

RESPONDING TO THE CHALLENGES OF GENDERED CAREER ASPIRATIONS: RESPONSIBLE ACADEMIC LEADERSHIP IN SUPPORT OF THE GOLDEN TRIAD OF ACCESS, EQUITY AND JUSTICE

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7.1 Introduction

The triad of access, equity and justice in higher education has been discussed, analysed and debated at numerous forums, today finding expression in both global and national policy documents, regulating frameworks, and action plans. The UNESCO *World Declaration on Higher Education for the Twenty First Century: Vision and Action* (1998: 1) and the Sustainable Development Goals Post 2015 are but two examples. The Preamble to the *World Declaration on Higher Education for the Twenty First Century: Vision and Action* states unequivocally:

“On the eve of a new century, there is ... an increased awareness of its [higher education] vital importance for sociocultural and economic development, and for building the future, for which the younger generations will need to be equipped with new skills, knowledge and ideals.”

There is no gainsaying the correctness and enormity of this directive in a world characterized by continual change and a higher education sector undergoing disruption. In this milieu, university leaders are called upon to ensure that the teaching and learning agenda remains true to these aspirations and that the students they produce are true global citizens competent to understand and engage both discipline-specific issues as well as ethical, cultural, political, and social problems.

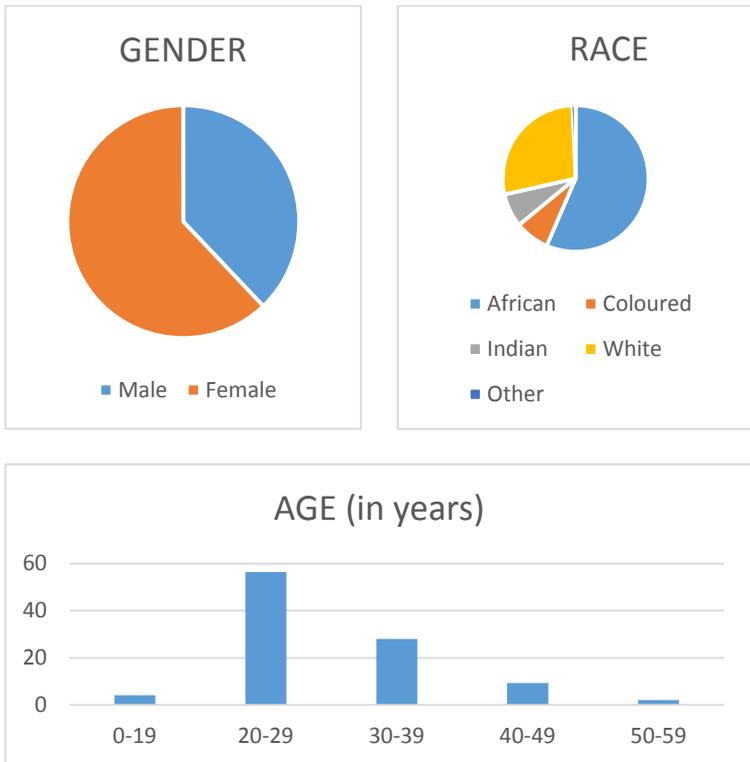
However, before they become graduates, for many potential students lies the challenge of access and admission to university. In both of the aforementioned signal global instruments, nothing is said about promoting a better gender balance in higher education. This may be because, in the developing world from the second to the third millennium, gender balance in higher education has in fact greatly improved. With the emphasis on open and equitable access for previously disadvantaged groups facilitating their entry into higher education, the number of women entering the higher education system and university specifically has increased manifold. However, notwithstanding the open access paradigm, a particular area of emphasis, globally indicated, is that women often constrain themselves, giving preference to particular career choices “perceived to be traditionally suitable for females” (Obura and Ajowi 2012: 149). Similarly, Momsen (2010: 65) describes the “subject ghettos” as nursing, education, and social work for women and remonstrates that courses leading to the best paid jobs such as medicine, law and engineering continue to be dominated by men.

The purpose of this paper is to open a discussion on whether the gendered mindset to career choices by women remains real, and if indeed true, then what informs such thought and decision-making processes in the twenty-first century, and is there anything that universities can (and should) be doing to influence and facilitate a

different way of thinking and practice among women entering the university sector?

7.2 The Research Survey

In 2013-2014 the University of South Africa (Unisa) undertook a (limited) Student Education and Career Aspirations Survey at the request of the author. The final report was prepared by Dr Molapo based at the Unisa Directorate: Institutional Research. (Molapo & Mapolisa 2014) 1793 students participated in the survey and the participation analysis is reflected below:



Graph 1: 56.5% of the participants were African, 7.6% were Coloured, 7.4% were Indian, 27.8% were White, and 0.7% fell into the category Other. The researchers confirm that the participation distribution by race was reflective of the institutional demographic. Graph 2: The gender participation indicates 37.9% were male and 62.1% female; and Graph 3: provides an indication of participants by age.

The study used a social constructionist approach building on the work of Momsen (2008) and Mutekwe and Modiba (2012) which posits that (i) gender is a social phenomenon and (ii) gender influences social and cultural practices and expectations (Molapo & Mapolisa 2014: 9).

Data collection was through an online survey questionnaire as well as face-to-face interviews. The survey instrument included both structured and open-ended questions which directed the respondents' focus whilst not completely limiting the expressions of their views, which were recorded in the responses to the open-ended question.

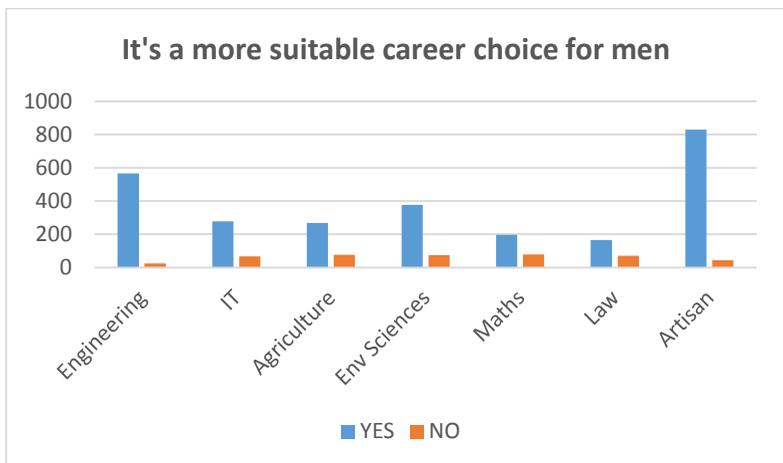
7.2.1 Results

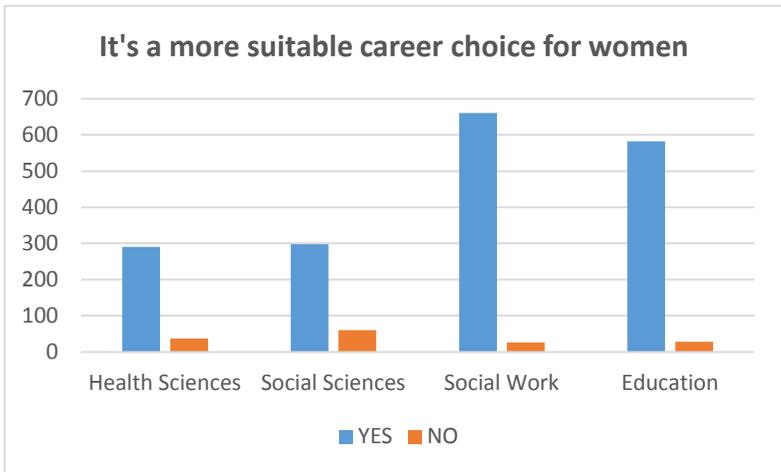
Students were questioned on their career aspirations and career choices, as well as the underpinning factors that swayed and/or informed their final decisions. The results indicate that *inter alia* (i) particularly with regard to subject choices in secondary school, the majority of the respondents indicated that they had chosen their own subjects in secondary school (46.4%), followed by 20.6% who indicated being influenced by their mother or a female guardian. Other role-models included siblings (6.9%), friends (11%), school teachers and counselors (29.5%), others (5.9%) (Molapo & Mapolisa 2014: 21). With specific reference to study at university, a majority of the respondents (33.3%) indicated that they had made their own decision to register at university, followed by those influenced by their mother or female guardian (17.6%) with the influence of the father or a male guardian registered at 14.5%. 49.5% of the respondents noted that they had individually chosen their subjects and career path at university, whilst 10.1%

received guidance from their mother or a female guardian and 8.4% were influenced by their father or a male guardian. Siblings, friends, school teachers and counselors, and others made up the difference (Molapo & Mapolisa 2014: 21).

The respondents were specifically challenged on the opportunities available to male and female students and the results were an unequivocal 72.3%: 14.6% disagreement with the statement that male and female learners were not afforded the same opportunities in high school, whilst 13.1% of the respondents were unsure. There was also disagreement (45.5%: 27.2%) that male learners necessarily performed better than female learners in mathematics and physical science in high school. 62.0% of the respondents were certain that men and women could enter a career in any field of their choice (Molapo & Mapolisa 2014: 34).

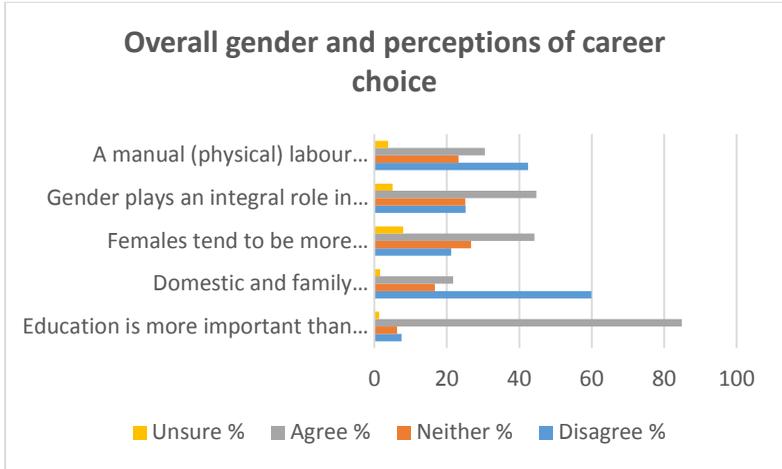
Notwithstanding the above opinions, when making a gender comparison about the suitability of specific fields of study, a majority of respondents were of the opinion that some areas of study were predominantly male-oriented and less suitable to women. The results are tabulated below:





From the sample surveyed, females clearly outnumbered males in education (77.8%:22.2%), human sciences (73.8%:26.2%), economic and management sciences (62.8%:37.2%), and agricultural and environmental sciences (57.4%:42.6%). There was a much smaller difference in law with women exceeding men by 51.9%:48.1%. However, there was a notable difference in science, engineering and technology where the males outnumbered the females by 70.1%:29.9% (Molapo & Mapolisa 2014: 33).

Finally, on the overall gender and perceptions of career choice, the findings are set out below:



(Molapo and Mapolisa 2014: 36)

An interesting consideration is the point that the higher number of respondents who agreed with the statement that “gender plays an integral role in the career choices made by males and females” may be indicative of the respondents’ own decision-making: however, this matter was not further tested in the survey.

7.3 Discussion

The literature confirms that there is indeed a difference in the manner in which men and women make career choices. There is no evidence of a single factor that influences career choice: rather what one sees is a multiplicity of values of both psychological and sociological character that underpin the identified variances. Behrend et al (2007:1) suggest that one way in which students - both male and female - make career decisions is by gauging their perceived overall ‘fit’ with the chosen career specialty.

In understanding this notion of “fit” Obura and Ojawi (2012: 150) found that one of the significant factors impacting on “fit” especially

when subject choices are made, is school performance. In their study amongst students in Kenya, the poor performance of females in the training setting when compared with their male counterparts led women to make particular career choices because of the perception that “some careers are better suited for males”.

The Unisa study also reveals the importance of family/guardian representatives in influencing career choice, repeating the recommendations of the social constructivist theory, specifically the influence of learning through observation and imitation (Ernest 1994: 63). Using the principles of social constructionism helps understand how and why many women choose specific careers, explains why children identify with parental norms and expressions of experience from within the communities in which they grow up, and often take onboard and internalize expressed gender stereotypes and opinions as their own. Interestingly, the study showed far more clearly that amongst the respondents canvassed, a significant majority had made their own career choices, persuaded by neither parent: however, social and community influence was a significant factor. This is not incongruent with social constructivism for as Ernest (1994: 63) notes, “Knowledge and perception of reality are socially constructed and we are socialized in our upbringing to share aspects of that perceived view.”

The Unisa study found that mothers have a slightly higher influence on career choices and aspirations of their children - both male and female – as compared with the father or male guardian. The impact of the mother or maternal guardian on career aspirations reiterates the findings of Bojuwoye and Mbanjwa (2006) and the much earlier studies by Mickelson and Velasco (1998) who also identified a similar result. However, Mickelson and Velasco go further to point out that not only were mothers more influential in guiding occupational selections but that daughters’ career choices were often closely aligned with that of the maternal parent. Hurtado and Gauvain (1997: 514) looked at influencing

factors on “college attendance” (as opposed to career choice) and suggest that from their study, it was evident that amongst the Mexican American youth the role of the mother is far more emphatic, whilst amongst the Euro-American adolescents it was the fathers’ education that played the stronger part. They did not provide any reason for the difference.

In studying women’s reasons for going to College, Astin (1990: 484) found that it was “both *intellectual* and *occupational*.” Whilst factors such as “employability” and “making more money” were important considerations for the women surveyed by Astin, of equal interest to them was the need to “learn more” and “gain a general education and appreciation of ideas”. On the other hand, the men surveyed ranked “wanting to make more money” as a consistently higher trigger than “the need to learn more”. Sax (1994) and Perry (1996) also found a similar mindset recording that whilst women were more concerned with the social good of their career choice, men’s aspirations appeared to be inherently driven by financial empowerment.

However, whilst women appear to indicate a stronger inclination to supporting the common good when making career choices, as early as 1990, Astin (1990: 485) found that in the U.S.A. almost one-third of high school females were already beginning to make choices for careers in business, law, medicine and engineering, with only one in 10 women expecting to pursue a teaching career and fewer looking to careers in the arts. (1990: 489). Obura and Ajowi (2012: 157) confirm the funneling of the career aspiration disparity between men and women finding, for instance, that amongst the youth participating in their study, the main career choices for male respondents was law, medicine and engineering whilst amongst female respondents it was also medicine and law, with nursing as the third option. With specific reference to medical study, Behrend *et al* (2007) found that *within* the discipline there are aspirational differences with women being much more inclined to

specialties focused on primary care over other areas of medicine. They attributed the choice differentiation to “a function of gender differences in the values that affect students’ career choices” and continue, “One such value involves the desire to give comprehensive care for ones patients” which includes “providing treatment that that encompasses psychological and social aspects of patient well-being in addition to biological aspects” (2007: 1). The conclusion they draw is that primary care, chosen over all other specializations, is essentially because it is “relationship-focused” as opposed to “treatment-focused”. This outcome is synchronous with the findings of the study by Clancy and Dollinger (1993) whose results revealed that when asked to choose photographs that described their lives, women chose photos of others whilst male participants selected more photographs of themselves, reinforcing the view that woman have a greater tendency to define themselves based on social relationships and connectedness compared with men. (Clancy & Dollinger 1993: 488) Similarly Obura and Ajowi also found that amongst Kenyan youth, female respondents were more inclined towards careers that were “biological-science” based whilst the male respondents were inclined towards the physical-science based occupations. (2012:157) The Unisa survey corroborates the findings in the literature that the social and care-giving disciplines tend to be dominated by females.

Very often the differentiation that culminates in career selections is initiated in the school environment where under-representation of females in particular subjects has concomitant consequences for occupational under-representation. The sciences are a very good example of this manifestation and it explains the current limited number of women in the areas of science, technology, engineering and mathematics (STEM) in university and the workplace. Obura and Ajawi point out that math-related and scientific and technical subjects have traditionally been seen as male activities and, coupled with the

stereotype of women being seen as less competent than their male counterparts in these areas, it may have led to “girls being less confident than boys in their general intellectual abilities and to have lower expectations for success at difficult academic and vocational activities.” (2012: 160) Against this stereotypical backdrop, girls may be even less inclined to choose such subjects, particularly if they do not find them especially interesting and important (Obura and Ajawi 2012:160).

However, over the years there has been an increasing interest amongst girls in school in the subjects of science, technology, engineering, and mathematics, which is confirmed by the growing numbers of women (i) registering for STEM disciplines in, and (ii) graduating from universities in these disciplines. Hill *et al* agree but raise the nagging concern that notwithstanding the growing numbers, there still remains a pattern amongst female school-leavers of diminishing interest from high school to graduation. They note specifically that in high school, as many women as men show an interest in pursuing science and engineering programmes at university, yet fewer women *actually* do so (2010:xiv) and, similar to other studies, they identified that the disparity becomes greater when the biological sciences are not included (2010:7). Their findings are that, by graduation, the numbers of men completing the qualification outstrips women in almost every science, engineering, physics and computer science programme. The representation of women in science and engineering drops even further in the transition to the workplace and they confirm that men continue to outnumber them especially at the upper levels of the profession. (Hill *et al* 2010: xiv; 9-11; 18-19)

Margolis and Fisher (2006) looked particularly at computer science as a career choice, and found that the image of the “the computer geek” - whose only interest is the computer - is particularly damaging to women “who, instead of the singular obsessive interest in computing that is common to men, require a balance of multiple interests” (2006:6).

This image and the concomitant social reaction shapes the assumptions of who will succeed and who belongs to the discipline. The suggested challenge is, however, not insurmountable but Hill *et al* make it clear that in addressing the issues, universities must avoid the traditional approach of trying to fit women in to computer science: rather what is required is to revise perceptions of computer science at an overall level. In response Margolis *et al* (2006:6) suggest one simple inducement to attract women into the discipline - Computer Science Departments should consider creating “a more conducive and balanced environment where social spaces and interactions are promoted” thereby mitigating the perception of computer science students as isolated, asocial personality types, and social misfits.

The research also demonstrates that limited familiarity coupled with negative experiences and an incomplete understanding of the broad employment market and professional *milieu* as well as the available opportunities and prospects for success may also contribute to career choice decisions, especially amongst women in minority and previously disadvantaged groups. Astin’s study on career choices amongst women from “minority” groups’ is however, more hopeful as she notes that over time there has been a far more focused shift in career choices towards professions that “demand increased preparation and training, and occupations that require greater commitment” amongst women from minority groups. (1990: 489) This accelerated shift that was identified by Astin may be explained by (i) increased exposure of minority and previously disadvantaged groups to the different and better opportunities and careers, and (ii) a recognition of past and current socio-economic challenges and the consequent hope of a better life and future.

Against this background, however, the point made by Shumba and Naong (2012: 169) must not be lost – they caution that whilst context is important, personal aptitudes are also a critical factor in the decision-making process. Therefore, as schools and universities focus on women

in science, it must be understood that not every girl is geared for science, just as not every boy will not choose to enter a career in science or technology. That being understood, at a principle level, if the identified challenge that constrains women's career aspirations is to be addressed by the university sector specifically, it is crucial that academic leaders understand the influencing factors that contribute to how career choices are made by men and women, how racial and ethnic dynamics contribute to the final selection of occupation by many women, and that they are able to respond to these individual constraints.

7.4 Recommendations

Effective solutions to this conundrum will require responsible and responsive leadership. Stuckelberger and Mugambi (2007:1) define such leadership in the following terms: "A leader is responsible when he or she is responsive to the needs, concerns and interest of those whom one aspires to lead." Responsible leadership recognizes the various issues and the diversity of demands, the opportunities and the challenges, it requires the necessary sensitivity that therefore ensures that decisions, plans and strategies are mutually reinforcing and serve the interests of all stakeholders.

Women's participation in higher education has seen an extraordinary growth with policy imperatives in many countries specifically focusing on this issue. From school, girls are being encouraged to study science and mathematics and enter careers that were previously part of the male-oriented stereotype. Employment opportunities for women have undergone unprecedented change as a result legislation and policy directives. Thus, there is no gainsaying that in recent years one is seeing a widening of career aspirations as well as work-related expectations from women and a clear trajectory of convergence in the occupational choices of men and women. Women are now more prepared to enter

fields previously occupied by men and take the opportunities on offer. The Unisa study found that among other choices, the majority of the respondents – both male and female – indicated that they chose their current career paths because they are interesting and fulfilling (83.4%), have prospects to improve their economic welfare (70.7%), and are relevant to the job market (63.1%) (Molapo & Mapolisa 2014: 37-38).

Further, notwithstanding the growing trends in women's empowerment, the stereotypical choice aspirations still pertain – as is indicated by the Unisa survey and other studies – and it would be premature to believe that true equality has been attained. There is still much work that needs attention during basic education and secondary school, as well as from university leadership to provide the enabling environment that addresses the constraining forces that perpetuates specific stereotypes for women, and ensures a totally desegregated labour market. If higher education is aimed at a collective and individual good and is recognized as a core lever for social development and global citizenship, the doors of higher education must be opened wider and all those who wish to study and are capable of studying should be able to. If the commitment to the Sustainability Development Goals is to be realized, equity and access will require greater impetus focusing on race, economic standing, and gender. The studies analysed recognize that women are inclined to choose career opportunities that are more 'social' and relationship-orientated (as opposed to investigative and technical): however, what can higher education offer to better attract women into these less-chosen areas and disciplines identified as being strongly male-dominated? In the STEM disciplines, for example, if there is indeed a veritable commitment to growing the number of women in the profession the test for leaders in education is to identify innovative solutions to encourage women to enter these career disciplines and to persist and graduate. The "nudge theory" provides an interesting option in positive reinforcement – where universities will take the bold step of

reviewing the teaching and learning space in identified disciplines, deliberately inculcating and nurturing a growth mindset which reinforces the belief that men and women are equally capable of succeeding in the chosen occupation. In the mathematics discipline, for example, Hill *et al* motivate the importance of reassuring young students both at school and at university that mathematical ability is really a “learned skill” rather than a “gift” (2010: 34; 20). Similarly, Dweck’s (2006) research points to men having greater inherent spatial skills than women, influencing their success in the STEM disciplines. Poor or under-developed spatial skills often deter girls from pursuing mathematics or science courses or programmes: however, Hill *et al* point out again that spatial ability can be learned and ‘dedicated courses in the curriculum aimed at improving spatial-visualisation skills of affected students, [have] rendered very positive outcomes (2010: 20). Positive reinforcement in the classroom is crucial as it inclines towards a twofold progressive impact. Hill *et al* confirm that firstly, with positive reinforcement and support women stayed in the programme and completed their studies; and secondly, that they were less susceptible to the negative stereotypes that presented at university and even when they became part of the work environment (2010: 34; see also Frome, Alfeld-Liro & Eccles undated). Anecdotal evidence submits that competent women in a male job are often found ‘less likeable’ and experience an unwelcoming and ‘chilly’ working environment (Seymour 1995). However, if men and women are made aware of this prevalent prejudice, they can prepare for it and/or consciously work at expunging such a mindset. Supporting women in male-oriented disciplines and raising awareness amongst the men of the environmental prejudices, also requires universities to consider a more holistic and integrated approach to the learning paradigm, focusing on discipline-specific teaching whilst also preparing students for the workplace with the concomitant cultural and contextual biases and stereotypes. This will of course require deep

research and a thorough understanding of the profession: rather only the limited focus on the discipline of the programme.

There is no denying that if science is the discipline of choice, students entering university need a sound foundation and this begins in the school. In South Africa, for example, if the challenges experienced in the schooling system which have resulted in the under-preparedness of school leavers particularly in the areas of mathematics and science are not addressed, “this will continue to have an impact on learners” choice of study, with fewer being academically prepared to tackle science and engineering degrees (Coetzee et al 2012: 23). As Ernest (1994: 63) notes: “both social processes and *individual sense making* have central and essential parts to play in the learning of mathematics”; [my emphasis].

This does not mean that students cannot succeed in the university, with the appropriate didactic and pedagogical reforms in place this is achievable: however, the challenge at university level is in attracting school leavers to the STEM disciplines when the high school learning experience has already been one that was negative.

On a more positive and hopeful note, Astin (1990: 489) found that over her 13 year longitudinal study (1975-1988), the degree aspirations of minority women had increased far more significantly than those of white women with a far higher proportion aspiring to careers in medicine, law and engineering as opposed to teaching and the arts. This bodes well for the global future. However, that said and given the global policy imperative, government intervention with appropriate encouragements and incentives will probably be one of the strongest catalysts for change. Financial aid, bursaries and scholarship for women seeking to study for degree programmes in areas highlighted as male dominated will be a material inducement for women, particularly in countries like South Africa where affordability of higher education is a critical constraint for the majority of the population. Leadership

internships and learnerships for women leaving university – focused on addressing her specific contextual and social realities – will positively reinforce an informed decision to take on business and leadership roles and to remain in position even after marriage and a family.

A very important signal for change is role-modelling – children making secondary school subject choices and career choices at university need to see positive reinforcement that quashes the perceptions of specific careers being for men or women and household chores being the prerogative of women. A small improvement that will yield big results is for universities to ensure that in the specifically identified disciplines, they attract more successful women as faculty, who will in turn be role-models and mentors to young students.

Notwithstanding Momsen's affirmation (2010: 4) that the beginning of the third millennium has seen a "greater voice of women in both their public and private lives", a concern that cannot be underestimated is the belief amongst many men and women that the mother has the primary role of caregiver in the home. The task of balancing demanding career aspirations as well as a full burden of responsibilities in the home often results in role overload for many women. (Astin 1990:491) Universities can play a crucial role in enhancing social equality - creating spaces for discourse, engagement, disagreement, and debate, enabling men and women to hear each other, and to understand that running a home is a joint responsibility. There is no gainsaying that gender equality requires change from both men and women. Universities and the university leadership regime should be at the forefront of leading such social change imperatives, promoting activities and engagements that acknowledge the need to adjust both at the deeper personal and communal levels, as well as through ensuring curriculum transformation and gender mainstreaming in the university programmes and projects.

7.5 Conclusion

If one accepts the proposition that (a) we are in a modern economy – the so-called “knowledge era” – where education is the key driver, and (b) women are central to global development, then it follows that *all* plans and strategies geared to future growth, well-being and sustainability need to include a focus on gendered abilities, rights and needs. Momsen (2010: 251] warns though that “[i]nvesting in women is not a global panacea.” However, it will set a springboard for future generations to be treated equally, fairly and justly. However, the caution by Tomlinson (2007: 287) must be underscored namely that women are not a monolithic group and the way in which students approach their career choices is incredibly subjective and “value- and identity-driven, relating to the graduates’ own disposition and biographies.” Thus career aspirations are ultimately a confluence of communal experience, economic reality, and very importantly individual identity. There is no one-size fits all solution but an open door and a level playing field will be a critical enabler for equity and access of women in higher education.

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