I want to publish but ...: Barriers to publishing for women at a University of Technology

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This article documents the experiences of a community of practice (CoP) of female academics with regard to the notion of publishing. The non-probability, purposive sample utilised in the study, comprised a group of female academics who were involved in a women in research programme at a University of Technology (UoT). The purpose of the article was to explore the personal and professional barriers the women may have experienced with regard to academic publishing. A qualitative paradigm was used, by means of a case study approach.

It was expected that the data might indicate a specific gendered overload for the sample group with regard to publishing, as well as produce anomalous outcomes as a result of the UoT setting. However, women were not found to be specifically conscious of their gendering, but rather experienced barriers to publishing mainly as a result of high administrative workloads in the institution. The article adds to the body of knowledge in that it (1) maintains that the main barrier to publishing in this case is not compounded by gender. (2) Shows that workload pressure is similar in a University of Technology environment as in a traditional university environment, and (3) documents the experiences of a CoP and the success thereof, which could be duplicated in other environments.

Keywords: academic publishing; women; research; personal and professional barriers; gender

Introduction and background

It is widely acknowledged that there is pressure on academics in higher education to research and publish as well as to maintain a full teaching load. In addition, Davies, Lubeska and Quinn (1994), Greenwood (1998) and Roth (2002) contend that research and publication outputs are central to an academic's life world and occupational identity. Where teaching was once the core function of university academics, research and publishing have now become far more integrated into the university milieu (Waghid, 2009:211). Sweeney (2001) further submits that scholarly publications produced by researchers are part of their jobs and do count significantly towards salary and job security.

This is reiterated in the words of Sullivan (1996: 40-46)

> *publication in recognised scholarly outlets is the prime indicator of academic worth, paving the way to rewards such as promotion, tenure and research funding ... scholarly publishing, in all its manifestations remains both the bedrock and the currency of academic life.*

However, the ability to publish is evidently an outcome that some seem to attain with more apparent ease than others.

Hemmings, Rushbrook and Smith (2007) show that the publishing front line is fraught with perils, yet academics are urged by their employers to meet set criteria with regard to publishing. They refer to the term "research active" which entails that academics contribute to four types of publication, namely refereed conference papers, refereed journal articles, scholarly books, and scholarly book chapters. This definition of research activity will be used as the notion of what publishing entails in this article.

The difficulties of publishing (Hemmings *et al.,* 2007) may be further compounded when the researchers are female and when the institution at which they are based does not have an established publishing culture (Davies, Lubelska & Quinn, 1994:5; Gottlieb & Keith, 1997; Martin, 2010:12). Much scrutiny has been placed on gender equity in academia and there is substantial literature devoted to gender inequality and difficulties women have in the academic arena (Etzkowitz, Kemelgor, Neuschatz & Uzzi, 1994; Peterson & Gravett, 2000; Maürtin-Caincross, 2005; Easterly & Pemberton, 2008). Moreover, "gender equity is one of the fundamental principles underpinning the transformation of the South African education system" (Dieltiens, Unterhalter, Letsatsi & North, 2009: 365-374).

From a gendered standpoint then, this article focuses on the experiences with respect to academic publishing of a group of women, or Community of Practice (CoP), a term coined by Lave & Wenger (1998). This CoP took the form of a "Women in Research" (WIR) programme at a University of Technology (UoT) in South Africa. This article attempts to explain why such a group of women find publishing challenging.

Compounding the pressure to publish is the fact that Universities of Technology (previously Technikons in the South African higher education sector) are now viewed in the same vein as traditional research universities. This means that similar yardsticks and pressures apply with regard to national research benchmarks. However, these UoTs have traditionally been considered to be "less research-driven", much like the "Historically Black Universities" (hereafter HBUs) which Maürtin-Caincross (2005) denotes as promulgating inadequacies and barriers to publishing that have "translated into institutional cultures that are characterised by a very strong emphasis on teaching and community-based research, while publications are relegated to a more peripheral component of the academic project". Perishing instead of publishing is potentially par for the course in these circumstances.

Given the context of this research, two key assumptions underpinned the project. The first was that the absence of a research tradition at UoTs was likely to negatively affect the research activity of academics at the institution. The second was that women academics at the UoTs were likely to have experienced a number of gendered challenges to the publishing imperative.

Therefore, while research on inequalities can adversely affect women's advancement in academia (Reid & Comas-Diaz, 1990; Bronstein, Rothblum & Solomon, 1993; Etzkowitz *et al*., 1994; Peterson & Gravett, 2000; Maürtin-Caincross, 2005; Hemmings *et al.,* 2007; Easterly & Pemberton, 2008; Kargwell, 2008), potentially *new* themes were anticipated to emerge within a UoT setting. An additional novel issue we feel has been captured in this article is that it focuses specifically on the experiences of *women* academics with regard to *publishing* and its potential barriers, rather than merely on being unable to advance in academia due to being female.

How the idea came about …

The University of Technology where the research was conducted is not immune to having to conform to national pressure to produce publications; arguably even more so due to having to transform from a Technikon to a University of Technology.[1] To stimulate publishing outputs, the research directorate of the institution decided to initiate a "Women in Research" (WIR) programme at the institution with the aim of establishing a CoP to encourage women academics at the institution to write and publish accredited academic articles.

Women from all fields within the institution were invited to participate in the programme. Some of us were nominated by our respective faculties or line managers. An original group of twenty women signed up for the programme which was conducted for two days roughly every month for the duration of one year. The publishing challenge was intrinsic from the first meeting. We talked at length about why publishing was difficult for all of us and many other academics, specifically women, although all of us admitted to wanting to publish. The women in the group began to share their experiences (or lack thereof) of publishing and this gave rise to the initial concept of documenting the experiences of the group. As the aim behind the initiation of the group was to stimulate publishing, the specific focus of the research was on identifying those barriers or obstacles which prevent(ed) us from publishing, as this seemed to be a challenge to most of the group.

Conceptual framework

The literature focuses mainly on barriers to advancement of women academics within traditional or comprehensive universities. Reference to such examples are made in the work done by Petersen and Gravett (2000) who refer broadly to experiences of women academics within a traditional Afrikaans university in South Africa. They give credence to the notion of women being outsiders in academia and document concerns regarding the unequal distribution of male and female academics according to job level as well as the poor representation of women at the professorate level. Other issues raised in their study are constraints regarding the lack of adequate child-care facilities, gender discrimination and the continuation of sexual harassment, and violence.

While literature also addresses the concept of barriers in academic careers experienced by ethnic minority groups in academia (Vokwana, 2008; Bronstein *et al*., 1993; Wyche & Graves, 1992), this article will reflect on gender issues, rather than on ethnic minority issues. Moreover, selected research conducted on women in academia focuses on barriers to participation and promotion relative to perceived institutional supports or hindrances (Acker & Armenti, 2004; Georgia Tech Research News, 2004; Kargwell, 2008), while a large majority of research depicts more personal gender barriers such as the impact of pregnancy and child-rearing on women's academic careers, low levels of self-confidence, domestic responsibilities, and other family demands (Etzkowitz *et al*., 1994; Hughes, 1999; Theron, 2002; Hemmings *et al*., 2007). The literature does not specifically document women's experiences of publishing, which this article will reflect on, as well as both the professional and personal barriers of the sample group.

Finally, as the research was conducted within a specific group or community of practice (CoP), we adopt, as the conceptual framework of the article, the learning theory of Wenger and Snyder (2000) who characterise CoPs as groups of people who share a concern or a passion for something they are involved in and learn how to do it better as they interact regularly.

These CoPs are stipulated, in part, as a process of social learning that occurs when people who have a common interest in a subject or area collaborate over an extended period of time, share ideas and strategies, determine solutions, and build innovations (Lave & Wenger, 1998). The WIR group met regularly over the course of a full calendar year, sharing experiences, voicing their concerns and assisting one another with various challenges that emerged. We thus felt it appropriate to document the experiences of the CoP.

Methodology

Design and sample

A qualitative paradigm was used for the study, utilising a case study approach (namely all the women in the CoP). Non-probability, purposive sampling was used, as we actively selected the most productive sample to answer the research question (Marshall, 1996). Our inclusion criteria comprised all the women who had initially joined the WIR programme, irrespective of whether they chose to remain in or withdraw from the programme. Of the original group of twenty women who joined the programme, nine were unable to fulfil their commitment to complete it. The eleven that remained in the WIR programme agreed to participate as respondents in our research project, and ethical clearance was obtained from the Research Directorate of the university in this regard.

We, as the researchers, also decided to attempt to solicit responses from the nine women who had left the WIR programme, as we felt that they might also be able to give additional insights into publishing barriers at our institution that the women remaining in the WIR group might not. Only one participant who left the programme consented to be involved in our research project, eventually resulting in a total of twelve participants in the sample. This is concomitant with qualitative research sample sizes, as documented by Bineham (2006) who states that qualitative research should involve approximately ten to twelve people or events due to the large amount of data generated and the complexity of analysing qualitative data.

The involvement of the participants was of a voluntary nature. The group was all female, but fairly diverse, ranging in age from mid-twenties to mid-fifties and comprising five White females, four African females and three Indian females. The participants were also from various academic departments, varied in levels of seniority, and one was non-academic. We also all had various degrees of research and publishing experience.

Instrumentation and procedures for data collection

A relevant literature study utilising both national and international sources was conducted. The researchers examined a number of articles (Skolnik, 2000; Le Grange, 2003; Garnett, 2005; Hemmings *et al*., 2006) on barriers to publishing experienced by both male and female academics across geographical boundaries and decades.

While we expected that the participants in our study may have some similar experiences identified in the literature, we were also keen to understand whether the particular academic context of UoTs was significant to understanding the barriers to publishing, and we wanted to examine publishing from a female perspective and document the experiences of our CoP.

After six months of conversations with all the women in our regular meetings, a few questions started to emerge. An interview guide was developed from our conversations and used to explore the participants' perceptions regarding their professional and personal barriers to publishing. Three questions were identified. The first was "Why did you join the women in the research programme?" This was to ascertain the motivational factors attributable to the participants. The second was "What are the personal and professional barriers to publishing that you experience?" And the third was "Are you still part of the Women in Research group. Why or why not?" We purposefully chose questions that did not mention gender and deliberately did not draw attention to the fact that they are women academics in relation to their barriers to publishing. We wanted to investigate whether the gender issue would come up 'naturally', rather than in response to leading questions.

We discussed the best method of data collection with the participants in the CoP and came to the agreement that the participants would prefer to write their responses in a narrative form and submit them electronically, rather than be interviewed. This method was in keeping with the approach that we had been using in the WIR group for the duration of our meetings. The facilitator of the group required that we keep a journal and write at least a page a day to keep record of our thoughts and document our feelings. This was done to stimulate the urge to write and so enable the women in the group to be able to write up additional matters, such as research findings.

We acknowledge that utilising this narrative writing method may have been a limiting factor in the richness of the data produced due to the time constraints of the participants. To mitigate this, however, we requested participants to write their responses during the WIR sessions, where they focused only on their writing and arguably would not have been under the same time pressure as within the office. We also requested at least a two-page narrative from each participant to ensure that sufficient data was generated. Participants were then requested to submit their responses electronically to one of the researchers within the week following the WIR session.

All participants were conversant with the purpose of the study, their participation was voluntary and they were able to opt out at any point if they so desired. The data was collected within a two-week period, following the six months of meetings and conversations held in the WIR group. Owing to the fact that the researchers were involved in the WIR group as a CoP and interacted with the group over the course of a year also contributes to the trustworthiness of the data which, according to Sandelowski (1993), becomes a matter of persuasion whereby the scientists are viewed as having made their research practices visible and, therefore, auditable.

A record was kept of the dates of all responses received (which on average was a two-page written, narrative response), as well as of the participants' details. We did not use any of the respondents' names and all responses were coded in a collective summary. However, we recognise that due to the WIR group being fairly well-known within the university, anonymity could not be guaranteed.[2]

Analysis of the data

The documented responses of the participants were analysed by the researchers using Atlas ti. A list of twenty-two codes was generated. After re-examining the summary, we decided to collapse some of the codes as they were repetitive. We agreed that data saturation had been reached owing to the amount of data we had collected and the repetitive themes that emerged in the coding. Each researcher coded independently and then compared codes. This amounts to analyst triangulation which, according to Patton (2002), occurs when multiple analysts review findings. Two or more persons may independently analyse the data and compare their findings. This implicitly reflects the credibility of the data analysis. Where participants mentioned items more than once in their responses, these items were coded accordingly.

We then assigned these collapsed codes to different families. Eventually, seven families were created and fourteen codes assigned within each family (refer to Table 1). We called the seven families: *extrinsic motivators, intrinsic motivators, personal barriers, professional barriers, personal reasoning for joining, professional reasons for joining,* and *why they stayed.*

Findings and discussion

The findings indicate that the majority of the women joined the programme voluntarily. Some of the responses were: "I always wanted to publish an article and I hoped that I would be able to learn the 'how to' through this initiative"; "the reason I joined the WIR programme was to broaden my outlook in research and to further develop myself"; "I joined the WIR programme as it seemed like a perfect opportunity to gain skills to improve my writing".

The women also displayed high intrinsic motivator-type behaviour as there were high loadings on the codes *meeting intended outcomes*, *overcoming barriers* and *self–exploration/development* which is indicative of an inward strive for competence (in this case the ability to write) and to reward themselves (via the publishing of an article). This relates to whether the women joined the programme for personal reasons, as intrinsic behaviours are characterised by key "motivators" such as knowledge, accomplishment, stimulation, responsibility, challenge, achievement, variety, need for competence, autonomy, and advancement opportunity (Herzberg, 1966; Kasser & Ryan, 1996; Weinberg & Gould, 2003). This indicates that by joining this CoP they expected to be involved in a learning process, resulting in a specified outcome (Lave &Wenger, 1998), which is the original intent expressed by a CoP.

Extrinsic motivator-type behaviour towards the programme was also demonstrated. Some of the women joined because they felt it would allow them the opportunity to network with other women and receive a level of social support (Ganster, Mayes, Sime & Thorp, 1982) and encouragement. Participants expressed this as follows: "I also envisaged it as a place where women could share their experiences regarding research"; "I hoped to find personal and professional support for research"; "network with colleagues in the broader institutional context"; "as women we have an overload of personal and professional work, maybe we will be advised on how to cope". It appears that the women wanted to form part of a CoP like the WIR group where they would feel encouraged and supported. This notion is supported by Cook (1977) who indicates that networks of love and support are critical to the ability as women to work in a hostile world where they are not expected to survive.

The data indicates that the extent of *personal barriers* experienced by the women was far less significant than the *professional barriers*. *Lack of self-confidence* and *role stress* were the two main codes attributed to personal barriers and some of the women expressed that they lacked self-confidence and

writing skills. Role stress can be experienced by a person due to their role (job) in the organisation and constructs such as role conflict, role ambiguity and role overload (Aziz, 2004) were coded under the ambit of role stress. In this case we are using the term to denote stress in a personal capacity and not solely in terms of organisational work roles.

Table 1: Data codes and families

FAMILIES	CODES	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL
EXTRINSIC MOTIVATORS	Academic work expectations	0	0	0	0	0	2	0	2	1	0	1	0	6
Actions that result in the attainment of externally administered rewards, including pay, material possessions, prestige, and positive evaluations from others (Ryan & Deci, 2000) TOTAL: 14	Networking, support and interaction	0	2	0	0	2	0	0	0	2	0	2	0	8
INTRINSIC MOTIVATORS An individual's need to feel competency and pride in something, derived from within the person or from the activity itself, positively affecting behaviour, performance, and well-being (McCullagh, 2005).	Meeting intended outcomes	0	1	0	0	1	1	0	1	0	1	1	1	7
	Overcoming barriers	1	0	0	1	0	1	1	2	0	1	1	0	7
TOTAL: 22	Self-exploration and development	0	1	1	1	0	2	1	1	1	0	0	0	8
PERSONAL BARRIERS	Lack of self-confidence and skill	2	0	0	1	1	2	2	3	0	0	1	0	12
TOTAL: 23	Role stress	0	0	1	1	1	0	2	2	2	1	1	0	11
PERSONAL REASON FOR JOINING TOTAL: 10	Intrinsic reasons for joining	0	2	1	1	1	0	1	1	1	0	1	1	10
PROFESSIONAL BARRIERS	Lack of infrastructure, research and organisational support	0	0	0	2	0	0	0	4	2	0	2	0	10
	Limited opportunity for promotion/reward	1	1	0	0	0	0	0	1	0	0	0	0	3
TOTAL: 29	Work overload/ time	1	1	1	2	2	1	1	1	2	1	1	2	16
PROFESSIONAL REASON FOR JOINING TOTAL: 3	Extrinsic reasons for joining	1	0	0	0	0	1	0	0	0	1	0	0	3
WHY THEY STAYED TOTAL: 20	Commitment and perseverance	1	3	1	1	1	1	1	1	1	1		0	13
	Meeting intended outcomes	0	1	0	0	1	1	0	1	0	1	1	1	7
	TOTALS	7	14	5	10	9	11	11	21	12	5	12	4	121

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The results support and add to the findings of previous research (Seyed, Al-Haji Umar & Al-Hajji, 2004), which shows that a high level of confidence in relation to academic publishing is exceedingly important, as more productive academics compared to less productive academics display greater confidence in their ability to carry out research activities. According to Wills (2007), many academics experience barriers to writing such as inadequate knowledge and writing skills, lack of confidence, and low motivation regarding writing for publication. The following excerpts from our data reiterate this notion: "the ability to express my thoughts in general on paper"; "the ability to write in English"; "I don't feel confident to write"; "I don't believe I have the skills" and "suffer from bad inferiority complex with regard to research". Our findings show that this is an important supposition for women too, rather than merely for male academics as the previous research suggests.

The overload of home and personal life was mentioned, albeit to a lesser extent than the other barriers. Some women mentioned that they had young children and some were single mums, and that this contributed to role overload as they also had family commitments. Some women revealed the stress and time pressures they felt with regard to travelling time: "travelling to and from Johannesburg is time-consuming and stressful because that leaves me with limited time in the mornings and afternoons"; "I am a single mum and the responsibility is enormous"; "I am a single parent, time is against me because when I knock off I have to think of the kid." This is unique in the context of academic publishing, but not unique with regard to academic careers, as research conducted at another traditional university revealed that the women in that instance felt they were encumbered with a double workload, i.e. traditional family responsibilities and as academics with career responsibilities, thus impacting on their personal lives and their career development (Petersen & Gravett, 2000). If research expectations are added to the mix in this context, arguably women are then encumbered with a triple workload. It is interesting to note that the workload strain the women experienced in the traditional university setting concurs with the experiences of the women in the University of Technology environment.

Professional barriers seemed to be the highest contributor to the lack of writing and publishing. The most frequent complaint was lack of time and work overload, which was mentioned by nearly all the participants. Many other studies found that the lack of time, administrative load and juggling research and teaching responsibilities was problematic for many academics (Petersen & Gravett, 2000; Garnett, 2005; Maürtin-Cairncross, 2005; Hemmings *et al*., 2006). Some strong feelings were expressed by participants as follows: "there is too much administrative work required which does not allow me much breathing space" and

> *I want to be able to do things which I consider as work during working hours, but unfortunately in my office, there is no chance of that, as students and staff wander in and out all day long, with or without appointments, the phone rings non-stop, so it is not a conducive environment for focusing on research.*

As this is an issue that emerges so frequently in academic writing regarding publishing, we suggest that it is about time that university management takes such concerns seriously and works on real, effective solutions to mitigate this.

Despite the workload issues, professional barriers and other demands, the women appear to be committed to the process of publishing, and willing to overcome barriers. The women were determined to finish the WIR programme as they wanted to meet the intended outcome, namely to ultimately produce a publishable article in keeping with CoP norms (Wenger & Snyder, 2000). Exact phrases from the women were "this initiative had an expected outcome - publishing an article - which kept me in the process";

"should result in an article being published for us"; "I joined the programme with the hope of realising my own barriers to furthering my studies"; "very important to me to have a published article"; "I need to learn other forms of research".

Concluding remarks and recommendations

The main objective of the article was to document the experiences of a group of women in a CoP at a University of Technology and their views on publishing. Although the article focuses on the barriers to publishing from the perspective of a group of women, the 'gender issue' did not emerge strongly in the data. Contrary to expectations (Petersen & Gravett, 2000; Hemmings *et al*., 2006; Easterly & Pemberton, 2008), women are not conscious of their gendering as the primary barrier to publishing. Professional barriers were rated as the biggest contributor to lack of publishing (specifically workload and time constraints) This supports the findings of various other studies (Petersen & Gravett, 2000; Garnett, 2005; Maürtin-Cairncross, 2005), albeit in traditional university settings. The article documents the observation that workload and time constraints are as prevalent in the University of Technology context as in the traditional university space.

Three women out of a sample of twelve mentioned being a single parent as contributing to a gendered overload, which could be attributed to personal circumstances rather than as being a specific commentary on inequalities experienced by women alone. Nine of the total participants have children, but the majority of women did not mention this as being a problem factor. Personal circumstances and mothering took a back seat in this case and organisational constraints were highlighted as being more prevalent in terms of barriers to publishing. High workloads and administrative responsibilities emerged as their most time-consuming activities versus their home responsibilities. We conclude that UoTs are also guilty of creating environments that contribute to this administrative overload, as is the case in other traditional universities, but possibly do not promulgate an environment of gender inequality. This may be attributed to being more sensitive to issues such as race and gender owing to the fact that they were previously denoted as "Historically Black Universities" (Maürtin-Caincross, 2005).

The article adds to the body of knowledge in that it:

- maintains that the main barrier to academic careers in this case is not specifically compounded by gender which is contradictory to other research;
- shows that workload pressure is similar in a University of Technology environment as in a traditional university environment;
- demonstrates that many of the personal and professional barriers to publishing documented in previous research on academic careers from the perspective of *both* genders also holds true for women in this case, and
- documents the experiences of a CoP and the success thereof[3], which could be duplicated in other environments.

Implications for practice

The high level of commitment expressed by this group of women would lead one to believe that they have the willingness to publish and if their time was more structured and perhaps freed up somewhat, many research outputs could potentially be expected. This requires a strong commitment from the management team in this university (and, in fact, all universities) to create an enabling environment, rather than a hindering one. Purely administrative tasks should be duly shifted from academics to administrators in light of this.

Learning did take place in this CoP, articles were produced and it can for this reason be labelled as a success story. Therefore, universities should consider implementing these formal or informal CoPs, by inviting groups of women into a common space where they can tackle the publishing challenge. It is clear from the findings that women are seeking such an outlet.

In conclusion, at this University of Technology, this CoP does not feel victimised; by happening to be female academics, we are just academics and we want to publish.

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Endnotes

1 Prior to 2004, a total of 36 higher education institutions existed in South Africa. Thereafter, through a series of mergers advocated by the South African Department of Education, the original institutions were consolidated into 26 institutions at the time the research was conducted, and former Technikons were now renamed Universities of Technology.

2 Participants were informed of this at the time of collecting their responses, and they gave their permission for the data to be written-up under these circumstances.

3 After the conclusion of the WIR programme, a total of three articles were generated as a result; these are under review at present. If success is arguably measured by article outputs, then this group can be labelled as successful.