

Critical Issues in Female Performance  
At the University of Dar es Salaam 2004-2010:  
Role Models and Lessons for the Future

Magdalena K. Ngaiza<sup>1</sup>

**Abstract**

This article explores the facts underlying the 50 years (1961-2011) that saw not only independence, nor the birth of the first Tanzanian university but also the gender initiatives. The gender initiatives have raised the stature of the Tanzanian nation in African statistics and the prestige of the University of Dar es Salaam. It celebrates women's intellectual achievements along their male counterparts. The article argues that during the 50 years, there was 'magic in the air' that enabled female success in different degree programmes amidst unpredictable biological and gender environments! Besides, the numbers that pullulated year after year in the university admission records were evidence to the spirit of a growing nation in civilisation. Some of the female achievements proved to the chagrin of the conservative theorists that Tanzanian girls are, without doubt, intelligent in their own right. I refuse to compare the performance of females and males and label such a comparison, a 'defunct science'. I also recognise female academicians in various positions as Nobel and other prize winners, professors, lecturers, senior administrators as conquerors of positions which were purportedly spaces for men. These are the role models for the upcoming young female students. The article argues that within the 50 years the credit that the university claims is that of recognising that female performance in academics was very much encumbered by both biological and social dispositions and was likely to drop if not supported. With evidence it brings to the attention of the university that a real female academic revolution has yet to come which ensures that female students pursue their academic obligations in a fair gender environment both for students and staff without prejudice or preference. It concludes that the promise of emancipation for the women of Tanzania will depend on ensuring that at intellectual level they achieve their rightful academic grades and be supported to surpass the biological and socio-economic encumbrances so as to open up their rightful opportunities and responsibilities in various job opportunities.

**1.0 Introduction**

The University of Dar es Salaam (UDSM) reached 50 years which many people certainly celebrated with appreciation. Indeed "Advancing Knowledge and Creating Futures" (the slogan of the celebrations) has been a job well done. The reflection in this article is to give a bird's view of how the university marched its mission and vision with the gender terrain. The national people's university did not fail to recognise that women were part of this society and indeed to accommodate female students as they

---

<sup>1</sup> Institute of Development Studies, University of Dar es Salaam, Tanzania.

surfaced since the catchment areas were very few. Female students on their part did their best in terms of fighting all hardships to achieve reasonable grades. It is these grades that are the subject of this article. The overriding concern is that generally there is a seemingly academic gender gap in academic achievement where male students outshine females. This is a global conclusion based on wrong data and logic which I call a 'defunct science'. I therefore take a feminist approach in appreciating the fact that women joined the prestigious "Hill" and were able to be visible in all courses formerly considered male like Engineering, Sciences, Law, among others. Some were also among the best students as it shall be shown. The act of comparing different male and female achievers should be a subject for another study and should include more variables than sex.

It is therefore important to celebrate and acknowledge that during the 50 years, there was 'magic in the air' that enabled female success in different degree programmes amidst unpredictable cultural, biological and gender circumstances in a male university! Besides, the female numbers that pullulated year after year in the university admission records were evidence to the spirit of a growing nation in civilisation. Some of the female achievements proved to the chagrin of the conservative theorists that Tanzanian girls are, without doubt, intelligent in their own right as we read and appreciate their visibility and performance in all schools and colleges. Although it has not been possible to obtain all the data that show the performance of students over the 50 years, we have used available electronic data in ARIS during 2005-2010 to show the possibilities and talents that female students exhibited.

Besides students, UDSM also among its female staff has produced great role models. These are known locally and are internationally acknowledged. Nobel Prize winner in Science (Botany) the late Professor Semesi; first female President of the African Union Parliament Ambassador Gertrude Mongela; former Professor of Economics, UN-habitat Director, now Minister for Land, Housing and Human Settlements, Prof. Anna Tibaijuka; former Law lecturer, Minister for Community, Gender and Children Affairs, Minister for Foreign Affairs and Assistant UNO-Secretary General, Hon. Dr. Asha-Rose Migiromu, Professor Mlamba and others have served on various national and international boards and guided many successful initiatives. All of them have excelled in their areas of specialisation and service to the community.

In the area of administration, it has been acknowledged that women have executed their roles highly magnanimously and professionally. As Deans and Directors no one woman has been declared a wash out, rather they have all been recognised as excellent leaders in all schools and colleges including the Library which is the heart-beat of the university. It may be important in another study to trace, in detail, the leadership of women administrators (role models) during the 50 years beyond the cursory look of this article.

## **2.0 The university's vision, mission, and values**

It is understandable that the university authority wished every member of the university community to uphold the vision, mission and values expected of the university. This article of course questions indirectly whether the spirit of the

university was observed by all during the fifty years. As a male-focused university, females were like intruders so that the data may suggest some kind of negligence in this area although this is not the main objective of the study.

UDSM started with acknowledging men and women within the spirit of the nation after independence which saw both women and men participating in the struggles that brought about independence. At that time, the girl child was included in colonial education as a footnote.<sup>2</sup> So the nationalist spirit continued with the trend of giving girls some opportunities including going to the East African University at Makerere.<sup>3</sup> As it continued with more national consciousness, will power and advocacy by advocates, UDSM increased the number of females using deliberate efforts as guided by the first president. This achievement came very early in the history of the nation and the university. By participating in the nationalist struggles, older women had proved that their daughters' way in other fields was also paved as recognised by the first president as well as successive presidents.

However, there was no strategic objective to discover the women's intellectual potential during their studies and after graduation. So UDSM maintained a carefree attitude towards issues of performance provided there were the assumed basics for success such as a library, bookshop, competent professors, a student bursary (that was almost insufficient) and a group of academic advisors (whose role was not clearly known). Indeed it can be said that although UDSM did make an attempt to attach students to advisers, the strategy never made a good contribution as the study participants concluded. Besides academic mentoring there has always been the Dean of Students' office that deals with general discipline and what is considered individual 'baggage' which students come with, as well as the confusion that some students develop while at the university campus. For example, issues of family, teenage behaviour, poverty, pregnancies, marriages and the total gender environment have been inimical for both male and females and have relevance for students' mental health and academic levels of achievement.

### 3.0 Relevant Literature

#### 3.1 *Historical Account*

Historically, there have been the patriarchal tendencies of ignoring the gains that females make and global literature attest to this truth. Females therefore were not expected to reach great heights in academics as speculated by conservative psychoanalysts like Burke and Freud (1986) who saw women as elephants in their kitchens but with little brains elsewhere, and Ngara people (see Ngaiza, 2002) and the recent Nobel Prize saga in Britain. Because this thesis failed at UDSM and elsewhere as argued by Chodorow (1978) and Figueroa (2000) both male students and staff respectively had a strategy to belittle female students through committing sexual indignities as ways of pulling them

---

<sup>2</sup>Female education was largely about home making that set the tradition of women's subjects but which again leads to questions of why women study what they do? When they study other subjects they are called names! When they perform well they are rejected by the very elites who argue for male-female competition.

<sup>3</sup>The first female Secretary to Council (2000-2005), and the VC's Assistant (1980-1995) were ex-Makererians.

down (humbling them, knocking them down and reminding them of their **sexual roles** to males). In the history of UDSM even as we celebrate our past 50 years of feminist and gender achievements, no serious feminist scholar will ever ignore the desperate suicide of Levina Mukasa who was raped by fellow students apparently to 'size her down'<sup>4</sup>. Also, the history of 'punch' as male bullies to threaten female students and force them to couple up sexually with males is not yet on record analytically and I will try to do that in this article. Several female students were either raped during the day or at night at the slightest mistake of visiting male students.

Such violations were committed under the pretext that both males and females were starved of sex and that everybody had to understand! Clearly, this violence was aimed at threatening girls and obstructing them from serious academic work as we shall see from the conversations we made with various respondents. Historically, it can be said that a good number of female students have had a negative gender environment while at UDSM which pulled them down academically. However, this depends on how one looks at the historical events and makes interpretations. The 20 case studies referred to in this article have produced some inkling to the facts which are usually outside the concern of the university but may be central for concern. The literature globally points to serious omissions in managing social relations at universities for better academic achievement while elsewhere efforts have been made to separate women into their own colleges in order to observe an experiment of women on their own!

By understanding the feminist and gender history at UDSM, one begins to acknowledge the need of research on female academic empowerment revolution. What I read of the historical feminist history at UDSM is that there is still a haunt of Levina Mukasa's death because it did not produce a historical rupture that would bring the university community into greater consciousness about the crisis in gender relations. Instead, the staff went into blaming students forgetting that some of the male staff were also culprits! Meeting in the Council Chamber, male and female staff had different feelings of guilt but several men felt that it was befitting her because she was academically brilliant and therefore 'invited rape' by being outgoing<sup>5</sup>.

This conclusion was reached because some male staff chased women activists around trying to stop them from organising an all campus demonstration with a coffin<sup>6</sup>. A joint meeting of female students and female staff was convened to condemn the 'punch' phenomenon and the immediate facts that had led to the girl's suicide under the protection of the then Minister of Community Development, Women and Children, Hon. Mrs. Gertrude Mongela. Women were angry; the male students were shocked and stood in close proximity to hear how 'punch' (their agent) was being fought. The question that imposes itself today is why did we not see that rape was an attack on the

---

<sup>4</sup>Bright female students as well as the strikingly beautiful ones were always nuisance at least in the early decades 1970s-1990s. 'Punch' was seen as the answer against them until it was brought to rest by the death of Levina Mukasa. Other students were also raped in the same spirit of keeping them down.

<sup>5</sup>Levina had gone to a student party at Silversands with a team of her male 'friends'.

<sup>6</sup>Also Hon. Mongela was criticised by several men for accepting to attend to such a 'minor issue' instead of letting the UDSM leadership handle it!

female brain? Why did we not read anger on the male psychology then against female performance?<sup>7</sup> Was there adequate conceptualisation, organisation and advocacy by female staff? The answer is probably not and this is why it has taken a long time to bring this gender crisis to record. In my view it does not tarnish the name of UDSM but it gives it the concrete facts to act more firmly from an informed perspective.

Our university appears sheltered from female revolutionary influence, but several sexual offence cases will forever haunt us especially how they were mildly handled, and in favour of men. The blindness on these issues undoubtedly grows out of a dominant assumption that 'men and women attract' so it is normal to rape/attempt rape or punish those female non-conformists, which in a way is a measure of self-delusion and a males' reality. Due to persistent outcry, the university invoked a Gender Policy and an Anti-Sexual Harassment Policy for the university community (UDSM, 2005) to meet the standards of civilisation as guided by the national law (Act 1999) on sexual offences. The war against the academic excellence of women may still be present today in hidden forms as we have been discussing and celebrating the 50<sup>th</sup> anniversary since last year, but we should not give up since UDSM is now widely known for its strengths and weaknesses. If one cannot explain such isolated incidents, then a bigger revolution may be in the offing where female students will put professors to shame by mentioning their names publicly, for ignoring the university's vision, mission and values.

### 3.2 *The academic problem*

The above are only a few dimensions of the problem but, in any event, it is clear that just as the signs of the gender crisis were difficult to miss at UDSM, even those without a sociological microscope admit that academically female students need both guidance and protection in career choice and focus. The degrading of the collective self-image of women compounds the sense of degradation of each individual woman. The assumption that if females are academically threatened by males they will compromise their self-respect is quite alive and has lived on for many years<sup>8</sup>. The heroines against self-degradation have been squeezed to committing suicide, being raped silently or to getting lower grades for lack of clear, quick and secure lines of support. Usually the young female students are expected to keep silent as if nothing happened in order to avoid negative publicity.

The silent revolts that follow in the wake of acts of desperation can in this sense be interpreted as carrying forward a demand for social recognition, respect for human rights and above all the demand for academic freedom that everyone knew could not be satisfied by the then patriarchal structures but required the establishment of a highly sensitive network and gender focal points campuswide. All the cases that are recorded in the history of the 50 years express above all, a will to recover a sense of individual and female collective self-respect and above all academic freedom to perform and be rightfully rewarded. The problem is therefore double pronged as a

---

<sup>7</sup>A recent pronouncement in a newspaper by a government official regarding the behaviour of Dons victimising students has been met by a flurry of hungry negative responses. Who is right?

<sup>8</sup>Students are told by a male professor, "you are too many; some of you might have to go". Who is being addressed? Or "some of you are likely to fail". Who is being addressed?

'social question' and primarily an 'academic question'. It can be said that some men just hadn't understood the purpose of the presence of women at universities and which values they generally stand for. It suffices to say that the female students' performance is still a hidden issue whose details cannot be captured by simple statistics. History shows that some damage has been done so that need exists to design better ways of supporting academic performance for the youth but more for females with clear justification.

### *3.3 Conceptualisation of university success factors*

Aptitude, role model mentoring, male expectations and behaviour as well as the gender environment are key factors in explaining success, other things being equal. Besides aptitude, the gender environment can play havoc to one's chances be it in social, political or economic areas. Various studies have argued that there is no convincing research that has established that women have less aptitude than men (Figueroa, 2000).<sup>9</sup> In fact, sometimes it has been to the contrary at different ages (Byrne, 2011). Byrne found that at Harvard Business School actually women spend more time on academics than men do although women are not yet able to achieve honours. In the United Kingdom and Australia it has been the same story.

In Jamaica, Figueroa (2000) shows a situation where young girls are ahead of boys. However, in the end, all these results can be explained. The fact that men have outdone women among the top 20% at Harvard for many years presents a complex phenomenon that needs thorough investigation beyond the ability of this article, but gives us hints about things that can happen. For example, the science of how men's and women's brains are knitted need to be understood; more especially, how they function. Sociologically, a conducive gender environment allows both men and women to excel in their areas of specialisation, or in their daily activities, and vice versa. The educational gender gap is a historic fact and one that does not need simple answers. Various authors have investigated the gender gap adequately including UDSM (Mukangara, 2008; UNESCO, 1998) showing the role of the gender environment. Figure 1 shows relevant factors for academic achievement.

Being one of the strategic gender needs, education is considered to be the root cause of other forms of participation and interaction among women in other sectors of the society. Basing on this fact, a gender environment through which women participate in the education arena becomes a very important area of discussion, especially to the extent to which it enables women to excel in the academic fields and vice versa. Male behaviour and expectations of women is another factor as discussed earlier. Some males may be shocked that women are catching up on them and being competitive than compliant and dependent. This female elevation causes hidden anger and revenge amounting to academic sabotage (see Chrester, 2011). Reading from the actions of some males in academics towards female counterparts the male perspective of females as 'objects of pleasure' has hardly changed or may be changing slowly if at all.

---

<sup>9</sup>Aptitude is also related to social conditioning. For example, in the so-called female-related soft subjects females excel in cookery, social sciences etc. (Figueroa, 2000).

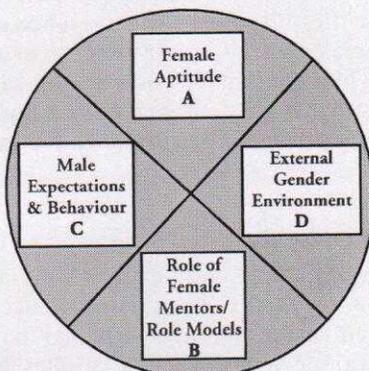


Figure 1: *Relevant factors for academic achievement*

Source: Ngaiza M. K. 2011. Compiled from literature

Finally, the effect of role models is not to be underplayed. Literature shows females especially in science enjoying better guidance from female role models than otherwise, something that pushed for female-only universities in some parts of the world including Africa (Ethiopia, Zimbabwe and Sudan) though for different reasons.<sup>10</sup> This shift obliges us to investigate the character of universities.

### 3.4 *The character of universities revisited*

Elsewhere in the world researchers note that from its beginning as an enterprise established by men for men, to early experiments in coeducation, the university was marked by isolating women and limiting their participation in university life (Nidiffer, 2001; Miller-Bernal, 2000; Solomon, 1985). Women were an afterthought even at UDSM. Given this historical legacy, it is just short of remarkable that today *women outnumber and in many respects perform better than their male counterparts [sic]*. In fact, the National Centre for Education Statistics (2001) noted that female students today have comprised the majority of undergraduates for more than two decades in some universities in Britain and USA.

Moreover, women are said to be more likely than their male peers to hold high educational aspirations, to enrol in college, and to persist to degree attainment (Bae, Choy, Geddes, Sable, & Snyder, 2000). Though impressive, women's gains in numerical representation and achievement may mask more complex issues of gender inequity in the academy. Indeed, despite the advances made by women in higher education, some argue that women continue to be treated as 'second class citizens' (AAUW, 1992; Riordan, 1992; Holland & Eisenhart, 1990) a fact that has necessitated women-only colleges. Since 1982, when Hall and Sandler reported a chilly climate for female

<sup>10</sup> Some countries may be responding to religious needs and/or gender complications. This was revealed at a Gender Mainstreaming Training at OSSREA, in Addis Ababa, in April 2011.

undergraduates, the quality of the learning environment for women at co-educational colleges and universities has been a topic of justified concern. They put it as follows:

*Though the evidence supporting the chilly climate thesis is somewhat limited, what does exist suggests that compared with men, many women students perceive their campus to be less supportive of their academic and social needs and that, as a result, their learning and personal development is adversely affected (Pascarella et al., 1997; Drew & Work, 1998; Rice, 1991).*

Pascarella and his colleagues found a handful of moderate size negative relationships between perceptions of the campus climate and selected intellectual and personal development outcomes. This pattern persisted through the junior year, wherein students who perceived their campus to be 'chilly' had lower gains in writing and thinking skills, science knowledge, and arts and humanities knowledge (Whitt, Edison, Pascarella, Nora, & Terenzini, 1999). In other words, the undermining conditions can be difficult to measure because researchers cannot determine the relationship between lower grades and sexual harassment, or broadly the gender environment.

In addition, women students continue to be underrepresented in positions of leadership on co-educational campuses (Astin, 1993) and in the traditionally male-dominated fields of Science, Mathematics, Engineering, and Technology (Postsecondary Institutions in the United States, 2001). In part, this may be because women students have qualitatively different leadership styles and experiences during college (Astin, 1993; Kezar & Moriarty, 2000; Whitt, 1994). In addition, females who might serve as role models are underrepresented among senior administrators and faculty positions (Nidiffer & Bashaw, 2001). It is argued that as these and other micro-inequities accrue over time, they have a damaging cumulative effect, creating an environment that dampens women's self-esteem, confidence, aspirations and their participation.

Researchers argue that such inequities were especially marked in areas where women are underrepresented, such as Science, Mathematics, and Technology (Davis, Ginorio, Hollenshead, Lazarus, Rayman & Associates, 1996). In such instances, the paltry proportions of women students in classes were seen to contribute to women's feelings of lack of belonging as learners and to their discomfort in the learning environment. Since experiences differ, in Africa the pain for STEM subjects is in acquiring employment than grades, especially for engineering students. Female students in Science, Mathematics and Engineering at co-educational institutions are often discouraged from pursuing Science as a career because they have few interactions with role models that could support such a choice and perceive that male science professors fail to take them seriously (Davis *et al.*, 1996; Seymour & Hewitt, 1997). At UDSM the number of females in STEM subjects has also not grown adequately for reasons explained elsewhere. However, unlike in the past STEM students at UDSM have started to organise themselves for a better day.

By establishing conditions that foster student faculty interactions, women-only colleges are said to have provided important support for women in fields where they are underrepresented. This is true, for example, at Sweet Briar College where 60% of its graduates obtain advance degrees, many of them in the sciences. First-year students

and seniors at women-only colleges participate more actively in class, collaborate more frequently with their classmates in and outside of class, and tutor other students more than women at co-educational institutions. However, although the radical approach of 'women only' colleges may truly show other results, my view is that men and women must **learn** to live respectably with each other but the learning environment must be visibly established to benefit all.

In the following section, I report findings of research conducted at UDSM. The objectives of the inquiry were three: to capture the performance of females at the level of excellence (honours first and second classes) during the 50 years of UDSM; to explain the performance of female students and people's perceptions; and to come up with recommendations that can improve female performance as part of the gender mainstreaming efforts of UDSM.

#### 4.0 Female performance at UDSM in the last 50 years

##### 4.1 *The heterogeneity of female students*

Among the key issues that this research found as part of the background was the heterogeneity of students. Participants noted that female students come to university in many colours and shapes (the different faces of Eve), which is the reason why one has to be ready to offer them some extra support and professional guidance. Women have realised that pregnancies and marriages should not be reason for them to be left behind. When such women appear on campus one cannot give them a blind eye. Some students affirmed that attaining a degree plus getting a child, both in the same study period, is a very big success! There are two known cases (1974 and 1993) of female students who got their first degree with three children each, during the same study period, because their husbands were fearful that the wives would mess around with other men!

Some of those women students who pursue different degrees while they are already in marriage find themselves performing multiple roles at once. They are often forced to fulfil their responsibilities as students, wives, and mothers, and most of the time they have limited or no support. This combination of roles does not only limit their study time but it also affects their mind-set psychologically to such an extent that their concentration in their studies gets largely affected. Sometimes, they are forced to stay outside campus or hostels not because of room scarcity, but because they have to attend to other duties as mothers and wives. One professor at UDSM commented: "Women cannot be successful because usually there are no men behind them"! He reminded me about the dictum which says: "Behind every successful man, there is a woman."

Female students under such circumstances find themselves also restless because of the roles they are supposed to assume at the same time as mothers. They must make sure that their children are properly taken care of in terms of proper nutrition, schooling and development in general. All these demands affect their scope of involvement in academic matters. While they know that they can't win on both fronts, this situation has often reduced their possibility to excel in the academic fields. Today, or in the next fifty years, the university and other stakeholders may want to offer the requisite

services of all students beyond the unmarried category. Some of the women (whether married or not) get pregnant during studies. This also becomes an obstacle to them both physically and psychologically. Accompanied with its complications, concentrating on their studies and interacting with their fellow students for the purpose of studying becomes very difficult. Given the fact that they are supposed to carry the same load as other students, it becomes very hard for them to shine and excel in the academic field. Some of them have sometimes been forced to freeze and postpone their studies, which extends their graduating time.

Some of these women came from distant rural areas like Kibaha and Moshi (*live cases*), and they were expected to harmonise the demands of their families, husbands, and those of their studies. Some of them travelled to see their families every weekend, so they had to cover approximately 400 kilometres. The extra strain was taking toll, and sometimes they even failed to attend the next day's lectures.

Some other women in high learning institutions were single parents. They were sometimes forced to have children, support them and other relatives while at the same time struggling to support themselves economically in their college life. They found themselves overloaded with responsibilities beyond their studies as well as being inexperienced.

Another category is that of young women fresh from school that joined the university alongside others. These joined the university full of dreams but not knowing what was going to happen in their academic life. They had no obligations in their families, and these (especially those from well-to-do families) received financial support from their parents and others. These were expected to excel better than any other category of women who joined the higher learning institutions. Some of them joined the higher learning institutions with even better grades than those of their male counterparts. Yet this category was also faced with a number of challenges. Some of them suffered from being picked upon by their fellow male students in the class, and also by their male professors. The atmosphere became unfavourable for them to actively engage in discussions with their fellow students.

Some of the girls got mixed up by their fiancés. They got forced to divide their time between studies and their emotional relationships. These relations tended to affect the females psychologically, especially when these relationships failed. Some of the boyfriends, out of sheer mistrust tended to bump into their fiancées' timetables with no consideration of the harm this might cause to their female students' academic performance. The male focus group wondered how female students managed to accommodate all these complications and yet achieve high grades.

#### **4.2 Conversations and revelations**

Findings about the performance of female students in the last 5 years<sup>11</sup> (2006-2010) are at best interesting. They show that women are actually doing well and perhaps could even do better as we read the data below; while at worst the findings show a

---

<sup>11</sup>Readily available data is limited but it allows us to say something about female performance.

distortion of female academic achievements due to what is called the negative gender environment in the last 30 years resulting from their partnerships, biological responsibilities and other externalities.

The early years of the UDSM (1970s and 1980s) admitted female students who were more mature and serious with university studies than today. However, it was revealed during the discussions that there was no particular drive around 1970-1976 to recruit women tutorial assistants. The character of UDSM was patriarchal and women had not developed a bargaining spirit for space in universities because it was not an issue if one stayed at UDSM or not. Jobs were abundant elsewhere. If females 'graduated' with fiancés or husbands, they were satisfied; besides, career counselling was weak.

A male staff opined that as one might continue searching for explanation as to why females do not stay back to teach, one has also to consider the fact that even today there are career opportunities which have better rewards compared to staying in an academic environment, which perhaps is not either morally or socially perfect for some females to stay. There is better take-home, and the working environment promises a happier future out there than at UDSM. With regard to excelling, he noted that not many students attain the required GPA for one to become an academic; for example, only a few students want to search for knowledge while others just want to copy. He thought also that academic posts at the university are selectively given {sic}, blaming it on the failure of the university/government to strategise on retaining the best performers. In the struggle to distribute the few resources available, even some of the male students do not get open scholarships when preference is given to women. He recounts: "If I were to give my own example, my undergraduate GPA was 4.5. I confidently applied for masters open scholarships offered by the university, they didn't take me, and I was rescued by the Loan Board in 2005 (a year later)."

A focus group at the Institute of Social Studies revealed that being faced with various socio-economic setbacks and an unfavourable gender environment which in most cases are less considered when articulating female poor performance, many female students fear of getting lost on the way. The male respondents were genuinely concerned about female performance. The foregoing discussion does not tell the whole story about what prevents many female students from getting to the top. Moreover, it also doesn't tell their academic competence either. The statistics below give some clues.

Table 1: Female students' performance at UDSM between 2006 – 2011 (n = 6883)

Degree Class	Number	Percent
1st class	27	0.4
1- & >3.7 (GPA)	668	9.7
Upper second	1694	24.6
Lower second	4709	68.4
Pass	453	6.6
<b>Total</b>	<b>6883</b>	<b>100</b>

Source: UDSM: Examinations Department (ARIS, 2011). 9.7% is counted alone.

Evidence from faculty statistics 2006-2010 (ARIS, 2011), Table 1 above and Graph 1 below) shows that female students have generated quite a critical mass which excelled (first and upper second class above a GPA of 3.7) and from which adequate numbers to stay as academic staff could have been found, other things being equal. In other words, if we claim that females are not at the top we must also see that given their circumstances not many are at the bottom either.

According to records at UDSM (2010) high achievers during 2006-2010 (5 years) were 9.7% or 668 students out of a total 6,879 female students who had a GPA of (3.8-4.8). During the period of five years only 27 (0.4%) female students were 1<sup>st</sup> class (GPA 4.4-4.8). The upper second class alone (GPA 3.5-4.3) were 1,693 or 24.6%. Lower second class were 4,707 or 68% while the pass group had a very low number of 451(6.6%). From this data many females who excelled are out there in the public and private sectors and they have been joining higher studies comfortably.

This distribution is normal and allays fears about female students not being up to the mark. Across faculty/schools and colleges there were the usual discrepancies regarding the small numbers of women in almost all the colleges. What is important is not how they compare with male students but how they manage their difficulties to reach satisfactory grades from pass level to first class. The female circumstances were said to be much harder and literature supports that assertion, to the extent that female performance was affected. Such issues have been indicated in the history and the heterogeneity of female students discussed above. We also read the data in terms of how female students were distributed in the honours grades in terms of the top 5%, 10% and 20%, between 2004 and 2010 (see Table 2 below).

**Table 2: Presence of female students in top honours**

School	5%	10%	20%	Total Enrolment
CASS	201	403	806	4029
Education	36	72	154	772
UDBS;	37	75	150	748
Journalism/MC	11	21	42	212
Engineers	16	32	64	318
LAW	18	37	144	722
Science	25	50	100	498
<b>Total</b>	<b>328</b>	<b>690</b>	<b>1379</b>	<b>7299</b>

Source: Calculated from ARIS Data 2004-2010

The data suggest that the numbers look small especially at the 5% level. The truth is that many students are left out in the counting but the number is not qualitatively insignificant for purposes of what excelling women can do. The figure below shows the visibility of the data. CASS shows a total of 806 in the (5%, 10% and 20%) but could be said to be small given the history of the school. Education shows a total of 154, UDBS shows a total of 150, while Journalism and Mass Communication (JMC) which is relatively new shows 42, Engineering 64, Law 144, and Science a total of 100.

These are reasonable achievements that need to be applauded. In the figure below, we see reasonable visibility at the 20% level, but also the 5% and 10% are not invisible.

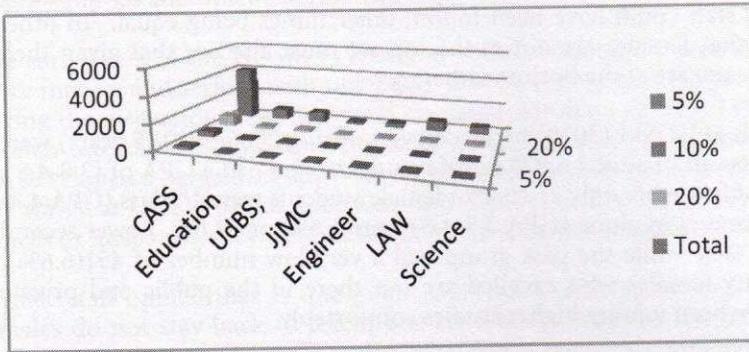


Figure 1: Visibility by Honours Percentages

Source: Calculated from UDSM-ARIS Data (2004-2010) & Table 2 above

The top scoring (GPA) for the above respective 20% shows the following order: Engineering (4.8) lead by ICT with the majority in top 5%; Science (4.7) lead by ICT, with many other scientists in Wildlife, Aquatic Sciences, Molecular Biology and Education in honours grade; Journalism and Mass Communication (4.5) with only ten students without honours grade; CASS with the majority female students but with a GPA of (4.4) lead by FPA, Arts with Education, Economics and Statistics. Education top GPA (4.4) is at par with CASS in terms of highest GPA; these are followed by UDBS with highest GPA ( 4.2) and finally Law with the highest GPA at (3.7) by four students only. More analysis of the database is needed to complete the picture. The figure below translates Table 2 above and seeks to show the importance of each category.

The College of Informatics and Communication Technologies (CoICT) is currently producing comparatively better results as far as female students are concerned (College Board - CoICT, 2010/2011). A study comparing female performance in different colleges and schools may be informative. At the time of the study, CoICT students were spread into the faculties of Science and Engineering.

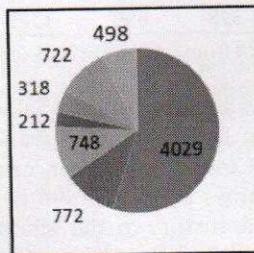
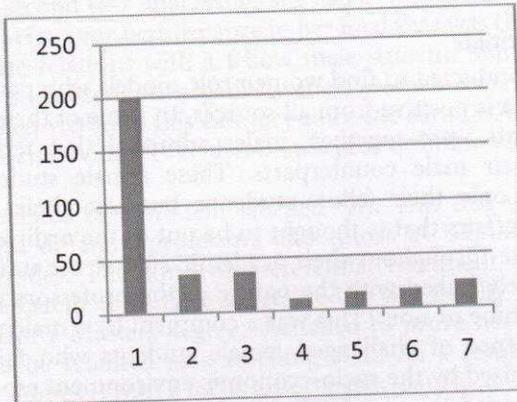


Figure 2: Share of females in respective colleges

Source: Calculated from UDSM-ARIS Data (2004-2010) and Table 2

*Critical Issues in Female Performance at the UDSM: 2004-2010*

Figure 2 shows the share of colleges (faculties by then) in absorbing female students: CASS 55.2%(4029), Education 10.6%(772), UDBS 10.3%(748), JMC 2.9%(212), Engineering 4.4%(318), Law 10.6%(772), Science 6.8%(498).



**Figure 3: Top 5% Female performance across schools and faculties**

Source: Calculated from UDSM-ARIS Data (2004-2010) & Table 2 above

Figure 3 indicates that data of the last five years shows not only the presence of female students among the top 5%, 10% and 20%, but also the need to be more visible in the higher GPAs at 5%, 10% and 20%. Reasons have been given above largely involving an improved gender environment, exposure to role models, social protection and visible caring, as the gender terrain is getting more complicated.

Although the five percent seems visible and usable for practical purposes, there is hidden potential if the gender environment is highly improved. The College of Informatics and Communication Technologies is leading the way and perhaps there is something to learn here. The College of Engineering is also catching up because of the previous deliberate efforts to improve on recruitment through pre-entry support. This input generated new energy among female engineering students, and the University Gender Centre has kept its eye on encouraging them to do recognisable things.

The preceding information tells us more than we can see. On the part of female students they have also excelled to enter fields which previously were reserves of male students. The university takes credit to have encouraged female students to take Engineering subjects. With support in recruiting them through a pre-entry programme, female students did their best as the data show, with the majority in the honours group, and they are in all fields. All the fields of Engineering have been infiltrated by females and their numbers have increased. Another new field is Business. Fields of Accounting, Marketing, Corporate Finance, Business Management and Administration and Banking are all in the purview of female students.

## 5.0 Critical factors in the academic life of female students

Some critical factors have been recorded that play havoc to female students. Positive factors were also identified as role models and supportive staff and relatives. These critical factors are explained below.

### 5.1 Role models and aptitude

Since this study was conducted to find women role models who performed at the top of their classes, the data is positive from all sources. In some of the classes where male and female respondents were together, males admitted that female students did sometimes surpass their male counterparts. These female students found to be brilliant, impress not only their fellow students, but also their professors largely because it is a state of affairs that is thought to be out of the ordinary. Some of them have been able to shine throughout their academic stay at the university. However, such possibility is closely linked with the nature of the professors whether they give females that room to shine or not. (This was a comment by a male participant). Data also revealed the presence of challenged female students who failed to shine out because of being victimised by the socio-economic environment especially the gender relations which surrounded them at UDSM and at home. The foregoing statements might imply that sometimes passing or failing depends not only on ability but on the desire of the instructors, and the general social-economic conditions.

One of our female respondents and two male respondents in this study gave evidence to this situation regarding treatment of failed female students. Due to space we have used only a few case studies as source materials for the statements made in this article. It is not uncommon to hear of female students being asked to meet a professor in a guest house or hotel room as discussed earlier on threats to females. Other possible influencing factors were named to be the economic background and character of girls, and the influence of their peer groups and various threats. Female students from well-to-do families were found to have better chances of shinning out because they are financially stable, and thus, they don't become victims of men because of poverty. And so, if they have high aptitudes and determined to make things happen, they obviously could shine out.

### 5.2 Gender stereotypes

Gender stereotypes were also said to be persistent, and one of the forces which also disappoint women. Verbal abuse was said to be very common among the student community at UDSM. It was argued by male students that in most cases if a girl outshines men, that girl is less accepted and not appreciated among the student community. Her performance tends to be linked with what is called 'sex grades' or favours from a professor in exchange for sex. In this way, their academic achievements do not get widely respected; but if the same female student fails to perform well, her poor performance is attributed or linked to low academic ability without considering other genuine factors which might be responsible for such low performance. For example, the lower second class to which many students are placed is an area of contention because even some of the best students find themselves in this category.

### **5.3 Female-male student relations**

Asked about whether or not female-male student relations had negative outcomes on studies, a focus group at UDSM admitted that some cases had proved to be negative, for example student (Y) from a well-to-do family joined the university with high grades. During her first and second year final results she had a GPA of 4.0; while in her final year she got a GPA of 3.5. Her poor performance in her final year was claimed to be the result of unhealthy intimate relations with a fellow male student. Some of the interactions between male and female students negatively affect women achievement in academics. Several girls have fallen victim in this category since the early 1970s, and some students have infected their friends with HIV, either on purpose or unknowingly.

Another case was recited of a student labelled (Z). This one was said to have had sexual relations with different professors and tutors at UDSM as long as she was guaranteed good grades. This kind of preferential treatment enabled her to shine academically to the extent that she was retained in her faculty after graduating. But after she had gone for a Masters degree, she failed to prove her academic ability that had enabled her to be retained as a teaching staff. As a result, she was eventually discontinued from studies (From a focus group participant).

### **5.4 Marriage and studies**

Marriage is also one of the factors that can and did prevent women from excelling academically. Some married female students were supposed to play three roles, all at the same time: as wives, mothers, and students throughout their studies. A female student labelled (A) lamented that she had to travel more than 400 kilometres every weekend to see her husband and children. She sometimes had to forego some of Friday and Monday lectures because she had to leave early on Friday and arrive in Dar es Salaam late evening on Monday. As a result she wasted a lot of time. Surprisingly, she managed to graduate with a GPA of 3.4. She was admired by her classmates. Such juggling was a necessary evil for married women.

### **5.5 Poverty**

Poverty is another problem which hit female students strongly at UDSM. This was said to be one of the factors that prevent female students from achieving their academic goals. They end up in the hands of their professors or fellow male students from well-to-do families, or even engage in commercial sex. A female student named (B) was discontinued during her second year after she had performed poorly in her examinations. One of her friends said that she had to spend most of her evening time in the city where she was conducting commercial sex due to the fact that she was unable to afford tuition fees and other costs for subsistence.

Another case is of a girl who was brilliant but had to finish with a PASS degree. The girl also had to spend a lot of her time on the street offering sex for money. In one occasion she spent a night with one of her fellow male students from a different degree programme but they did not recognise one another at the time. After some days they bumped into each at Mabibo Hostel and the news spread, badly affecting the girl psychologically. However, she managed to graduate with a PASS degree.

## 6.0 Conclusion and Recommendations

### 6.1 Conclusions

The fragile foundations that allowed sexual harassment along the fifty years can be explained in three ways: lack of common experience by the female peers on how the university space was dominated by male interests and how to contest it; absence of discussion fora on gender issues on campus; and a divided approach when it came to starting dialogue. While men thought women were exaggerating gender facts, women thought facts were enough evidence to the existing gender crisis but that research needed to show more scenarios countrywide and concentrate on national gender and women related research.

We have travelled a difficult path but we hope it is clear that female students are able to perform better if the gender environment is rectified because aptitude is guaranteed by entry requirements. The values of UDSM are clearly based on respect to each individual but as evidence shows this value system has been seriously disregarded and damaged. Nevertheless, the university has covered some milestones in gender responsiveness towards equity in terms of recruitment but needs to do a lot more in designing strategies to improve female performance. Finally, performance by females during pre-entry programmes in the Colleges of Engineering, Science and Education have indicated that with some concerted support to offset the female pre-entry weaknesses, women can do better. So the claim that males necessarily outdo female students or that female students are not able, is not a valid conclusion.

### 6.2 Recommendations

There are many measures that can be taken to protect female rights and academic freedom. Both policy and pragmatic approaches are required. Globally, there are experiences that show the establishment of separate women colleges as a means to enable them enjoy the learning environment without being interfered by men. The assumption is that these separate women colleges with dominant female professors will offer female students an opportunity to enjoy the learning environment both within and outside the classes. They will also offer appropriate interaction between female students, and their professors. This suggestion is based on the successful story of USA and elsewhere where the oppressive gender environment to women students led to the establishment of separate women-centred colleges. These colleges enable female students to enjoy the learning environment, and excel academically.

As argued by many, because men are absent at women's colleges, women students at single-sex institutions have unique opportunities to engage in the education process (Langdon, 2001; Sharp, 1991; Neff & Harwood, 1991; Conway, 1985; Women's College Coalition, 1981). Unlike women at co-educational institutions, women at single-sex colleges assume all the leadership roles on campus, form study groups composed only of women, and take charge in laboratory exercises and classroom discussion. Further suggestions support Fassinger's (1995) conclusion that classroom conditions at co-educational institutions reduce women's level of participation, whereas women's colleges seem to create classroom conditions in which women

students are more likely to be actively engaged. Students at women-only colleges also report better performance compared to those at co-educational institutions.

As Clifford (1993:142) observed, "Gender . . . is one of the most potent forces in shaping human institutions, including education." For more than two decades, proponents of women's colleges have asserted that such institutions offer female students a more equitable, and therefore a higher quality, developmentally powerful learning environment (Langdon, 2001; Sharp, 1991; Neff & Harwood, 1991; Conway, 1985; Women's College Coalition, 1981). Furthermore, staff and students in each region appreciated the ways that teaching was focusing on women's ways of learning and on empowering them as students, scientists, and future workers. As reported by their peers at US women's colleges (Hardwick-Day, 2008; Kinzie, Thomas, Palmer, Umbach, & Kuh, 2007; Wolf-Wendel, 1998), students said that they felt taken seriously, that staff cared about them as people, and that they felt empowered for future success in the classroom and in the workplace.

Researches support this claim and indicate that single-sex colleges are not an anachronistic post-secondary option for women. On the contrary, in many respects they are models of effective educational practice, institutions that have much to teach other types of colleges and universities that aspire to provide a challenging yet supportive educational environment for all their students. This is a radical theoretical and practical prescription for the future. UDSM however can add some practices to what is already available as a co-educational institution. Below I recommend several issues that such practices might want to consider.

- (a) Female mentoring facilities should be established, to act as service points dealing with gender related issues which in one way or another oppress female and male students. The departments will provide academic advice to female students, and equip them with necessary skills on how to deal with the compromising situations. The departments will also act as the mouth piece of female students because the latter fail to open up. The mentoring departments may be established in each school, and they would be working parallel to the Gender Centre and the Dean of Students of UDSM. The departments should also be responsible in counselling female students on how to avoid being naïve at UDSM and develop valid expectations. The departments should consist of senior academic members, and senior students. Monitoring of possible bad cases must be done but also the teaching staff must be made aware that they are being watched.
- (b) Courses should be taught by two professors and marked by anonymous makers where necessary. This will reduce the bossing attitude of male professors towards female students. It will also reduce the possibility of distorting grades for self-interest<sup>12</sup>; and in case there is no female professor fit for instructing the course, a female lecturer should be left to coordinate the continuous assessment and the final exam.

---

<sup>12</sup>Cases have been found of grade distortion to benefit or punish females (and males too) in that confusion.

- (c) For the case of Masters students, UDSM should reform the policies on thesis and dissertation supervision. There should be two supervisors for each student, and ideally one should be a male and the other a female in case the candidate in question is a woman. This will likely reduce the manipulation on grading students' theses and dissertations, including either failing them unfairly or writing for them. Senior students report of female supervisors as being comparatively more helpful and more businesslike in their work, while older female students make advances at supervisors for academic favours. Self-respecting male professors should be allowed to throw out female students who attempt to impose themselves on such professors.
- (d) The DVC - Academic, Gender Centre through the Student Gender Club, and the Student Union (DARUSO), should sensitise female students to work for higher grades so that they stand better chances of getting employed. For example, at Harvard University such deliberate sensitisation has helped to raise female students' grades to the honours category. Again, conferences beyond orientation sessions could be held annually to discuss factors that hinder female performance and how to go around them including popularising support centres and telephone help lines in case of trouble. It is imperative to realise that the problem of female students will be better solved by creative and sympathetic feminists – both women and men.

## References

- Aleman, A.M.M. 1998. Girlfriends talking. *About Campus*, 2(6), 4-8.
- Altbach, P.G. 2004. Preface. In F.B. Purcell, R.M. Helms & L. Rumbley (eds.). *Women's universities and colleges: An international handbook*, pp. ix-x. Rotterdam, the Netherlands: Sense Publishers.
- American Association of University Women. 1992. *How schools short-change girls: A study of the major findings on girls and education*. Washington, CD: AAUW Foundation.
- Arnold, K. 1996. *Lives of promise: What becomes of high school valedictorians*. San Francisco. Jossey-Bass.
- Astin, A.W. 1993. *What matters in college? Four critical years revisited*. San Francisco: Jossey-Bass.
- Astin, H.S. & C. Leland. 1991. *Women of influence, women of vision: A cross-generational study of leaders and social change*. San Francisco: Jossey-Bass.

*Critical Issues in Female Performance at the UDSM: 2004-2010*

- Bacchi, C. 1998. Changing the sexual harassment agenda. In Gatens M., & Mackinnon, A. (eds.). *Gender and institutions. Welfare, work and citizenship*, pp. 75-88. Cambridge: Cambridge University Press.
- Bae, Y., S. Choy, C. Geddes, J. Sable, & T. Snyder. 2000. *Trends in educational equity of girls and women (NCES 2000-030)*. Washington, DC: U.S. USGPO.
- Bagilhole, B. & H. Woodward. 1995. An occupational hazard warning: Academic life can seriously damage your health. An investigation of sexual harassment of women academics in a UK university. *British Journal of Sociology of Education*, 16(1), 37-51.
- Bajpai, A. 1999. Sexual harassment in university and college campuses in Mumbai. *The Indian Journal of Social Work*, 60(4), 606-623.
- Bakari, S., & F. Leach. 2007. Hijacking equal opportunity policies in a Nigerian college of education: The micropolitics of gender. *Women's Studies International Forum*, 30(2), 85-96.
- Baxter, M.B. 1992. *Knowing and reasoning in college: Gender-related patterns in students' intellectual development*. San Francisco: Jossey-Bass.
- Britwum, A., & N. Anokye. 2006. *Confronting sexual harassment in Ghanaian universities*. Accra: Ghana Universities Press.
- Buchmann, C. & E. Hannum. 2001. Education and stratification in developing countries: A review of theories and research. *Annual Review of Sociology*, 27, 77-102.
- Burke, P. 2009. Men accessing higher education: Theorising continuity and change in relation to masculine subjectivities. *Higher Education Policy*, 22, 81-100.
- Butler, J. 1991. *Gender Trouble*. London: Routledge.
- Chan, D., C.S.K. Tang & W. Chan. 1999. Sexual harassment: A preliminary analysis of its effects on Hong Kong Chinese women in the workplace and academia. *Psychology of Women Quarterly*, 23, 661-672.
- Clifford, G.J. 1993. Shaking dangerous questions from the crease: Gender and American higher education. In Glazer, J. S. & Bensimon, E. M. & Townsend, B. K. (eds.). *Women in higher education: A feminist perspective*, pp.135-174. Needham Heights, MA: Ginn Press.
- Coffey, A., & E.L. Boyer. 1990. *A special report. Campus life: In search of community*. Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.
- Conway, J.K. 1985. Women's colleges: An educational force to be reckoned with. *Change*, 17, 30.
- Crosby, F., Allen, B., Culbertson, T., Wally, C., Morith, J., Hall, R., & Nunes, B. 1994. Taking selectivity into account: How much does gender composition matter? *National Women's Studies Association*, 6(1), 107-118.
- Davis, C., A.B. Ginorio, C.S. Hollenshead, B.B. Lazarus, P.M. Rayman & Associates. 1996. *The equity equation: Fostering the advancement of women in the sciences, mathematics, and engineering*. San Francisco: Jossey-Bass.
- Drew, T.L., & G.G. Work 1998. Gender-based differences in higher education: Gaining a broader perspective. *Journal of Higher Education*, 69, 542-555.
- Dyhouse, C. 1995. *No distinction of sex? Women in British universities 1870-1939*. London: UCL Press.

- Dyhouse, C. 2003. Troubled identities: Gender and status in the history of the mixed colleges in English universities since 1945. *Women's History Review*, 12(2), 169-194.
- Dziech, B., & L. Weiner. 1984. *The lecherous professor: Sexual harassment on campus*. Chicago, IL: University of Illinois Press.
- ECU (Equality Challenge Unit). 2009. *Equality in higher education statistical report 2009*. London: Equality Challenge Unit.
- Epstein, D., J. Elwood, V. Hey & J. Maw (eds.). 1998. *Failing boys? Issues in gender and achievement*. Buckingham: Open University Press.
- Eyre, I. 2000. The discursive framing of sexual harassment in a university community. *Gender and Education*, 12, 293-307.
- Fassinger, P.A. 1995. Understanding classroom interaction: Students' and professors' contributions to students' silence. *Journal of Higher Education*, 66(1), 82-96.
- Franke, A.H. 2008. New lessons in dealing with sexual harassment. *Chronicle of Higher Education*, 55(14), A99.
- Giele, J.Z. 1987. Coeducation of women's education: A comparison of alumnae from two colleges. In Lasser, C. (ed.). *Educating men and women together*, pp.91-112. Urbana: University of Illinois Press.
- Glazer-Raymo, J. 1999. *Shattering the myths: Women in academe*. Baltimore, MD: Johns Hopkins Press.
- Hall, R.M., & B.R. Sandler. 1982. *The classroom climate: A chilly climate for women?* Washington, DC: Association of American Colleges.
- . 1984. *Out of the classroom: A chilly campus climate for women? Report of the Project on the Status and Education of Women*. Washington, DC: Association of American Colleges.
- Hayes, E., & D.D. Flannery, 2000. *Women as learners: The significance of gender in adult learning*. San Francisco: Jossey-Bass.
- Hearn, J., & W. Parkin. 2001. *Gender, sexuality and violence in organisations*. London: Sage.
- Holland, D.C., & M.A. Eisenhart. 1990. *Educated in romance: Women, achievement, and college culture*. Chicago: University of Chicago Press. <http://www.bernicessandler.com/id23.htm>. Retrieved, 2003, from the World Wide Web).
- Hurtado, S., D.F. Carter, & D. Kardia. 1998. The climate for diversity: Key issues for institutional self-study. *New Directions for Institutional Research*, 98, 53-63.
- Jaschik, S. 2008, February 15. Converts to leading women's colleges. *InsideHigherEd.com*. Retrieved August 7, 2008 from: <http://www.insidehighered.com/news/2008/02/15/women>
- Jones, S.R. 1997. Voices of identity and difference: A qualitative exploration of the multiple dimensions of identity development in women. *Journal of College Student Development*, 38, 376-386.
- Kaschak, E. 1992. *Engendered lives: A new psychology of women's experiences*. New York: Basic Books.
- Kezar, A., & D. Moriarty. 2000. Expanding our understanding of student leadership development: A study exploring gender and ethnic identity. *Journal of College Student Development*, 41(1), 55-69.

*Critical Issues in Female Performance at the UDSM: 2004-2010*

- Kim, M.M. 2001. Institutional effectiveness of women-only colleges: Cultivating students' desire to influence social conditions. *Journal of Higher Education*, 72(3), 287-321.
- . 2002. Cultivating intellectual development: Comparing women-only colleges and co-educational colleges for educational effectiveness. *Research in Higher Education*, 43(4), 447-481.
- Kim, M., & R. Alvarez. 1995. Women-only colleges: Some unanticipated consequences. *Journal of Higher Education*, 66(6), 641-668.
- Kinzie, J., A.D. Thomas, M.M. Palmer, P.D. Umbach & G.D. Kuh. 2007. Women students at co-educational and women's colleges: How do their experiences compare? *Journal of College Student Development*, 48(2), 145-165.
- Knight, L.L. 2004. Educating Asian women in women's colleges and universities: A world perspective. *Asian Journal of Women's Studies*, 10 (4), 79-86.
- Kuh, G.D. 2001. Assessing what really matters to student learning: Inside the National Survey of Student Engagement. *Change*, 33(3), 10-17, 66.
- Kuh, G.D. 2003. What we're learning about student engagement from NSSE. *Change*, 35(2), 24-32.
- Lackland, A.C. & R. De Lisi, 2001. Students' choices of college majors that are gender traditional and non-traditional. *Journal of College Student Development*, 42(1), 39-48.
- Langdon, E.A. 2001. Women's colleges then and now: Access then, equity now. *Peabody Journal of Education*, 76(1), 5-30.
- Leggon, C.B. & W. Pearson. 1997. The baccalaureate origins of African American female PhD scientists. *Journal of Women and Minorities in Science and Engineering*, 3(4), 213-224.
- Lewin, T. 2008, June 3. Recruiters for top women's colleges in US see bounty in Middle East. *The New York Times*. Retrieved October 1, 2009.
- MacKinnon, C. 1979. *Sexual harassment of working women: A case of sex discrimination*. New Haven, CT: Yale University Press.
- Magley, V., C. Hulin, L. Fitzgerald & M. DeNardo. 1999. Outcomes of self-labelling sexual harassment. *Journal of Applied Psychology*, 84(3), 390-402.
- Manuh, T., S. Gariba, & J. Budu. 2007. *Change and transformation in Ghana's publicly funded universities: A study of experiences, lessons and opportunities*. Oxford: James Currey.
- Miller-Bernal, L. 1989. College experiences and sex-role attitudes: Does a women's college make a difference? *Youth and Society*, 20, 363-387.
- Miller-Bernal, L. 2000. *Separate by degree: Women students' experiences in single-sex and co-educational colleges*. New York: Peter Lang.
- Morley, L. 1999. *Organising feminisms: The micropolitics of the academy*. London: Macmillan.
- . 2010. Gender mainstreaming: Myths and measurement in higher education in Ghana and Tanzania. *Compare: A Journal of Comparative Education*, 40(4), 553-550.
- Morley, L., & R. Lugg. 2009. Mapping meritocracy: Intersecting gender, poverty and higher educational opportunity structures. *Higher Education Policy*, 22, 37-60.
- Morley, L., & K. Lussier. 2009. Intersecting poverty and participation in higher education in Ghana and Tanzania. *International Studies in Sociology of Education*, 19(2), 71-85.

Magdalena K. Ngaiza

- Morley, L., F. Leach, K. Lussier, A. Lihamba, R. Mwaipopo, L. Forde, & G. Egbenya. 2010. *Widening participation in higher education in Ghana and Tanzania: Developing an Equity Scorecard*. An ESRC/DFID Poverty Reduction Programme Research Project.
- National Centre for Education Statistics. 1994. *Digest of education statistics, 1994*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- . 2001. *Digest of education statistics 2000 (NCES 2001-034)*. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement.
- National Survey of Student Engagement. 2003. *Converting data into action: Expanding the boundaries of institutional improvement*. Bloomington, IN: Indiana University Centre for Postsecondary Research.
- Neff, L.A., & P.C. Harwood. 1991. Creating empowering campus climates for women. *Initiatives*, 53(5), 31-39.
- Nidiffer, J. & C.T. Bashaw. 2001. *Women administrators in higher education*. Albany, NY: State University of New York Press.
- Nidiffer, J. 2001. New leadership for a new century: Women's contribution to leadership in higher education. In Nidiffer, J. & Bashaw, C. T. (eds.). *Women administrators in higher education*, pp.101-134. Albany, NY: State University of New York Press.
- Nwadiwe, C.E. 2007. Unwilling brides: 'Phallic attack' as a barrier to gender balance in higher education in Nigeria. *Sex Education*, 7(4), 351-369.
- Omale, J. 2002. Tested to their limit: Sexual harassment in schools and educational institutions in Kenya. In J. Minsky, & M. Radlet (eds.), *No paradise yet: the world's women face the new century* (pp. 19-38. London: Zed Books.
- Paludi, M.A., & R. Barickman (eds.). 1991. In their own voices: Responses from individuals who have experienced sexual harassment and supportive techniques for dealing with victims of sexual harassment. In Paludi, M. A., & Barickman, R. B. *Academic and workplace sexual harassment: a resource manual*. Albany, NY: State University of New York Press.
- Pascarella, E.T., E.J. Whitt, M.I. Edison, A. Nora, L.S. Hagedorn, P.M. Yeager, & P.T. Terenzini. 1997. Women's perceptions of a "chilly climate" and their cognitive outcomes during the first year of college. *Journal of College Student Development*, 38(2), 109-124.
- Pascarella, E.T., G. Wolniak, & T. Cruce. 2003, November. *College Selectivity and Good Practices in Undergraduate Education*. Paper presented at the 28th Annual Meeting of the Association for the Study of Higher Education, Portland, OR.
- Poindexter-Cameron, J.M., & T.L. Robinson. 1997. Relationships among racial identity attitudes, womanist identity attitudes, and self-esteem in African-American college women. *Journal of College Student Development*, 38, 288-296.
- Rice, J.K. 1991. Separation and the education of women. *Initiatives*, 53(5), 5-15.
- Riordan, C. 1992. Single- and mixed-gender colleges for women: Educational, attitudinal, and occupational outcomes. *Review of Higher Education*, 15, 327-346.
- . 1994. The value of attending a women's college: Education, occupation, and income benefits. *Journal of Higher Education*, 65(4), 486-510.
- Rosser, S.V. 1990. *Female-friendly science: Applying women's studies methods and theories to attract students*. New York: Pergamon Press.

*Critical Issues in Female Performance at the UDSM: 2004-2010*

- Ryan, M. 1993. Women's challenge to higher education. *Academe*, 79, 22-27.
- Sadker, M., & Sadker, D. 1994. *Failing at fairness: How our schools cheat girls*. New York: Touchstone.
- Sandler, B.R., Silverberg, L.A., & Hall, R.M. 1996. *The chilly climate: A guide to improve the education of women*. Washington, DC: National Association for Women in Education.
- Sebrechts, J.S. 1992. Cultivating scientists at women's colleges. *Initiatives*, 55(2), 45-51.
- Sewell, T. 1997. *Black masculinities and schooling*. Stoke-on-Trent: Trentham Books.
- Seymour, E. & N.M. Hewitt, 1997. *Talking about leaving: Why undergraduates leave the sciences*. Boulder, CO: Westview Press.
- Sharp, M.K. 1992. Women's college and the women's movement. *The Education Digest*, 18-20.
- . 1991. Bridging the gap: Women's colleges and the women's movement. *Initiatives*, 53, 3-7.
- Sharpe, N.K. & C.H. Fuller. 1995. Baccalaureate origins of women physical science doctorates: Relationship to institutional gender and science discipline. *Journal of Women and Minorities in Science and Engineering*, 2 (1-2) 1-15.
- She Figures. 2009) *Statistics and indicators on gender equality in science*. Brussels: European Commission.
- Shumba, A., & Matina, A. 2002. Sexual harassment of college students by lecturers in Zimbabwe. *Sex Education*, 2(1), 45-59.
- Simelane, N.O. 2001. *Sexual harassment: A case study of the University of Natal, South Africa*. Paper presented at the 10th General Conference of the Association of African Universities, Nairobi, 5-9 February, 2001.
- Singh, J.K.S. 2008. *Whispers of change. Female staff numbers in Commonwealth universities*. London: Association of Commonwealth Universities.
- Smith, D.G. 1990. Women's colleges and coed colleges: Is there a difference for women? *Journal of Higher Education*, 61(2), 181-195.
- Smith, D.G., Morrison, D.E., & Wolf, L.E. 1994. College as a gendered experience: An empirical analysis using multiple lenses. *Journal of Higher Education*, 65(6), 696-725.
- Smith, D.G., Wolf, L.E., & Morrison, D.E. 1995. Paths to success: Factors related to the impact of women's colleges. *Journal of Higher Education*, 66(3), 245-266.
- Smith, N.C. 2001. Empowering African Americans in the sciences. HBCUs: Nurturing students with an eye to future success. *Journal of College Science Teaching*, 30(3), 156-157.
- Solomon, B.M. 1985. *In the company of educated women: A history of women and higher education in America*. New Haven, CT: Yale University Press.
- Stoecker, J.L., & E.T. Pascarella. 1991. Women's colleges and women's career attainments revisited. *Journal of Higher Education*, 62(4), 394-406.
- Thomas, A.M., & C. Kitzinger (eds.). 1997. *Sexual harassment: Contemporary feminist perspectives*. Buckingham: Open University Press.
- Tidball, M.E. 1973. Perspectives on academic women and affirmative action. *Educational Record*, 54, 130-135.

Magdalena K. Ngaiza

- Tidball, M.E. 1980. Women's colleges and achievers revisited. *Signs: Journal of Women in Culture and Society*, 5, 504-517.
- . 1985. Baccalaureate origins of entrants into American medical schools. *Journal of Higher Education*, 56, 385-402.
- . 1986. Baccalaureate origins of recent natural science doctorates. *Journal of Higher Education*, 57, 606-620.
- Tidball, M.E., & V. Kistiakowsky. 1976. Baccalaureate origins of American scientists and scholars. *Science*, 193, 646-652.
- Tidball, M.E., D.G. Smith, C.S. Tidball, & L. Wolf-Wendel (eds.). 1999. *Taking women seriously: Lessons and legacies for educating the majority*. Phoenix, AZ: Oryx Press.
- Townsend, N.C., & P. Geist, 2000. The discursive enactment of hegemony: Sexual harassment and academic organising. *Western Journal of Communication*, 64(2), 190-217.
- UNESCO. 1998. *World declaration on higher education for the twenty-first century: Vision and action*. Adopted by the World Conference on Higher Education. Paris: UNESCO.
- . 1999a. *Database. Students by sex. Tertiary education*. Retrieved 9 July, 2008, from <http://www.uis.unesco.org>.
- . 1999b. *Indicators. Gross enrolment ratios by sex. Tertiary education*. Retrieved United Nations. 1948. Universal Declaration of Human Rights. New York: United Nations. (from <http://www.un.org/Overview/rights.html>)
- Whitt, E.J. 1994. "I can be anything!": Student leadership in three women's colleges. *Journal of College Student Development*, 35, 198-207.