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Barriers to Professional Recognition: Experiences of Zimbabwean Engineers in South Africa

Abstract: This paper discusses the challenges faced by Zimbabwean engineers as they strive for professional recognition in South Africa. A case study of Zimbabwean engineers is used as an example to explore how a South African professional association dealt with an inflow of migrant professionals from within the African continent. Data was collected through semi-structured individual and group interviews. The findings reveal that the process to become a licenced professional engineer was ambiguous, highly subjective, unnecessarily long, and complex. Furthermore, the Engineering Council of South Africa's re-accreditation process under-valued their working experience and educational qualifications. Despite being employed in very senior positions for at least three years at the time of the interviews, the participants in this study were not registered as professional engineers. Thus, I argue that the Engineering Council of South Africa is mainly concerned with protecting the interests of the powerful elite in the profession.

Keywords: Engineers, ECSA, skills shortages, professional recognition, migrant professionals, South Africa, Zimbabwean engineers

Immigrant professionals often provide migrant-receiving countries with a quick-fix to skills shortages. However, their inflow in large numbers often presents professional associations with many challenges. On the one hand, ensuring that migrant professionals are adequately trained and qualify to practice in their field of expertise is a real challenge (Hawthorne, 2002). On the other hand, professional associations jealously guard the supply side of the labour market for their members in order to ensure high salaries for them (Willmott, 1986). A sudden influx of immigrant professionals threatens to flood the supply side of the labour market and would potentially result in the reduction of salaries and status. Therefore, under-valuation of qualifications, as well as under-utilization of foreign-trained professionals, is commonplace in migrant-receiving countries.

This paper discusses the difficulties experienced by Zimbabwean engineers as they strove for professional recognition by the Engineering Council of South Africa (ECSA). The research question for this study was: What are the challenges faced by migrant Zimbabwean engineers seeking professional recognition in South Africa. The paper offers fresh insights into the debate on occupational closure from the standpoint of migrant professionals. The paper is structured as follows. First, I present the theoretical perspective that shapes the analysis presented in this paper. This is followed by a review of the literature on migrant professionals and professional

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associations in migrant-receiving countries. In addition, brief contextual background in which migrant professionals in this study interacted with ECSA is sketched. Thereafter, I present and discuss the key findings of this study and the paper concludes with a few recommendations.

Professional associations as political bodies

In conjunction with aggregate theoretical insights on professions discussed later in this section, the analysis presented in this paper draws primarily from Willmott's (1986) theoretical approach, which takes professional associations as political bodies. He contends that we tend to decontextualize and depoliticize the existence of professional associations. Situating the actions of pioneers of professional associations in the wider political context reveals that selflessness and dedication are not the main drivers of professionalism. To the contrary, the core function of professional associations is to "define, defend and enhance the symbolic and material value of their members' skills" Willmott (1986, p. 559). Ultimately, the success of professional associations depends on its ability to advance the interests of its membership. Professional associations portray themselves as trustworthy, independent, and dependable in a bid to camouflage their political nature. While they may perform a necessary quality control function, professional associations tend to manipulate labour supply in thereby raising the wages of their members (Willmott, 1986).

It is important to underline, at this point, the fact that professional organizations are formed and developed within relations of power that they seek to shape as well as exploit (Willmott 1986). Hence, to consolidate their power from the beginning, professional associations seek to gain the recognition and confidence of their clients. To that end, they impose strict and meritocratic conditions of entry into the profession. This is usually followed by a lengthy period of apprenticeship, incorporating a rigorous examination of competence (Willmott, 1986). While regulating the quality of professional expertise, professional associations use the collective monopoly of power of their membership to create demand for their services. They do so by acting as pressure groups to influence the climate of opinion and discretely lobby for certain services that they provide to become mandatory by law (Willmott, 1986).

From the time of their formation, professional associations persuade the state to grant them the legal authority to operate as self-regulatory organizations. With time, professional associations become institutionalised as law-proposing mechanisms and eventually constitute preliminary arenas of public lawmaking in their own fields. Members of these associations also play an important political role. For example, the pursuit of policies by officers of an association can be constrained and checked by the formal democratic procedures for electing officials. In some instances, they have the right to vote on and dismiss policy recommendations made by officials. This becomes an especially pressing issue when the membership of an association is internally segmented (Willmott, 1986).

The sociology of professions has not been static since Willmott's (1986) work. For example, Pavalko (1988), Evetts (2003), as well as Bourgeault, Benoit and Hirschhorn (2009) made important theoretical contributions to this field. Reviewing these contributions shows that, on the one hand, professions are portrayed as selfish occupations seeking maximum rewards for their services and, on the other hand, they are also viewed as altruistic occupations interested in protecting standards of professional services and the interests of their clients (Crompton, 1990). This paradox is well captured in Evetts' (2003) critical discussion on professionalism. She contrasts two theoretical approaches to the study of professions namely professionalism as a value system and professionalism as an ideology. Professionalism as a value system approach hinges on the importance of "functional specificity, restriction of the power domain and the application of universalistic, impersonal standards" (Evetts, 2003, p.

400). This approach further emphasizes the importance of professional associations as a means through which a common identity in a particular profession is forged and reproduced. Proponents of this approach hold the view that a common educational background, vocational experiences, and professional training are the building blocks for a successful profession (Evetts, 2003).

In contrast to the aforementioned claims, professionalism as an ideology approach holds that professions are camouflaged powerful, privileged, and self-interested monopolies. Most critical is the argument that professions do not only close markets, dominate, and control other occupations in their field but “could capture states and negotiate regulative bargains with states in the interests of their own practitioners” (Evetts, 2003, pp. 401-402). This leads to an occupational closure. According to Weber (1922/1978), occupational closure occurs wherever legal and normative barriers restrict the supply of labour to a specific labour market position in order to protect those who already hold such positions from external competition. There are at least two traditional ways to achieve this. The first is through the restriction of access to opportunities to receive academic training in a particular field of specialisation. Secondly, closure can be achieved by restricting the supply of labour that can legally practice the tasks that are under the particular jurisdiction of that occupation. In both cases, the result is that trained workers remain in short supply (Bol & Weeden, 2015; Weeden, 2002).

With state backing, professional bodies issue licences that allow licence-holders exclusive rights to practice a set of skills or to use a particular occupational title. Supplementary requirements such as paying annual membership fees, accepting a code of ethics and conduct and demonstrating competence are imposed in addition to a set minimum academic qualification for licensure. These requirements are often set by professional bodies giving them indirect control over the number and qualities of licensees (Bol, & Weeden, 2015).

Professional bodies and migrant professionals

Professional associations invariably struggle to assess and accredit foreign-trained professionals for licensing purposes (see Duvander, 2001; Girard & Bauder, 2007; Hawthorne, 2002; Groutsis, 2003; Hawthorne, 1997; Chapman & Iredale, 1993; Kesler, 2010). This results in discrimination against migrant professionals especially those coming from countries where little is known about the training they have received. Thus, while temporarily alleviating skills shortages immigrant professionals are often marginalised and underutilised. Rigidities in the accreditation process that is often stipulated for by professional associations also compound the problem further.

Where there are no easily readable and comparable degrees, the question of whether or not foreign-trained professionals should be granted professional recognition continues to generate heated debates in migrant receiving countries. The difficulties of transferring and evaluating qualifications obtained from a different place further complicate the matter (Hawthorne, 2002). The intended and unintended consequences of professional bodies’ attempts to assess foreign-obtained qualifications are well documented (Chapman & Iredale, 1993; Hawthorne, 1997, 2002; Groutsis, 2003). Girard and Bauder (2007) argue that the systemic discrimination of migrant professionals is largely an “unintended” consequence of the application of rules and procedures that are not deliberately designed to discriminate against anyone. However, I argue that the marginalization of foreign-trained professionals on the labour market is not necessarily unintentional. It is important to note that professional associations are not politically neutral entities (Willmott, 1986). To the contrary, they actively protect the prestigious status and financial interests of their members. For

instance, Duvander (2001) contends that self-regulating professional bodies in Sweden insist on immigrant professionals obtaining Swedish qualifications before they can be licensed yet, even after obtaining Swedish qualifications they remained under-utilized and unlicensed.

In Australia, professional bodies in professions such as engineering, nursing, and medical doctors were experiencing difficulties to “fairly” accredit the qualifications of skilled migrants from non-English speaking countries. As a result, engineering and nursing professions decided to include competency-based assessments. This move has been praised as a way of democratizing skills recognition via a simple principle that: If you are competent to carry out your job—you qualify for professional recognition (Chapman & Iredale, 1993; Groutsis, 2003; Hawthorne, 1997, 2002).

Allsop et al. (2009) conducted a cross-country study comparing the experiences of migrant professionals in Canada, Finland, France, and the UK. They found that contrary to scholars that argue that there is negative discrimination against foreign professionals by local professional associations, engineering as a profession operates within an international labour market. They claim that due to a shared language base within engineering, mobility is expected as part of an engineer’s professional career. Therefore, engineers in the countries mentioned above have considerable freedom to choose where they work. For Allsop et al. (2009, p. 492), “specialist experience, rather than initial credentialing, is important in career progression and national professional regulators play a smaller role.”

The easy mobility and integration of migrant professionals in the European countries studied by Allsop et al. (2009) is largely because the European Union has been pushing for easily comparable degree programs within the region. In response to the increased global competition for scarce skills member countries of the European Union (EU) pool resources together. In order to minimize unintended discrimination against professionals trained in all its member states, the EU developed and launched “easily readable and comparable degrees especially in relation with their use on the labour market” (Augusti, 2005, p. 419). This makes the transnational recognition of educational qualifications much easier as well as improves quality assurance.

However, it is problematic to say the same about Canada because its integration policy has come under heavy criticism by migration scholars (see Boyd & Schellenberg, 2008; Boyd & Thomas, 2001; Girard & Bauder, 2007). For example, Beynon, Ilieva and Dichupa (2004, p. 429) note that foreign-trained teachers immigrating to Canada are viewed as “desirable” for their high levels of education, yet they are still required to redo their professional training upon arriving in the country. This often proves to be a barrier to the full utilization of their skills.

The following sections provide a specific South African context in which the phenomenon under study took place. This is divided into two historical periods. The first looks at the period before South Africa’s transition to democracy in 1994 and the second looks at the period after 1994. This is followed by a brief history of ECSA and its functions.

Skills shortages under apartheid

The Apartheid regime was bent on skilling whites, especially white men and its immigration policies were designed to attract skilled workers from Europe. This was regarded as a “cheaper” option to “relieve” the skills shortages rather than train black South Africans (Callinicos, 1987; National Manpower Commission of South Africa, 1987, p. 33). Thus, European countries were viewed as sources of skilled workers, while neighbouring countries were viewed as sources of cheap unskilled labour for the mining and agricultural sectors in South Africa (Crush, Jeeves & Yudelman, 1991). One of the factors that contributed to skills shortages is that during apartheid

the state ensured occupational closure of professions, including engineering, along gender and racial lines (Bonnin & Ruggunan, 2013; Jawitz, Case, & Tshabalala, 2000). Occupational closure for black South Africans and women significantly reduced the pool of skilled workers, which led to qualitative and quantitative skills constraints. Women, in particular, were under-represented in occupations requiring high levels of skill and the few that got in such occupations had limited access to training opportunities (Moleke, 2004).

However, the transition from “Fordism” to “flexible accumulation” in the 1980s necessitated the shift from the emphasis on a semi-skilled labour force to a highly-skilled labour force (Gelb, 1991, p. 17). This happened against the backdrop of an education and vocational training system that was purposely designed to equip black South Africans with skills primarily applicable to rural agricultural contexts or the routine work at the mines and the factory floor (Paterson, 2004). These factors combined led to a situation whereby the supply side of skills was outstripped by demand.

Skills shortages and policy responses after 1994

Despite transitioning to democracy in 1994, South Africa continued to face acute skills shortages in key professions including engineering. A number of factors such as economic growth, emigration of skilled workers, a poor schooling system, low throughput of engineering students at universities, and negative reactions to transformation policies by white workers are responsible for the skills shortages (Du Toit & Roodt, 2009; Lawless, 2005; Rowe, 2009).

Following a long period of low demand for civil engineering and construction services which decimated the industry’s skills capacity, the South African construction industry boomed between 2002 and 2010 (Lowitt, 2007; Parker, 2009). This led to increased demand for engineers, stretching an already depleting pool of experienced engineers. The situation was compounded by the increase in emigration of highly skilled workers, who are predominantly white men, to more economically advanced countries in the global North (Wocke & Klein, 2002; Rowe, 2009).

The skills shortages in post-apartheid South Africa often reached debilitating levels. For instance, according to a 2006 report by the South African Association of Consulting Engineers (SAACE, 2006), 92% of surveyed construction firms were failing to fill engineering posts. The South African public sector was amongst most severely hit. For example, SAACE (2007) claimed that 79 out of 231 municipalities in the country failed to fill more than 1000 vacancies for civil engineers, technologists and technicians.

The post-1994 South African government undertook various steps to promote skills development. For example, the Skills Development Levies Act, No. 9 (1999) and the Skills Development Amendment Act, No. 31 (2003) were enacted for that purpose. As a result, 25 Sector Education and Training Authorities (SETAs) were established to cater for skills development (Martins, 2005). Despite a seemingly good start, there were loopholes in the system including issues of corruption and mismanagement of funds. Hence, the SETA system was largely regarded as an administrative nightmare and costly to run (Lee, 2002; Martins, 2005).

Furthermore, the Joint Initiative for Priority Skills Acquisition (JIPSA) was established in 2006. This was a joint partnership between the government and the private sector aimed at developing local skills (Lowitt, 2007; Parker, 2009). In 2009 JIPSA was expanded into a nation-wide Human Resource Development Strategy of South Africa (HRDS-SA). The HRDS-SA was aimed at creating a broad-based focus on developing skills and training initiatives at all levels in the country while seeking to align the supply of skilled labour with the demands of the labour market (Parker, 2009). These efforts were met with uneven success. There have been significant positive changes, but new forms of racial structures of power informally operate in the

post-apartheid South African labour market and the workplace (Burger & Jafta, 2006).

In addition, as a response to the general skills shortages in the country the Immigration Act No. 13 (2002) was passed. The Act was aimed at “setting in place a new system of immigration control which, ensures that” the South African economy would have “access at all times to the full measure of needed contributions by foreigners.” Thus, in principle, the South African immigration policy, since 2002 was geared towards attracting skilled workers from other countries to fill in the skills gaps in the country. The Department of Home Affairs as cited in Lowitt (2007, p. 22) confirmed the issuing of 35 000 quota work permits by 2007 of which 12 000 were related to civil engineering and construction skills.

Despite the passage of immigration, Act that is, at least in principle, favourable to the inflow of foreign-trained professionals the government was still criticized for half-heartedly implementing it (see Bernstein, 2001; Bernstein & Schlemmer, 2000; Lowitt, 2007; Wocke & Klein, 2002). However, what is missing from this criticism of the state is the role played by the professional associations such as ECSA. Nonetheless, the relative relaxation immigration laws to allow skilled migrants to move into the country coincided with a rapid deterioration of the Zimbabwean economy. Thus, hundreds of Zimbabwean engineers moved to South Africa in search for better-paying jobs. However, they found themselves marginalized and underutilized as they struggle to get professional recognition by joining ECSA.

ECSA: A brief history and its mandate

The engineering profession in South Africa became a self-governing profession in 1968 with the passage of the Professional Engineers Act, No. 81 (1968). The South African Council for Professional Engineers (SACPE) was established. However, this did not happen overnight. As early as the late 19th century, there were numerous attempts to make engineering a self-regulating profession. Fundamental disagreements within the different strands of engineering made it very difficult to organize South African engineers under one professional body. In addition, the existence of different and competing perceptions from the state, educational institutions as well as individual engineers repeatedly derailed the efforts to establish an umbrella professional body (Gericke, n.d; Kruger, n.d).

The SACPE was renamed to the Engineering Council of South Africa (ECSA) following the passage of the Engineering Profession Act, No. 46 (2000). This Act makes provision for three types of engineering professions in South Africa, namely, engineers, engineering technologists, and engineering technicians. A four-year Bachelor of Science Degree in Engineering (BSc Eng) or a Bachelor of Engineering (BEng) from a university is required for registration as an engineer. An additional three years of experiential training is required to be registered as a professional engineer. A technologist must hold a Bachelor of Technology (BTech) from a university of technology. Technicians are required to have a National Diploma (NDip) from a university of technology (Du Toit & Roodt, 2009). Thus, individuals can be registered as members of ECSA in the following ranked categories:

1. Candidate/Professional Engineer
2. Candidate/Professional Engineering Technologist
3. Candidate/Professional Engineering Technician

One of the most critical provisions of the Engineering Profession Act (2000) is enshrined under section 26 of this Act, which mandates ECSA to reserve certain engineering work exclusively for certified professional engineers. Furthermore, ECSA’s jurisdiction to act in the public’s interest extends beyond registered persons. Its legal mandate also includes accreditation visits to accredit programmes offered

by other institutions apart from universities and technikons.

Over the years, there has been a decline in ECSA engineer registration and an increase in the registration of the lower categories of technologists and technicians (Du Toit & Roodt, 2009). It is important to note that registration with ECSA still remains voluntary (Du Toit & Roodt, 2009). Thus, foreign-trained engineers, as well as locals, can be employed without being registered with ECSA. However, they must be registered in order to perform certain engineering tasks and to get more lucrative consulting jobs. Thus, this study sought to address the following research question: What are the challenges faced by migrant Zimbabwean engineers seeking professional recognition in South Africa?

Design and methodology

This paper reports the findings of a qualitative case study. This approach was chosen for its ability to enrich understanding by explaining in a nuanced fashion the otherwise unknown or covert aspects of social life (Denzin & Lincoln, 1989). Hence, the focus was on the perceptions of the participants who experienced the phenomenon under study. However, the explanations and interpretations presented in this paper were informed by the understanding of the context in which interactions between participants and ECSA took place.

Sampling and the profile of participants

Two non-probability sampling techniques, namely purposive and snow-balling were employed. Brewer and Hunter (2006, p. 93) describe purposive sampling as a “claim on the part of the researcher that theoretically significant, not necessarily statistically significant, units are selected for study.” Thus, this case was made up of academically qualified Zimbabwean engineers who were employed in one provincial government department in South Africa. Snowball sampling was particularly useful for this study because there was no readily available official register or list of names that specifically captured the target population for this study.

The sample comprised of twelve participants: ten men and two women between the ages 31 and 43 who had been working in South Africa for a minimum of three years between 2006 and 2011. Furthermore, they all had more than three years working experience in Zimbabwe. Nine participants held Honours Degree in Engineering, and three had Diplomas in Civil Engineering. With regard to registration with ECSA, three were non-members and nine were registered as candidate engineers (see Table 1 below).

Table 1
Profile of participants

Respondent	Age	Gender	Highest Zimbabwean Engineering Qualification	Working Experience (Zimbabwe)	Working Experience (South Africa)	Job Title	ECSA Membership
Jones	43	M	Diploma in Civil Engineering	16 years	3 years	Deputy Chief Engineer	Candidate Engineering Technologist
Orbert	39	M	Diploma in Civil Engineering	6 years	4 years	Deputy Director	Rejected

Silvia	37	F	Diploma in Civil Engineering	5 years	3 years	Deputy Director	Rejected
Chinotimba	38	M	BSc Honours Degree in Engineering	6 years	5 years	Specialist Engineer	Candidate Engineer
Nicky	39	M	BSc Honours Degree in Engineering	8 years	4 years	Specialist Engineer	Candidate Engineer
Joe	35	M	BSc Honours Degree in Engineering	4 years	5 years	Chief Engineer	Candidate Engineer
Keita	31	M	BSc Honours Degree in Engineering	3 years	4 years	Specialist Engineer	Pending
Muranda	35	M	BSc Honours Degree in Engineering	6 years	4 years	Chief Engineer	Candidate Engineer
Tineyi	31	M	BSc Honours Degree in Engineering	3 years	5 years	Chief Engineer	Candidate Engineer
Maromo	31	M	BSc Honours Degree in Engineering	3 years	4 years	Deputy Director	Candidate Engineer
Forward	33	M	BSc Honours Degree in Engineering	4 years	5 years	Deputy Director	Candidate Engineer
Nancy	41	F	BSc Honours Degree in Engineering	10 years	5 years	Chief Engineer	Candidate Engineer

Data collection

Data was collected through eight semi-structured individual interviews and one focus group interview comprised of four participants. The researcher used an interview guide, which contained thematically arranged open-ended questions. The lengths of the individual interviews ranged from 45 to 90 minutes, and the group interview lasted for 90 minutes. The interviews were conducted in such a way that the participant's perspective on the phenomenon of interest unfolded as the participant views it, not as the researcher viewed it (Marshall & Rossman, 1995). All the interviews were audio recorded. In addition to the audio recordings, handwritten notes on non-verbal communication and the surrounding environment were taken. These notes also included comments on the interview overall that were useful during the final analysis.

Data analysis

After all the interviews had been completed, the interview recordings were played back and meticulously transcribed and checked, after which the data analysis process commenced. The analysis was not done to provide statistical summaries but to discover variations, portray shades of meaning, and examine complexities of the phenomenon under study (Rubin & Rubin, 2005). The data was analysed following a model outlined by Rubin and Rubin (2005). In line with this approach, the following overlapping steps were followed:

1. *Recognition*. With all the transcripts prepared the researcher looked for concepts, themes, events, and topical markers in the interviews.
2. *Clarification*. At this stage, I systematically examined the different interviews to clarify what is meant by specific concepts and themes.
3. *Initial synthesis*. Here, I carefully synthesized different versions of events in order to put together my understanding of the overall narrative.
4. *Elaboration*. As I clarified and synthesized concepts, themes, events, and topical markers in the interviews new concepts and themes emerged. Thus, the

themes set out in the interview guide were compared to and collated with those emerging from the data set. In other words, inductive and deductive methods were used to complement each other.

5. *Coding*. This was done by assigning brief labels and highlighting them in different colours thereby classifying and distinguishing them. Hence, all data units with the same label were grouped together. In addition, I created and kept memos containing notable quotes throughout the research process.

6. *Final synthesis*. At this stage, I combed through the coded data to knit together the links and subtle differences between and within the interviewees' experiences of the phenomenon under study. These shaped the overall narrative reported in this paper.

Limitations of this study

In view of the small sample size for this study, the findings of this case study should not be blindly generalized; they remain specific to the "case" and may only be applicable to other cases of the same type (Kumar, 2005, p. 113). However, the findings presented in this paper can be useful in stimulating debate on the subject under study and as a basis for a large-scale study of this phenomenon.

A struggle for professional recognition

As shown in Table 1, eight out of the nine participants who had Zimbabwean engineering degrees were registered with ECSA as Candidate Engineers. The least experienced of these eight had a total of seven years of work experience: three in Zimbabwe and four in South Africa. The most experienced had a total of fifteen years work experience: ten in Zimbabwe and five in South Africa. One participant with a Zimbabwean degree and a total of seven years working experience, three in Zimbabwe and four in South Africa, was still waiting for the outcome of his application more than a year after submission. Only one of the three participants who had Zimbabwean Diplomas was registered as a Candidate Engineering Technologist. He had a total of nineteen years work experience: sixteen in Zimbabwe and three in South Africa. The other two participants had been refused registration. Of these, one had a total of ten years work experience, six in Zimbabwe and four years in South Africa. The other had a total of eight years of work experience, five in Zimbabwe and three in South Africa.

As stated earlier, there are three different categories in which engineers can be registered with ECSA: Engineer, Engineering Technologist, and Engineering Technician. Each category has a stipulated basic educational qualification required for registration. An additional three years of working experience is required to be registered as a Professional Engineer or Engineering Technologist. Engineering Technicians need one-year working experience (Du Toit & Roodt, 2009). For registration purposes, ECSA (2011a) grades qualifications into three categories. The first is for ECSA accredited qualifications from local universities. The second caters for international qualifications recognised under three different accords that ECSA is a signatory: the Washington Accord (for BEng Degrees), Sydney Accord (for BTech Degrees), and the Dublin Accord (for National Diplomas). The last category is simply called "other qualifications," these are qualifications that fall out of the ambit the aforementioned categories (ECSA, 2011a; n.d-a). While ECSA readily accepts qualifications in the first two categories, applicants with qualifications that fall in the last categories face a cumbersome educational evaluation process with the possibility that their qualifications may be rejected as insufficient. Zimbabwean engineering qualifications fall in the "other qualifications" category. Hence, navigating the process for registration was frustrating for participants in this study. A crucial part of

the process is an interview by a selected appraiser(s) who would recommend either refusal or registration. One of the key findings of this study is that the participants describe the registration process as highly subjective and ambiguous. For example, one participant told me:

[t]he problem is that it seems as if there is no clear criterion to be followed especially if you are a foreigner. You will see that a certain individual who went to the same college in Zimbabwe, for example, has been given professional membership and others coming from the same institution will be told that your qualifications are not good enough. So, it depends on who interviewed you and who did you submitted your papers to. (Jones, 43, Candidate Technologist)

The fact that the individual panellists who interviewed these migrant engineers were given substantial discretionary powers made the process highly subjective. This led to the alleged differential treatment of applicants. Explaining how cumbersome the educational evaluation process was one participant said:

They want to know how many hours you spent on the course and who were your lecturers and what were their qualifications, and what exactly did we do in the labs ... we had to go back to Zimbabwe and look for our student projects and then submit to them. (Chinotimba, 38, Candidate Technologist)

Although, in principle, all applicants go through a similar rigorous process for registration, migrant professionals whose qualifications are not readily recognized by ECSA carry an extra burden of proving that their qualifications are good enough or equivalent to local qualifications (ECSA, n.d-a). The second key finding was that all the participants reported that they waited for long periods: up to two years after submitting their applications to get feedback from ECSA. This is what two interviewees had to say:

I made the application in 2008, and they took about one and a half years to respond...then they called to tell me that “okay you will have your interview after six months.” So, that’s two years after application to get my candidate membership; then I’m now working towards my professional membership. (Chinotimba, 38, Candidate Technologist)

I applied [for registration], and I am still waiting for the feedback. I applied in 2010. They haven’t given me any feedback. It’s more than a year now. (Keita, 31, Membership Pending)

From the perspective of these Zimbabwean engineers, the delays represented a political strategy to frustrate them until they give up their pursuit of professional recognition. Thus, they responded by establishing a collective platform to engage ECSA on this and other matters. In 2010, they started a branch of the Zimbabwe Institute of Engineers called the Zimbabwe Institute of Engineers South Africa (ZIESA). Through this institute, they presented their collective concerns to ECSA (ZIESA, 2010). Commenting on this, one participant said:

ZIESA met with ECSA, and we listed a number of grievances. ECSA has promised to look into it. (Tineyi, 31, Candidate Engineer)

This event was reported in ZIESA’s May 2010 newsletter which stated that a ZIESA delegation met with ECSA to discuss the “impediments” to the registration of Zimbabwean engineers and significant progress was made towards resolving some of the

problems (ZIESA, 2010). In its 2010-2014 strategic plan, ECSA, (2010) acknowledged the need to minimize the delays for evaluating foreign qualifications and to better explain and refine or standardize registration requirements and processes. Additionally, ECSA (2011b) also pledged to improve transparency as well as transformation. Hence, new registration, competency standards and education policies were approved in 2011, which, among other things, paved the way for replacing the paper-based application system with an online system. It remains to be seen if this will make a difference to the experiences of migrant engineers since the new system was only become fully operational in 2016.

A third key finding of this study was that participants felt that ECSA attempted to keep them from acquiring professional engineer status. Some of the participants claimed that they were “advised” to register for categories lower than that of Professional Engineer or as candidates. This is what some of the interviewees who were unsuccessful in their attempts to get professional accreditation told me:

[t]hey didn’t want to register me as a professional engineer but as a professional technologist and I refused, I felt that is not what I wanted and that’s not what I am. They were undermining my qualifications. (Muranda, 31, Candidate Engineer)

I should, by now, be registered as a professional engineer but I am not. I am still a candidate member. (Nicky, 39, Candidate Engineer)

Keeping in mind the significant differences between the status of and qualifications required for engineers and technologists, it is not difficult to see why they were frustrated. Even those who were accepted as candidate engineers found themselves stuck as candidates without the full benefits accorded to professional engineers. This is further illustrated in the following interview excerpts:

It’s difficult to register with ECSA especially if you are coming with foreign qualifications. Although I feel that my working experience is more than what they require for registration. (Nancy, 41, Candidate Engineer)

Foreigners with more than ten years working experience after graduation are graded as candidates/graduates by ECSA. And if you check the conversion rate of those who are registered as candidates to become professionals it may be less than 1%. Most of them end up just getting frustrated because they make it unnecessarily hard to achieve. If you are black and foreign, they make it hard to be registered. (Maromo, 31, Candidate Engineer)

It is important to note that these migrant professionals had significant work experience as engineers prior to immigrating to South Africa in addition to their qualifications (see Table 1). For instance, Nancy had ten years working experience in Zimbabwe and an additional five years in South Africa, but she was only registered as a candidate engineer. However, those who held degree qualifications fared better compared to those with diplomas. Two of the three participants who had diplomas had their applications for registration rejected. One of them said:

ECSA didn’t accept my qualifications. They just stated that my qualifications were not sufficient to meet their consideration. (Silvia, 37, Rejected Applicant)

Despite being registered as candidates or having their applications being rejected outright, all the participants in this study occupied influential positions in the workplace. Essentially, as senior engineers working in a government department, they were performing quality control checks on behalf of the state with the full authority

to approve or disapprove the work done by registered Professional Engineers employed by private firms. However, this was not without any challenges. Participants reported that when dealing with registered engineers who work for private consultancy firms, their knowledge and authority is often challenged. These are some of their experiences:

The guy who used to hold this position was white, so [now] when they come in they see a black woman, and they think “she doesn’t know much.” Some of them end up walking out, well I let them walk out, but they will come back because I am the only one who can help them. Mostly, the aggressive ones are white males. (Silvia, 37, Deputy Director)

Some [consultancy firms] are mainly composed of whites. They don’t feel that a black person can actually give them instructions. But a white client comes with that attitude of saying “we know these things better.” (Jones, 43, Deputy Chief Engineer)

In addition to having their qualifications and expertise questioned by ECSA, race also played a key role in how they are viewed by their colleagues. The final finding was that participants viewed ECSA as a “gate keeper” ensuring the occupational closure of the engineering profession in post-apartheid South Africa. Social factors such as nationality, and race were reported to be an important currency for admission as a professional engineer. Even though registration with ECSA is voluntary, participants in this study viewed it as their ultimate goal in terms of career advancement. This is so because as a regulatory body, ECSA is authorized by law to determine and reserve certain jobs for its registered professional members. The following narratives capture the general perception of participants regarding ECSA:

ECSA is an organization that is prohibitive of people that are trained outside the country. The whole idea is to try and protect a certain group. Most of them are the ones that are forming these consultancy firms, so they want to limit the number of people that get registered and become professional so that they remain in the ownership of the companies. (Orbet, 39, Rejected Applicant)

Joining ECSA is like climbing a mountain, it is not a foreigner friendly organization let alone a black friendly organization. It’s an organization meant protect the interests of white South African professional engineers. It can take a black South African about ten years to be registered with ECSA where as a white graduate engineer can take about three years after graduation to register. (Maromo, 31, Candidate Engineer)

It looks like there is a group of people who want to protect entry into our field, so they make it a little bit difficult to get registered. (Muranda, 35, Candidate Engineer)

Although further research is required on this matter, participants in this study believed that ECSA performed the functions of a gatekeeper protecting the interests of white professional engineers by systematically excluding both foreigners and black South African engineers. This is a strong possibility since ECSA is mandated by subsection 26 of the Engineering Profession Act, No. 46 (2000) to reserve certain types of engineering work exclusively for the highest echelon of its membership. In addition, the latest official statistics for registration trends per calendar year for the category of Professional Engineer provided ECSA (n.d-b) show that 220 or 71% of the 311 professional engineers registered in 2008 were white. Asians, blacks and coloureds make up the remaining 91 or 29%. By ECSA’s (2011b) own admission,

though there has been some progress, there is still a lot of work to be done to bring about racial transformation in the engineering profession in post-apartheid South Africa.

Discussion

As stated earlier, the research question for this study was about what the challenges faced by migrant Zimbabwean engineers seeking professional recognition in South Africa are. Thus, the discussion presented here shows how the findings of this study answer this question. The experiences of these migrant professionals provide a rare opportunity to shed light on how professional associations in a developing country deal with immigrant professionals. It is clear that licensure is a critical tool used by ECSA to retain its powerful influence (Bol & Weeden, 2015). In this study, perceived efforts to under-value the qualifications and expertise of foreign-trained engineers suggest that ECSA was primarily interested in defending the interests of white male South African engineers who dominate the profession. As Zimbabwean qualifications were not readily recognised by ECSA, participants in this study were left at the mercy of ECSA officials who interviewed them as part of the process to evaluate their qualifications. Highlighting the subjective nature of such evaluations, Girard and Bauder (2007) argue that internalized organization cultural norms and values of officials can be used against migrant professionals. Thus, the actions and attitudes of ECSA officials can result in barriers for Zimbabwean engineers.

In addition, their work experience gained prior to their arrival in the country was viewed inferior to that of locals. Hence, even after successfully proving that their qualifications were good enough, they were registered in the same category with inexperienced local recent graduates. Ironically, participants in this study occupied influential positions in a government department, entrusted to perform quality control checks on behalf of the state with the full authority to approve or disapprove the work done by registered professional engineers. It is worth noting that although these immigrant engineers were not categorically excluded from practising as engineers in the country, denying them professional status ensured that they could not compete with ECSA's elite membership for more lucrative jobs.

The findings of this study confirm Willmott's (1986) conceptualization of professional associations as political bodies. His argument that while strict meritocratic conditions of entry followed by a lengthy period of apprenticeship are meant to gain the trust of clients their most important function is to ensure occupational closure is particularly insightful. Furthermore, the political nature of ECSA can be seen in its history. There were critical disagreements between engineers in different areas of specialization that delayed its establishment for years. The year 1968 is viewed as a pivotal year in the history of ECSA for in that year it was granted, for the first time, a legal mandate to self-regulate (Gericke, n.d; Kruger, n.d). Willmott (1986) sees this as a political strategy used by professional associations to consolidate their power. In addition, Willmott (1986) calls attention to the important role played by the members of professional associations. He argues that they have collective power to reject policy recommendations made by officials. This is especially critical in a context where white skilled workers are reported to have negative attitudes towards transformation (Du Toit & Roodt, 2009; Lawless, 2005). This may be useful in explaining why despite ECSA's acknowledgement that there is a need for transformation, progress has been slow.

In conclusion, in the absence of easily comparable degree programs between countries, there is a need for alternative ways to assess foreign qualifications. For example, a competency-based approach could be more suitable. Additionally, developing a system of easily comparable degree programs across the Southern African region should be prioritized. Still, ECSA relied on a system of comparing academic

qualifications even though, in light of the findings of this study, this approach creates unnecessary bottlenecks and leads to the underutilization of migrant engineers. Without a doubt, engineering is a crucial profession and as such maintaining “proper” standards and professional ethics cannot be questioned. What needs to be looked at with the view to change are the ways in which, standards are determined and maintained. Unless a wide range of progressive reforms is embarked on with regard to the process of accreditation of qualifications and the general operations of ECSA, engineering will remain an occupational quasi-caste dominated by white male engineers.

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