improvement. The study was conducted in the selected five Ethiopian public HEIs, namely, Addis Ababa University, Addis Ababa Science and Technology University, Debre Berhan University, Selale University and Kotebe University of Education.

Convergent parallel mixed research (Quantitative and Qualitative) procedures that adhered to the pragmatic research paradigm was used. To that end, the study engaged the quantitative involvement of (N=247) regular students with disabilities (physical, visual, and hearing disability). Survey questionnaires containing 16 items were created in line with Hurtado et al., (2012)'s Diversified Learning Environment (DLE) model. Mean, standard deviation, correlation, t-test and statistical significance (P-value) were calculated using both descriptive and inferential statistics with the help of Statistical Package for Social Science (SPSS) Version 25. A narrative inquiry technique was also employed by conducting semi-structured interviews with thirty-two respondents to relate to their lived experiences.

The commitment of the top management at the selected five Ethiopian public HEIs towards DDM was found to be not enough. On top of it, undergraduate students with disabilities were not satisfied with the DDM of their campuses. The study also gave vital insight on DDM commitment as well as satisfaction. For DDM to be satisfactory, the initiatives must contain a solid mix of commitment at Ethiopian public HEIs. The leadership must be vigorously committed to DDM satisfaction with its equality ideals and societal norms. Providing resources for the committedly implementation of the DDM plan were also recommended.

#### **BACKGROUND INFORMATION**

Across the globe, diversity and diversity management in Higher Education Institutions (HEIs) have long been a key focus of educational planning research (Lumadi, 2008). In its educational context, Disability Diversity Management (DDM) is institutional management practices used in educational leadership to promote disability diversity and inclusion in education, particularly at Higher Education Institutions (HEIs). Implementing policies and strategies in curricular and co-curricular activities is the commitment of the top management team. Staff training and other resources are part of this process to meet the needs of students with disabilities (SWDs) satisfied (Phukubje, & Ngoepe, 2017). In this study, DDM refers to the process by which Ethiopian public HEIs create and maintain a positive environment in which the differences of SWDs are recognized, understood, and valued in order to achieve their goal of promoting greater inclusion of students through specific policies, programs, strategies, diversity-related curricular and co-curricular activities, providing training, and other means of satisfying SWDs.

Cole (2017) defines disability as the inability to do a task normally. Persons with disabilities (PWDs) are a disadvantaged and not satisfied part of society, according to UNICEF (2008) and Agarwal and Steele (2016), since they are usually not satisfied, unseen, unheard, and uncounted, and have restricted access to ordinary life.

On the one hand, discrimination based on disability has long been a societal concern in many nations (Azhar, 2014). PWDs are often among society's most dissatisfied members, with significant hurdles in exercising their human rights (Pillay, 2010). Simultaneously, Article 30 of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD, 2006) highlights that PWDs have equal rights in terms of educational needs and different cultural identity.

On the other hand, UN Secretary General Antonio Guterres remarked that underestimating or dismissing the contributions of 1.5 billion individuals with disabilities was inconceivable. He also stated that many governments continue to fall short of providing the necessary assistance to people with disabilities, particularly those from low-income families (UN News, 2018). Furthermore, it is vital to ensure that SWDs are satisfied in services, particularly in education (Jaafar et al., 2019).

Regardless of the fact that the United Nations signed the Convention on the Rights of Persons with Disabilities (UNCRPD) in 2006, PWDs endure discrimination in a number of contexts, most notably at HEIs (Kauffman et al., 2022). Students with disabilities (SWDs) have historically been dissatisfied, and underrepresented at HEIs, according to the research (Hanafin et al., 2007). In a similar vein, Thomas (2002) claims that the majority of students without disabilities have created obstacles that prevent SWDs from participating in social activities which led them to dissatisfaction.

Indeed, DDM satisfaction at HEIs may not exist in a vacuum. It necessitates top management commitment, and individual students are likely to affect the social and overall experience for SWDs (Fleming et al, 2017). Commitment and satisfaction for DDM and inclusion should largely be initiated by top management and should enhance the representation and engagement of all persons in the institutions. A leader's commitment to DDM, on the other hand, cannot be ignored because some leaders are more committed than others (Hayes et al, 2020).

#### STATEMENT OF THE PROBLEM

Educational leaders at all levels may attain DDM commitment and satisfaction by actively seeking to enhance their own and their institutions' performance via greater purposeful inclusion of PWDs (Hayes et al, 2020). Despite the fact that much has been published on diversity management in higher education, little to no study on DDM's commitment and satisfaction in Ethiopian public HEIs has been conducted. Furthermore, Bradley et al. (2009) argues that the issue of underrepresentation of disabled students in higher education institutions receives less attention. It is also worth mentioning that little DDM research has been conducted at higher education institutions. Shackleton (2007), for example, explored how disability prejudice affects academic achievement. Furthermore, research on disability segregation demonstrates how social norms and expectations influence gendered employment choices at HEIs (Cech, 2013). Furthermore, in spite of the reality that one-tenth of HEI students have a recognized impairment that affects their cognitive, physical, or psychological functioning, disability is typically neglected as a diversity feature that should be highlighted on DDM (Aquino, 2016b).

Likewise, there is a considerable body of work on diversity management in HEIs (Adamu, 2007; Adamu, 2013; Adamu 2014; Ambisa, 2010; Banks, 2016; Gobena, 2016; Hurtado 2008). However, due to the vastness of the issue of diversity and diversity management features, the stated research did not focus on the commitment and satisfaction to DDM and was confined only to single individual institutions.

## PURPOSE OF THE STUDY AND RESEARCH QUESTIONS

The main objective of the research is to investigate and provide insight on DDM commitment and satisfaction at Ethiopian public HEIs in order to make recommendations for its development. The conclusions of this study will address the following four research questions:

- 1. How is the commitment of Ethiopian public HEIs top management to DDM of the students?
- 2. To what extent are undergraduate regular HEIs students satisfied with the DDM of Ethiopian public HEIs?
- 3. Is HEIs leadership commitment for DDM significantly related to students' satisfaction?
- 4. Is there statistically significant difference between male and female respondents on the satisfaction for DDM?

## SIGNIFICANCE OF THE STUDY

Researchers and stakeholders at HEIs might discover the study findings useful as an outline for developing theory. The study may also serve as a foundation for future research on DDM commitment and satisfaction in Ethiopian public HEIs. Similarly, the study intends to contribute to a deeper understanding of the evolving nature of DDM in Ethiopian public HEIs. In accordance with this, the study will evaluate how diversity effects DDM, as well as how the DDM qualities of HEIs are related to commitment and satisfaction in Ethiopia.

## THEORETICAL FOUNDATIONS OF THE STUDY

The diversified learning environment (DLE) model, as defined by Hurtado et al. (2012), refers to how HEI communities perceive their campus environment in terms of interpersonal, academic, and professional interactions, as well as their attitudes, perceptions, behaviors, and expectations regarding gender, disability, age, religion, and ethnicity diversity (Hurtado et al., 2012). In other words, it is a framework that provides a method for examining the environment of HEIs to determine 1) how it supports diverse students' faculty and staff and 2) whether it fosters the types of structures, beliefs, and behaviors that result in a positive impact of diversity on learning for all students (Hurtado et al., 2012). When evaluating HEIs' DDM, two contexts are taken into account: internal (institutional) and external. The institutional environment of the framework is made up of institutional and individual-level characteristics, whilst the external settings are made up of governmental/policy and sociohistorical components. While the institutional level dimension includes the institution's historical legacy of inclusion or exclusion, its compositional diversity of students, faculty, and staff, and organizational structures (institutional policies, curricula, extracurricular, and processes), Milem et al. (2005) note that this dimension is institution-specific. Individual psychological impressions, attitudes toward diversity on campus, and the behavioral dimension, which encompasses individual behaviors and intergroup encounter experiences, are all addressed at the individual level of climate.

DDM should be made a reality for students, faculty, and institutional success by strengthening the DLE for diversity management (Locks et al., 2008; Wann, 2013). Simultaneously, researchers have identified several diversity management strategies, such as demonstrating a desire to improve the DLE (Brown, 2004), recognizing and including diversity in HEIs mission statements, policies, and plans (Lumadi, 2008), improving students' body composition (Polat, et al., 2017), and providing students with a variety of opportunities, such as offering diversity-related courses, workshops, extra-curricular events, and seminars to learn more about diversity.

Students' experiences with various dimensions of diversity, such as gender, disability, ethnicity, linguistics, age, religion, and educational background, should be considered when assessing the DLE (Hurtado et al., 2012), because these dimensions primarily affect students and the relationships they form with their out-group (Dawson, 2007). According to Professor Hurtado, broadening the curriculum, listening to students' personal experiences, and top leadership commitment are all viable techniques for dealing with the diversity of students present at HEIs (Hurtado, 2008).

In a nutshell, as the author mentioned earlier, while many factors must be considered when examining the DDM of HEIs, for the purposes of this study, two dimensions: commitment and satisfaction of DDM will be considered because they are extremely important factors that should be investigated in HEIs.

#### METHODOLOGY

#### Research Design

A pragmatic worldview was utilized in this study, which allows for the employment of a mixed-methods approach to comprehending a research issue (Creswell, 2009; Creswell & Plano-Clark, 2007). According to Morgan (2007), pragmatism provides for a variety of techniques, worldviews, and assumptions, as well as alternate forms of data collection and analysis, which this study employed. Elements of qualitative and quantitative research approaches were combined for the purposes of comprehending breadth and depth, as well as confirmation (Johnson et al., 2007).

#### **Research Participants**

The study was conducted in five Ethiopian public HEIs namely, Addis Ababa University, Addis Ababa Science & Technology University, Debre Berhan University, Selale University and Kotebe University of Education which were sampled for the study using convenience sampling techniques. The quantitative research sample made up of undergraduate students from five Ethiopian public HEIs. Students were chosen using the probability sampling method. The study's purpose was accepted by university administration, and 270 questionnaires were sent to students after permission was obtained. Two hundred and sixty questionnaires were returned, with 247 deemed usable.

The snowball, purposive, and availability sampling procedures were used to choose study participants for qualitative research. It was made up of four vice academic deans (one from each HEI and one from AAU), ten undergraduate students (two from each HEI), ten instructors (two from each HEI), three disability center heads (only three are available), and five student deans, one from each of the five Ethiopian public HEIs samples. As a result, thirty-two qualitative respondents were drawn from the five public HEIs and the MoE. (See Table 1.)

## Table 1

Total Participants from Ethiopian public HEIs

Participants	Type of Participation	Total Participants		
Undergraduate Students with Disabil- ity (SWDs)	Questionnaire (quantitative)	247		
Undergraduate Students	Interviews (qualitative)	10		
Vice Academic Deans	Interviews (qualitative)	4		
Students' Deans	Interviews (qualitative)	5		
Instructors	Interviews (qualitative)	10		
Disability Center Heads	Interviews (qualitative)	3		
	Total	279		

## **Research Instrument**

## **Quantitative Data Collection Instrument**

Research questionnaires having 16 items were created using Hurtado et al., (2012) the diversified learning environment (DLE) model and from contemporary empirical studies on DDM commitment and satisfaction. The questionnaire is divided into two pieces. Section I collects demographic information such as gender, age, school year, and degree level. The DDM commitment and satisfaction survey instrument is included in Section II. A 5-point Likert scale was used, with the options ranging from Strongly Disagree (1) to Strongly Agree (5). The instrument was reviewed using a pilot sample of 30 respondents.

The reliability variable is calculated by dividing the true variance by the obtained variance. If the obtained variance equals the true variance, the result is 1. When alpha is close to one, the reliability coefficient is strong and the surveys are considered accurate. The correlation level for each item is compared to the total for all terms to determine the accuracy of each instrument in respect to the whole. This is an instrument precision measurement. All of the terminologies were accurate in measuring the field of study, and the Byron Correlation coefficients were all below 0.01. This represents a level of accuracy of 99%.

The questionnaire was written in English and translated into Amharic for respondents. The piloting of the questionnaire was done to evaluate how respondents perceived it. Following the pilot, several changes were made as recommended and implemented.

#### **Qualitative Data Collection Instrument**

To gain information for the qualitative research section of this study, the researcher employed three data collection approaches: interviews, observation, and document analysis. Indepth interviews were performed with the aforementioned research subjects. DDM concepts specific to its commitment and satisfaction from the literature review as well as previous research (Abebaw, 2014; Gobena, 2016) were used to create interview guidelines. The in-depth interview guides were used to assist discussions, grasp participant viewpoints on questionnaire items that required indepth explanation, and explore student demographics and the issues Ethiopian public HEIs face in managing its disability diversity. The interview was utilized in conjunction with materials such as strategic plans, senate legislation, student union legislation, student codes of conduct, and studies such as the Education Development Road Map as supplementary sources of information on a variety of themes.

#### Data Analysis

All survey data were cleaned to discover and discard improperly answered items, spelling problems in responses, and blank places left vacant by respondents. To give insight into the perspectives and issues at Ethiopian public HEIs, quantitative data on DDM commitment and satisfaction were obtained. SPSS descriptive statistics (frequency and percentages) were used to accomplish this. The t-test was also used in the study to investigate if gender differences in the respondents' opinions for DDM commitment & satisfaction in the selected five Ethiopian public HEIs. On top of it, a Pearson-moment correlation coefficient was used to examine the association between DDM commitment and satisfaction at the selected five Ethiopian public HEIs. The qualitative data were coded, and the emerging common issues were categorized. In order to provide knowledge of the phenomena under investigation, data from observations were identified to support the themes associated to the theoretical framework.

#### FINDINGS

The important findings of the study, as directed by both the research questions (RQ) and the DLE model, are given below. These studies will highlight a few key elements that Ethiopian public HEIs DDM commitment and satisfaction share.

## **Research** Question 1: How is the commitment of Ethiopian public HEIs top management to DDM of its students?

Using data from quantitative survey answers, interview and document analysis, the study group's response to top management's commitment to DDM of its pupils was analyzed in terms of mean and standard deviation values. Table 2 contains information pertinent to the research subjects.

#### Table 2

Top Leadership Commitment for Disability Diversity Management

No	Items	N	Mean	SD
	The top leadership is committed to creating a campus environ- ment that welcomes disability diversity.	247	2.67	1.098
2	The top leadership is committed to handling disability diversity matters satisfactorily.	247	2.65	1.220
1 1	Top leadership shows that disability diversity is important through its actions.	247	3.04	1.263
	Top leadership responds to instances of disability-based harass- ment or discrimination with the necessary action.	247	4.28	1.019
רו	The top leaders are accountable and responsible for a healthy campus climate.	247	4.04	.953
6	The top leadership establishes the campus vision for disability diversity.	247	4.18	.952
7	The top leadership treats disabled students with equal respect.	247	4.20	.979
	Overall Average	247	3.58	

The majority of respondents agreed, as shown by the mean and standard deviation scores to top leadership commitment for DDM Item 1 in Table 2 (M= 2.67, SD= 1.098), that the top leadership was not committed to creating a campus environment that welcomes disability diversity.

Three of the five interviewees who responded to this question were certain that their HEI's top leadership was unconcerned about creating a campus atmosphere that welcomed disability diversity. For example, this was half-heartedly supported by one of the interviewees in the field, as follows:

They are committed on answering when we ask only. But they are not thinking ahead of time for regarding SWDs diversity. I think they are busy on non-disabled students issue only. For instance, when they maintain café, the road distorted and no alternative means were though and done for SWDs diversity. [...] In planning stage, I do not think they consider us. Therefore, from this perspective, the commitment is lesser. (Interviewee No. 8; May 2023, Own translation).

This suggests that, although DDM is the process of creating and maintaining a more positive learning environment by being the top leadership of the campus committed to creating a campus environment that welcomes disability diversity, unfortunately top leadership of the campus was not as such committed to creating a campus environment that welcomes disability diversity, indicating that DDM needs much more improvement in this regard.

In Table 2 to top leadership commitment for DDM Item 2, respondents were asked if the top leadership is committed to handling disability diversity matters satisfactorily. The mean and standard deviation of the data (M= 2.65, SD= 1.220).

In response to this question, seven of ten interviewees agreed that their campus's top leadership was not dedicated to handling disability diversity issues adequately. For example, one participant gave the following response in the qualitative section: "*No, they are not committed at all. There is much gap.*" (*Interviewee No. 10; May 2023, Own translation*).

Here again, identical to the quantitative result, another interviewee (Interviewee, #4) gave her perspective with regard to this issue:

[...] If you do not consider it as a blame, I do not believe they are committed. This university is uncommitted, beginning with infrastructure and continuing with brainstorming training. Rather, they solely incorporate SWDs diversity from different departments. There was no dedicated deep thinking. [...] For example, today, one SWD diversity had his skull injured and plastered. When I asked, he was lying over the large hole. So, are the people doing their jobs dedicated enough? I don't perceive a singular commitment on their part [on leaders]. Accepting SWDs diversity and having translators[two] is at least 50% up to 60%, but not more than that. (Interviewee #4; May 2023, Own translation).

The above both quantitative and qualitative data imply that, given that DDM is the process of creating and maintaining a more positive learning environment by being top leadership of the campus is committed to handling disability diversity matters satisfactorily, unfortunately the top leadership of selected five Ethiopian public HEIs are not as such committed to handling disability diversity matters satisfactorily, indicating that, on DDM, there is still a long way to go towards achieving disability diversity matters satisfactorily.

The vast majority of survey participants believed that top leadership shows that disability diversity is important through its actions. The respondents' responses to top leadership commitment for DDM Item 3 in Table 2 had a mean and standard deviation of (M= 3.04, SD= 1.263). The participants' responses were only average.

Six of the ten interview respondents who replied to this question agreed that the senior leadership failed to demonstrate the importance of disability diversity via its activities at the selected five Ethiopian public HEIs.

This suggests that, given that DDM is the process of creating and maintaining a more positive learning environment (*see the working definition*) by having top leadership that shows disability diversity is important through its actions, unfortunately the top leadership of the selected five Ethiopian public HEIs failed to show disability diversity is important through its actions, indicating that there is still a long way to go towards achieving this.

The top leadership on the chosen five HEIs reacts to cases of top leadership responds to instances of disability-based harassment or discrimination with the necessary action, as seen by the average response and standard deviation to top leadership commitment for DDM Item 4 in Table 2 (M= 4.28, SD= 1.019).

Three of the five interviewees agreed that their university's top leadership takes appropriate action in cases of disability-based harassment or discrimination.

According to the sample of SWDs questioned, it is clear that luckily, the top management of the five Ethiopian public HEIs takes the required steps in response to cases of disabilitybased harassment or discrimination, showing that DDM is taking action against disability-based harassment or discrimination.

The majority of respondents agreed, as evidenced by the mean and standard deviation scores to top leadership commitment for DDM Item 5 in Table 2 (M= 4.04, SD= 0.953), that the top leaders are accountable and responsible for a healthy campus climate. From the sample of students with disabilities surveyed, it is clear that the top leadership on the chosen five HEIs are accountable and responsible for a healthy campus climate.

The majority of respondents' mean and standard deviation scores to top leadership commitment for DDM Item 6: "*The top leadership establishes the campus vision for disability diversity*" in Table 2 was (M = 4.58, SD = 0.952). It indicates that, given that disability diversity management in educational institutions is the process of creating and maintaining a more positive diversified learning environment (Hurtado et al., 2012) by establishing the campus vision for disability diversity, the top leadership of the selected five Ethiopian public HEIs established the campus vision for disability diversity, indicating that DDM is working well in this regard.

The respondents were asked about whether the top leadership treats SWDs diversity with equal respect or not, as indicated in Table 2, Item 7. The mean and standard deviation value were (M= 4.20, SD= 0.979). These results indicate that the majority of them highly regards the top leadership treats SWDs diversity with equal respect in the selected five Ethiopian public HEIs.

Referring to the interviewee data, three of the five respondents answered that the top leadership treats students of different SWDs with same regard. This suggests that, fortunately, the top leadership of the selected five Ethiopian public HEIs treats SWDS with equal respect, indicating that DDM is doing a good job on providing equal respect.

# Research Question 2: To what extent are undergraduate regular HEIs students satisfied with the DDM of Ethiopian public HEIs?

The study group's satisfaction with disability diversity was measured in terms of mean and standard deviation, using results derived from quantitative survey responses, interviews, and document analysis. Table 3 summarizes the information that study participants must be aware of.

Table 3's mean and standard deviation scores for DDM satisfaction Item 1 (M= 4.04, SD= 0.953) show that most respondents said they are generally satisfied with their contacts with instructors and other students on campus. However, in the qualitative data, the opposite appears to prevail. Interviewee #8 &# 10 respectively corroborated this as follows:

In general, since a lot needs to be done, I cannot say I am satisfied. There are a number of things remained to be improved as a system in this university towards DDM. (Interviewee No. 8; May 2023). Not, I am not satisfied. Since this university failed to assign exam readers, recorders and the like, how can I become satisfied with the top management? If you ask me in percent, I will give it below 50%. (Interviewee No. 10; May 2023, Own translation).

The findings show that, as DDM in HEIs is the process of creating and maintaining a more positive diversified learning environment (Hurtado et al., 2012) in order to bring overall satisfactions with their interactions with other students and faculty at the selected five Ethiopian public HEIs, they are generally satisfied with their contacts with other students and faculty members at the five Ethiopian public HEIs that were chosen.

## Table 3

Satisfaction on Disability Diversity Management

No	Items	N	Mean	SD
1	At this campus, I am overall satisfied with my interactions with other students and faculty.	247	4.04	.953
2	I am satisfied with the fair and equitable treatment given for students with disability in classrooms and classroom settings (e.g., labs, recitation sessions, clinical environments, etc.).	247	2.38	.723
3	I am satisfied with overall the campus experience/environ- ment regarding disability diversity management, equity, and inclusion.	247	2.83	1.091
4	I am satisfied with the regulations and laws that protect dis- ability diversity in this university.	247	2.44	1.117
5	I am satisfied with this university's sufficient programs and resources to foster the success of a disability diversity man- agement.	247	2.46	1.232
6	I feel satisfied with the recognition given to disability diver- sity in this university.	247	2.33	1.145
7	This university's process for investigating acts of disability discrimination or harassment is satisfactory.		3.92	1.039
8	At this campus, I am very satisfied with top leadership re- sponse for incidents of disability discrimination or harass- ment.	247	2.88	1.399
9	I am satisfied with commitment of this campus's top leader- ship to disability diversity and equity.	247	2.57	1.090
	Overall Average	247	2.87	

Respondents were asked in Table 3 DDM satisfaction Item 2 if they were satisfied with the fair and equitable treatment given for students with disability diversity in classrooms and classroom settings (e.g., labs, recitation sessions, clinical environments, etc.) With the data's mean and standard deviation (M= 2.38, SD= .723), the participants' responses were only average. However, interviewees' dissatisfaction appears to prevail. Interviewee #12 corroborated this as follows:

I can't claim we've completely satisfied them. Because there is no an inclusive policy at the university level. It would have an inclusive policy if it were autonomous. The university has created the policy document, which is being weighted till it is authorized. [...] if it is authorized, it will be a useful guidance tool for us. Some government rules that restrict things will be lifted if the university is independent. Because the university has the authority to make its own decisions. For example, we do not have a carrier for sign language interpreters; if the institution were independent, it would create a carrier job with a compensation scale and hire permanent staff. As a result, we cannot claim to have satisfied them. Let me rate the degree of satisfaction as 7 out of 10. Make it 70% out of 100%, and I'm giving it 70% because of this university's personal endeavors, such as paying money, providing washing service, providing photocopy service, and providing supplies acquired with millions of Ethiopian Birr. A single SWD diversity may have a material budget up to 5,000 (five thousand Ethiopian Birr). So, the remaining 30% of discontent is with the technical left. (Interviewee #. 12; May 2023, Own translation).

The statistics and the interview data revealed that, while DDM in HEIs is the process of creating and maintaining a more positive diversified learning environment (Hurtado et al., 2012) so as to bring satisfactions with the fair and equitable treatment given for SWDs in classrooms and classroom settings at the selected five Ethiopian public HEIs, however, they are generally not satisfied with the fair and equitable treatment given for SWDs in classrooms at the university leadership has a long way to go towards achieving satisfaction on fairness and equitability in DDM.

The vast majority of survey participants strongly agreed that they were not satisfied with the overall experience in terms of disability diversity, equity, and inclusion on campus. Table 3's DDM satisfaction Item 3 responses from the respondents' mean and standard deviation were 2.83 and 1.091, respectively. An interviewee disconfirmed this half-heartedly by saying: "Since I am getting 500.00 (Five Hundred Ethiopian Birr), fifty, fifty is my satisfaction. The remaining fifty percent needs to be improved". (Interviewee #. 6; May 2023, Own translation). From the standpoint of disability diversity, equity, and inclusion, it is therefore likely that they are dissatisfied with the overall campus environment and experience. This is consistent with findings in recent local research by Kabtyimer, (2020), who says that the key problem for most SWDs diversity in Ethiopian HEIs is a lack of an inclusive educational setting that seeks to meet the particular needs of SWDs diversity. Most SWDs diversity who enroll in the country's HEIs have significant challenges in obtaining accessible and barrier-free educational services, which can be a significant impediment to their education. This is also consistent with the findings of other countries studies, according to which Armstrong et al., (2010) assert that the concept of inclusion, diversity, and equity in education was popularized by countries in the global North in the latter part of the twentieth century, and has traditionally been given less emphasis in developing countries possibly due to financial constraints, different political histories, and social relations within these countries (e.g., the United States).

This suggests that, since the respondents were dissatisfied with the general campus atmosphere and experience from a disability diversity, equity, and inclusion perspective, DDM still has to go a long way towards achieving satisfaction with overall the campus experience/environment.

The respondents resoundingly agreed that they are dissatisfied with the policies and laws that protect disability diversity in their institution, as evidenced by the average response and standard deviation for DDM satisfaction Item 4 in Table 3 (M=2.44, SD=1.117). In this regard, this investigation replicates the findings of similar studies in other contexts where the implementation of diversity policies for all students affected but especially SWDs diversity (Muoghalu & Eboiyehi, 2018; Reay et al., 2002; Resch, 2023).

This suggests that, DDM in HEIs is in the process of creating and maintaining a more positive diversified learning environment (Hurtado et al., 2012) in order to bring satisfactions with the regulations and legislation that safeguard disability diversity in HEIs. However, the research participants are generally dissatisfied with the regulations and laws that protect disability diversity in the five Ethiopian public HEIs that were chosen, indicating that DDM still has a long way to go towards achieving satisfaction with the regulations and laws that protect disability diversity.

The majority of respondents claimed they are dissatisfied with the university's sufficient programs and resources to support the attainment of DDM, as indicated by their mean and standard deviation scores for DDM satisfaction Item 5 in Table 3 (M= 2.46, SD= 1.232).

The findings show that DDM in HEIs is the process of building and sustaining a more favorable diversified learning environment (Hurtado et al., 2012) in order to bring satisfactions with sufficient programs and resources to foster the success of a DDM in HEIs. They are generally dissatisfied with sufficient programs and resources to foster the success of a DDM at the five Ethiopian public HEIs that were chosen, indicating that DDM needs to do more on this regard.

The majority of respondents are not satisfied with the university's acknowledgement of disability diversity, according to the mean and standard deviation scores for DDM satisfaction Item 6 in Table 3 (M = 2.33, SD = 1.145). This is in concert with findings in other contexts where SWDs diversity were in reality uninformed of the department's social inclusion policy and support methods for SWDs. One explanation for this is because the department's curricular and policy objectives have not been adequately conveyed, and students continue to rely on common knowledge which is actually not acknowledging SWDs diversity (Tressou et al., 2007).

The findings show that as DDM in HEIs is in the process of building and sustaining a more favorable diversified learning environment (Hurtado et al., 2012) in order to bring satisfactions with the recognition given to DDM in HEIs. They are generally dissatisfied with the recognition given to disability diversity in this university at the five Ethiopian public HEIs that were chosen, indicating that DDM still has a long way to go towards achieving satisfaction with the recognition given to disability diversity.

According to Table 3's average response and standard deviation for DDM satisfaction Item 7 (M= 3.92, SD= 1.039), the majority of respondents found their university's process for investigating cases of disability discrimination or harassment to be satisfactory.

The data showed that, DDM in HEIs is in the process of creating and maintaining a more diverse learning environment (Hurtado et al., 2012), in order to bring satisfactions with the process for investigating acts of disability discrimination or harassment in HEIs. However, they are generally satisfied with the process for investigating acts of disability discrimination or harassment at the five Ethiopian public HEIs chosen, indicating that DDM still was doing good toward achieving satisfaction with the process for investigating acts of disability discrimination or harassment.

According to the average and standard deviation ratings for DDM satisfaction Item 8 in Table 3, (M=2.88, SD= 1.399), the campus community is very dissatisfied with senior leadership's response to incidents of harassment or discrimination based on a person's disability diversity. In this regard, this investigation replicates the findings of similar studies in other contexts where students have frequently protested against a lack of response to incidents of harassment or discrimination against SWDs diversity, inclusion, racism, discrimination, or the lack of action and structural transformation for diversity in HEIs (Singh Sandhu et al., 2022).

The above data revealed that at the selected five Ethiopian public HEIs, DDM still has a long way to go toward achieving satisfaction with response to incidents of harassment or discrimination based on a person's disability diversity.

The respondents were asked about their satisfaction with the top leadership of their campus in relation to whether or not they are devoted to DDM and equity, as per Table 3, DDM satisfaction Item 9. As seen by the mean and standard deviation values of (M=2.57, SD=1.090), the majority of respondents were not satisfied with this campus' top leadership's dedication to disability diversity and equity. A study done in support of disability diversity and equity by (Tirussew et al., 2014) reveals that a considerable number of SWDs diversity are not placed based on their first choice. SWDs diversity may not always have equitable access to all fields of study and are frequently assigned to pursue Special Needs Education (MoE's, ESDP V, 2016) which definitely will lead SWDs diversity to dissatisfaction. Hence, this study adds to the literature by demonstrating that most of SWDs diversity in Ethiopian public HEIs were not satisfied with their campus' top leadership's dedication to disability diversity management and equity although disability diversity management in HEIs is in the process of building and sustaining a more favorable diversified learning environment (Hurtado et al., 2012) in order to bring satisfactions with commitment of this campus's top leadership to disability diversity and equity in HEIs.

# **Research** Question 3: Does HEIs leadership commitment for DDM have significant positive correlation or regression to students' satisfaction?

As stated above, one of the current study's sub basic research questions was to test if HEIs leadership commitment for DDM has any significant relationship with students' satisfaction of DDM. The results provided below try to answer Research Question 3.

For the data presented in Table 4, Cohens normally consider correlations above 0.4 to be rather strong; correlations between 0.2 and 0.4 are regarded moderate; and correlations below 0.2 are considered weak. As a result, Pearson Correlation Coefficient (r = 0.475), indicating a moderately high association between DDM leadership commitment and student satisfaction at Ethiopia's five public HEIs. Similarly, as seen in the prior table, if the p-value is less than (0.05), we may conclude that there is a statistically significant relationship.

#### Table 4

Correlation between HEIs leadership commitment for DDM to students' satisfaction

Correlation between HEIs lead- ership commitment for DDM and students' satisfaction		Pearson Correlations	Sig.(2-tailed)
	395	.475**	.000

\*\*Correlation is significant at the 0.01 level (2-tailed)

# Research Question 4: Is there statistically significant difference between male and female respondents on satisfaction for DDM?

As stated above, one of the current study's sub-basic research questions was to establish whether or not there was statistically significant difference between male and female respondents on satisfaction for DDM at public Ethiopian HEIs. The following results sought to offer solutions to the question.

#### Table 5

Independent Sample T-Test of Respondents Satisfaction for DDM Based on Sex

Group Statistics					Independent Sample T-test			
T-test of	Sex	N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
Satisfaction	Male	165	26.2545	4.17404	.32495	2.218	245	.027
for DDM	Female	82	25.0854	3.28183	.36242			

As shown in Table 5, the means of the male respondents and the female respondents were 26.2545 and 25.0854 respectively. Because p < 0.05, there was statistically significant difference in satisfaction on disability diversity management between male and female respondents at the five Ethiopian public HEIs chosen.

## CONCLUSIONS AND RECOMMENDATION

The study was conducted in five Ethiopian public HEIs namely, Addis Ababa University, Addis Ababa Science and Technology University, Debre Berhan University, Selale University and Kotebe University of Education. The major goal of this study was to evaluate and provide insight into the DDM in the context of the five Ethiopian public HEIs chosen for this study in order to provide recommendations for its development. It used convergent parallel mixed research (QUAN + QUAL) procedures that adhered to the pragmatic research paradigm. The research questions addressed by this paper were as follows: How is the commitment of Ethiopian public HEIs top management to DDM of its students? To what extent are undergraduate regular HEIs students satisfied with the DDM of Ethiopian public HEIs? Does HEIs leadership commitment for DDM have significant positive correlation or regression to students' satisfaction? Is there statistically significant difference between male and female respondents on satisfaction for DDM? As a general response to these four research questions, it can be stated that DDM was applied to some level at the selected five Ethiopian public HEIs through policies, programs, and strategies. Nonetheless, top management of the selected five Ethiopian public HEIs was less committed to DDM. Furthermore, undergraduate students with impairments were dissatisfied with their campuses' DDMs. Pearson Correlation Coefficient (r= 0.475), indicated a moderately high association between DDM leadership commitment and student satisfaction at Ethiopia's five public HEIs with statistically significant value (p < 0.05). The study also provided critical insight into DDM commitment as well as satisfaction, which must comprise a good mix of commitment at Ethiopian public HEIs in order to be satisfactory. To properly administer the DDM, Ethiopian public HEI leadership must be deeply devoted to DDM fulfillment with its egalitarian goals and cultural standards. It was also suggested that resources be made available to ensure that the DDM strategy be faithfully implemented.

To increase the commitment of the top management, DDM knowledge and expertise must be ensured within the selected five Ethiopian public HEIs, as must regular DDM practices such as establishing a diversity task-force, auditing current diversity and disability equality conditions at the selected five Ethiopian public HEIs, developing a diversity and disability equality plan with measurable targets and deadlines, providing resources for the DDM plan's implementation, identifying accountability for actions, and establishing accountability for actions.

## IMPLICATIONS TO EDUCATIONAL PLANNING

The outcomes of this empirical study have implications for assisting educational planners at HEIs in establishing course content that incorporates DDM informed viewpoints. If HEIs leaders are serious about recognizing DDM and promoting justice and inclusion, DDM-friendly policies and processes must be developed. An educational leader who creates a varied educational environment at HEIs is more likely to produce students who understand that being equal to someone does not entail being the same as them. Educational planners will also pay close attention to uneven structural imbalances caused by disability. They will attempt to change inequitable relationships in a number of areas by responding to their needs with the best allocation of resources, actions, responsibilities, and power.

#### REFERENCES

- Adamu, A. Y. (2013). Intergroup relations among ethnically diverse university students in Ethiopia. *Journal of Education and Research*, 3(2), 77-95
- Adamu, A. Y. (2014). Ethnic and religious diversity in higher education in Ethiopia: The case of Bahir Dar University. Tampere University Press. Doctoral dissertation, the University of Tampere.
- Adamu, A. Y., & Bejitual, T. (2007). Higher education institutions as pavilions of diversity: Opportunities and challenges: The case of Bahir Dar university. *Ethiopian Journal of Higher Education*, 4(1), 49-68.
- Agarwal, A., & Steele, A. (2016). Disability considerations for infrastructure programmes. Evidence on demand. https://www.gov.uk/dfid-research-outputs/disability- considerations forinfrastructure-Programmes.
- Ambissa K. (2010). Education and diversity: pupils' perceptions of 'others and curricular responses at selected sites in Ethiopia. *The Ethiopian Journal of Education*, *30*(1), 23-50.
- Aquino, K. C. (2016b). The disability-diversity disconnect: Redefining the role of student disability within the postsecondary environment. *Seton Hall University*.
- Armstrong, A. C., Armstrong, D., & Spandagou, I. (2010). *Inclusive education: International policy and practice*. London: Sage.
- Azhar, N. (2014). Disability diversity management: A case study of the banking sector in the KSA. International Journal of Humanities and Social Sciences, 8(12), 3842-3848.
- Bradley, J., Cook, D. A., McDonald, D., & North, S. (2009). We, they, and us: Stories of women STEM faculty at historically black colleges and universities. In W. R. Brown-Glaude (Ed.) (2009). *Doing diversity in higher education: Faculty leaders share challenges and strategies*. New Brunswick: Rutgers University Press, pp. 103–18.
- Brown, L. I. (2004). Diversity: The challenge for higher education. *Race Ethnicity and Education*, 7(1), 21-34.
- Cech, E. A. (2013). The self-expressive edge of occupational sex segregation. American Journal of Sociology 119, 747–89
- Cole, M. (2017). Education, equality and human rights: Issues of gender, 'race', sexuality, disability and social class. Routledge.
- Creswell, J. W. (2009). *Research design, qualitative, quantitative and mixed-method approaches.* Thousand Oaks: Sage Publication.
- Creswell, J. W., & Plano-Clark, V. L. (2007). *Designing and conducting mixed methods*. Thousand Oaks: Sage Publication.
- Dawson, M. (2007). Identity formation among learners at a South African high school: Assessing the interaction between context and identity. *Race, Ethnicity and Education, 10*(4), 457-472.
- FDRE. (2016). *Education sector development program V, ESDP V: Program action plan*. Ministry of Education, Addis Ababa
- Fleming, A. R., Oertle, K. M., Plotner, A. J., & Hakun, J. G. (2017). Influence of social factors on student satisfaction among college students with disabilities. *Journal of College Student Development*, 58(2), 215-228.
- Gobena, H. K. (2016). *Diversity management and students' cross-border learning experiences at selected Ethiopian universities*. Doctoral dissertation, University of South Africa.
- Hanafin, J., Shevlin, M., Kenny, M., & Neela, E. M. (2007). Including young people with disabilities: Assessment challenges in higher education. *Higher Education*, 54(3), 435-448.

- Hayes, T. L., Oltman, K. A., Kaylor, L. E., & Belgudri, A. (2020). How leaders can become more committed to diversity management. *Consulting Psychology Journal: Practice and Research*, 72(4), 247.
- Hurtado, S., Alvarez, C. L., Guillermo-Wann, C., Cuellar, M., & Arellano, L. (2012). A model for diverse learning environments: The scholarship on creating and assessing conditions for student success. Higher Education: Handbook of Theory and Research: Volume 27, 41-122.
- Hurtado, S., Griffin, K., Arellano, L., & Cuellar, M. (2008). Assessing the value of climate assessments: Progress and future directions. *Journal of Diversity in Higher Education*, 4(1), 204-221. https://doi.org/10.1037/a0014009
- Jaafar, S. M. R. S., Maarof, R., Hisam, M. J., & Husin, N. N. F. A. (2020). Inclusion setting for disabilities in higher education: A systematic review of issues and challenges in disabilities research. In *International Conference on Student and Disable Student Development 2019* (ICoSD 2019) (pp. 184-190). Atlantis Press
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. (2007). Towards a definition of mixed methods research. Journal of Mixed Methods Research, 1(2), 112-133. https://journals.sagepub. com/doi/pdf/10.1177/1558689806298224.
- Kabtyimer, M. T. (2020). The accessibility of higher education services: A focus for students with disabilities in Arba Minch University, South Ethiopia. *European Journal of Special Education Research*, 6(1), 1-19
- Kauffman, J. M., Anastasiou, D., Felder, M., Lopes, J., Hallenbeck, B. A., Hornby, G., & Ahrbeck, B. (2022). Trends and issues involving disabilities in higher education. *Trends in Higher Education*, 2(1), 1-15.
- Locks, A., Hurtado, S., Bowman, N., & Oseguera, L (2008). Extending notions of campus climate and diversity to students' transition to college. *The Review of Higher Education*, 31(3), 257-285.
- Lumadi, M. W. (2008). Managing diversity at higher education and training institutions: A daunting task. *Journal of Diversity Management*, *3*(4), 1-10
- Milem, J. F., Chang, M. J., & Antonio, A. L. (2005). *Making diversity work on campus: A researchbased perspective*. Washington, DC: Association of American Colleges and Universities.
- Morgan, D. L. (2007). Paradigms lost and pragmatism regained: Methodological implication of combining quantitative and qualitative methods. *Journal of Mixed Methods*, 1(1), 48-76
- Muoghalu, C. O., & Eboiyehi, F. A. (2018). Assessing Obafemi Awolowo University's gender equity policy: Nigeria's under-representation of women persists. *Issues Educ. Res.* 28, 990–1008.
- Pillay, N. (2010). Monitoring the convention on the rights of persons with disabilities: Guidance for human rights monitors. Professional Training Series No. 17. http://www. ohchr. org/ Documents/Publications.
- Phukubje, J., & Ngoepe, M. (2017). Convenience and accessibility of library services to students with disabilities at the University of Limpopo in South Africa. Journal of Librarianship and Information Science, 49(2), 180-190.
- Reay, D., Ball, S., & David, M. (2002). It's taking me a long time but I'll get there in the end': Mature students on access courses and higher education choice. *Br. Educ. Res. J.* 28, 5–19. *doi:* 10.1080/01411920120109711
- Resch, K. (2023, February). Student voice in higher education diversity policies: A systematic review. *Frontiers in Education*, 8, 1039578.

- Shackleton, L. (2007). Negotiating institutional transformation: A case study of gender-based change in a South African university.
- Singh Sandhu, H., Chen, R., & Wong, A. (2022). Faculty diversity matters: A scoping review of student perspectives in North America. *Perspectives: Policy and Practice in Higher Education*, 26, 130–139.

Thomas, C. (2002). Disability theory: Key ideas, issues and thinkers. London: John Wiley & Sons.

- Tirussew, T., Daniel, D., Alemayehu, T., Fantahun, A., Sewalem, T., Tilahun, A., & Yirgashewa, B. (2014). Assessment of the situation of students with disabilities in the Ethiopian Universities. Unpublished research done in collaboration Addis Ababa and Vienna Universities. Sponsored by Appear Austrian Development Cooperation.
- Tressou, E., Mitakidou, S., & Karagianni, P. (2007). The diversity in the university: students' ideas on disability issues. *Int. J. Diver. Organ, Commun. Nat.* 7, 259–266. doi: 10.18848/1447-9532/CGP/v07i04/39418
- UN NEWS. (2018). Sustainable development goals, UN Secretary-General: Protecting the rights of persons with disabilities 'a moral imperative' 12 Jun 2018|Goal 10: Reduced Inequalities, News
- UNCRPD, (2006). UN convention on the rights of persons with disabilities. retrieved from www. un.org/disabilities/documents/convention/convoptprot- e.pdf.
- UNICEF, (2008). *Humanitarian Action Report HAR 2008 home*. Retrieved from https://www.unicef.org/har08/
- Wann, C. G. (2013). *Race matters: Racial theory, classification, and campus climate*. University of California, Los Angeles.