**UNDERSTANDING THE COMMITMENT OF SOUTH AFRICAN ACTUARIES TO THEIR PROFESSION**

**By Kgodiso Mokonyane & Shivani Ramjee**

ABSTRACT

This paper reports on interviews that were conducted among actuaries in South Africa about their commitment to the actuarial profession. The South African actuarial profession has its own challenges, some of which are unique to the country. The former apartheid regime in South Africa did not allow black people to access quality mathematical education and therefore prevented access to actuarial studies for South African blacks. The current government aims to increase the participation of black people in its economy. Women and black men in the actuarial profession have the ability to participate meaningfully in the South African economy and help to achieve a substantial change in the racial and gender composition of ownership and management structures in South Africa, where the current composition is dominated by white males. The South African actuarial profession is no different, with 79% of its Fellows being male and only 6% of Fellows being African black in 2013. This is a big concern given that 79% of the South African population were African blacks and women made up 51% of the population in 2011.Thus, it is important to understand the commitment of actuaries to their profession in order to ensure that transformation within the profession is realised, the profession continues to grow and assists in ensuring that South Africa moves closer to its ideal of an inclusive and representative economy. Findings from these interviews are used to inform subsequent studies on the commitment of actuaries to their profession. It is found that the understanding of commitment of actuaries to their profession includes their commitment to actuarial professional association(s). The commitment of South African actuaries to their profession seems to be influenced by race and gender.

KEYWORDS

Actuarial professional commitment, organizational commitment, actuarial professional association commitment, transformation

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1. **INTRODUCTION**

The first recorded study of the commitment of South African actuarial professionals to their profession can be found in Bagraim (2003). This study found that actuaries and actuarial students in South Africa were highly committed to their profession. However, the study did not report on other professional domains that actuarial professionals were committed to and whether there was a common understanding of what commitment to their profession meant. Meyer & Allen (1997) recognised the need to determine whether the “meaning” of commitment was the same in different cultures and areas of the world.

The aim of this paper is to determine a common understanding of what it means for actuaries to be committed to their profession and whether commitment to their organisations (employers) and professional bodies is distinct from their professional commitment or not.

This study focuses on actuaries in South Africa who are Fellow members of the Actuarial Society of South Africa. The methods applied in this paper can be extended to any country or region. Results from this study will be used to inform further research which the authors are conducting on this topic.

In today’s world, a typical actuary spends at least a third of their day focussed on their profession. Understanding professional commitment is important because of its potential link to retention – in terms of both professional and organisational membership – and to work performance (Lee et al., 2000). Ericsson & Lehmann (1996) found that the highest levels of human performance in different domains can only be attained after around ten years of extended, daily amounts of deliberate practice activities. Understanding professional commitment is also important as it helps us to understand how people manage different commitments in their lives with their professional commitment (Meyer et al., 1998).

There is an increasing global trend to retain a minimum percentage of female representation on the board of directors of companies (Hewlett, 2011). The actuarial training that actuaries go through makes women Fellows good potential candidates to serve as effective members on boards. In South Africa, only 30% of managers were women while females made up 51% of the general population in 2011 (Statistics South Africa, 2011).

As part of a debate in the National Assembly on reconciliation and nation building in 1998, Thabo Mbeki (then Deputy President of South Africa, who later served as President of South Africa from 1999 to 2008) said,

*“A major component part of the issue of reconciliation and nation building is defined by and derives from the material conditions in our society which have divided our country into two nations, the one black and the other white. We therefore make bold to say that South Africa is a country of two nations.*

*One of these nations is white, relatively prosperous, regardless of gender or geographic dispersal. It has ready access to a developed economic, physical, educational, communication and other infrastructure....*

*The second and larger nation of South Africa is black and poor, with the worst affected being women in the rural areas, the black rural population in general and the disabled. This nation lives under conditions of a grossly underdeveloped economic, physical, educational, communication and other infrastructure.”*

Thabo Mbeki’s words remain relevant 15 years later. The former apartheid regime in South Africa did not allow black people to access quality mathematical education. The effects of this are apparent, with 83% of Fellows of the Actuarial Society of South Africa (FASSA) being white and only 6% of FASSA members being African black in 2013[[1]](#footnote-1). This is a big concern given that 79% of the South African population were African blacks in 2011. A group of black actuarial professionals felt the need to address the low proportion of black Fellows in South Africa and decided to found the Association of South African Black Actuarial Professionals (ASABA) in 2005, with the objective of increasing the number of black Fellows in the country.

The term “black people” is a generic term which means Africans, Coloureds and Indians (BBBEE Act, 2003). This term was historically used to refer to Africans and some South Africans still use it in that way. In this paper, Africans are referred to as African blacks.

1. **OVERVIEW OF LITERATURE**

Meyer & Allen (1991) examined the different definitions of commitment that had been used in literature before then. Based on this, they developed a three-component model of organisational commitment, distinguishing between affective, continuance and normative commitment as follows (p. 67):

*“Affective commitment refers to the employee’s emotional attachment to, identification with, and involvement in the organisation. Employees with a strong affective commitment continue employment with an organisation because they want to do so.*

*Continuance commitment refers to an awareness of the costs associated with leaving the organisation. Employees whose primary link to the organisation is based on continuance commitment remain because they need to do so.*

*Finally, normative commitment reflects a feeling of obligation to continue employment. Employees with a high level of normative commitment feel that they ought to remain with the organisation.”*

Meyer & Allen (1997) generalised their three-component model of commitment to any entity with which one has a psychological relationship.

Subsequent research has found the third dimension of commitment (normative commitment) to be too closely correlated with affective commitment to be regarded as a separate dimension (Ko et al., 1997). This suggests the use of a two-component model of commitment.

Bagraim (2003) applied Meyer & Allen’s three-component model of commitment to South African actuarial professionals and found that they showed high levels of affective and continuance commitment.

According to Chalofsky & Krishna (2009), identification with an organisation’s goals and values, congruence between individual and organisational goals, and the internalisation of organisational values and mission are primary drivers of affective commitment.

Steele (1997) finds that domain identification was the type of academic valuing that predisposes students towards performance boosting motivation. Domain identification occurs when one perceives good prospects in the domain, i.e. one has the interest, skills, resources, opportunities to prosper in the domain and that one belongs there, in the sense of being accepted and valued in the domain. Women and African Americans’ domain identification could be frustrated by societal pressures, such as gender roles and economic disadvantages. For those that are still able to identify with the domain (e.g. Mathematics), they face the further barrier of stereotype threat. Stereotype threat is defined as, *“the event of a negative stereotype about a group to which one belongs becoming self-relevant, usually as a plausible interpretation for something one is doing, for an experience one is having or for a situation one is in that has relevance to one’s self-definition.”* This can result in domain dis-identification.

In separate studies, Aranya & Ferris (1984) and Lee et al. (2000) observe that professionals who work in corresponding organisations (e.g. accountants working in accounting firms or nurses working in hospitals) are less likely to experience occupational-organisational conflict compared to professionals who work in non-corresponding organisations (e.g. accountants working at an insurance company or nurses working at industrial sites) – which are less likely to share their particular professional values and goals. They suggest that investigating non-work variables and dispositional variables, such as family and cultural experiences would help clarify the nature of occupational commitment.

Vanhala & LaPoite (2011) studied the differences in organisational, work and career/professional commitment of business school graduates who are managers, by gender and managerial position. In spite of the same university level degree, the majority of men were in upper-management positions while the majority of women were in lower-management positions. The values and attitudes of the managers did not seem to differ much between men and women. There was no statistically significant difference between women and men managers in work involvement and career commitment. However, male managers were, on average, a little more committed to their organisation and this was significant at 5% significance level.

Using a survey, Bellis (1996) compared women and men in the actuarial profession who studied at Macquarie University (graduates in the 70’s, early 80’s and late 80’s) and were current members of the Institute of Actuaries of Australia. She found that having children was seen as a pause in a career among the younger generation than an end to advancement. Bellis (1996) concluded that young women may be more career-conscious than young men in making the decision to commence actuarial studies. Women seem to have actively chosen actuarial science and come with high expectations (and leave university with high ambitions) while men seem to have fallen in to it without much thought and realise the potential to be successful once they leave university (and hence have an increase in ambition while working).

Finally, Cho & Huang (2012) investigated the influence of professional commitment and organisational commitment on professionals’ intention to leave their organisations for professional advancement. They found that organisations have to foster in their employees, especially the professional ones, feelings of commitment to the organisation by letting them know how they contribute their value to the organisation. This would be effective in the retention of professionals. A high level of professional continuance commitment would diminish the negative impact of occupational continuance commitment on intention to leave the organisation for professional advancement. Thus, the organisation may need to promote social exchange among staff so as to increase their organisational affective commitment in a more aggressive way in order to retain those professionals.

1. **SOUTH AFRICAN CONTEXT**

According to De Smidt (1971) the arrival of William Marshall, an Associate member of the Institute of Actuaries, in Cape Town in 1883 to found a branch of Colonial Mutual Life Assurance Society can be taken as the birth of the actuarial profession in South Africa. James McGowan qualified as a Fellow of the Institute of Actuaries in the same year and was the first recorded Fellow to come to South Africa. In 1921 Tienie Louw became the first South African born Fellow.

Since then, the South African actuarial profession has grown and 919 Fellows were registered with the Actuarial Society of South Africa in 2013 (table 1). Demographic data of the Fellows was received from the Actuarial Society of South Africa and is illustrated below.

**Table 1: Gender and racial split of Fellows**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Race** | **Female** | **Male** | **Total** | **Proportion Female in Race Group** | **Proportion Male in Race Group** | **Racial Proportion of Actuarial Profession in 2013** | **[[2]](#footnote-2)Racial Proportion of South African population in 2011** | **Difference** |
| African Black | 8 | 46 | 54 | 14.8% | 85.2% | 5.9% | 79.2% | **-92.6%** |
| Coloured | 3 | 8 | 11 | 27.3% | 72.7% | 1.2% | 8.9% | -86.6% |
| Indian & Oriental | 30 | 57 | 87 | 34.5% | 65.5% | 9.5% | 2.5% | 278.7% |
| Unknown | 0 | 3 | 3 | 0.0% | 100.0% | 0.3% | 0.5% | -34.7% |
| White | 156 | 608 | 764 | 20.4% | 79.6% | 83.1% | 8.9% | 834.1% |
| **Total** | **197** | **722** | **919** | **21.4%** | **78.6%** | **100.0%** | **100.0%** | **0.0%** |

Of the 54 African black Fellows shown in table 1, 32 were South African.

African blacks are under-represented by 92.6% in the actuarial profession compared to their representation in the South African population. This is a major concern because African blacks are the majority race (79.2%) of the population. This makes the South African actuarial profession less able to provide solutions that best meet the needs of the majority of its people since it does not reflect them. This questions the continued relevance of the profession in this country if the majority of the population remain gravely under-represented.

**Figure 1: Age distribution of Fellows**

The modal age is 35 and the median age is 37.

The South African actuarial profession has undergone a lot of changes over the past decade or so. [[3]](#footnote-3)Highlights of those mostly unique to South Africa include:

* the qualification, in 2001, of the first African black Fellow who was born in South Africa – Themba Gamedze;
* Janina Slawski becoming the first woman President of the Actuarial Society of South Africa in 2003;
* Ndivhuwo Manyonga (nee Ravele) being the first African black woman born in South Africa to become a Fellow in 2005;
* the launch of the Association of South African Black Actuarial Professionals in 2005;
* the launch of the South African actuarial Fellowship qualification in 2010, introducing the FASSA and AMASSA designations; and
* Themba Gamedze becoming the first black President of the Actuarial Society of South Africa in 2011.

These changes to the South African actuarial landscape are expected to assist in realising an actuarial profession that reflects the demographics of South Africa.

Currently the South African economy is characterised by low gender and racial diversity in its management and ownership. The Broad-Based Black Economic Empowerment Act was introduced in 2003 when the South African government acknowledged that its economy still excluded the vast majority of its people from ownership of productive assets and the possession of advanced skills. One of the Act’s aims is to,

“*Promote the achievement of the constitutional right to equality, increase broad-based and effective participation of black people in the economy and promote a higher growth rate, increased employment and more equitable income distribution.*”

The average annual income of households headed by African blacks was R60 613 in 2011 while that for households headed by whites was R365 134, i.e. over six times that of African black households in South Africa (Statistics South Africa, 2011). South Africa’s economy performs below its potential because of the low level of income earned and generated by the majority of its people (BBBEE Act, 2003). This is, indeed, part of the heritage of the country’s political past where the full and successful participation in the economy was restricted to a few.

The South African actuarial profession has made some progress in its membership diversity since the introduction of the BBBEE Act. However, it is important that the gains made by the profession so far are sustained in order to achieve the Act’s ideals. Actuaries in South Africa work mainly in the Financial Services Sector and this is where the actuarial profession can make a difference in the management and ownership diversity of the economy. In 2010, the Financial Services Sector in South Africa comprised of R6 trillion in assets and is estimated to have contributed R203.8 billion, 10.5% of gross domestic product, to the South African economy (National Treasury, 2011).

In order for South Africa to improve its economic participation in a global stage, it needs to tap in to the potential of all its citizens. The current membership of the South Africa actuarial profession includes people who have the ability to participate meaningfully in the South African economy and who can aid in increasing diversity in its management and ownership. In order to understand the participation of South African Fellows in the management and ownership of the South African economy, it is important to first understand their commitment to the actuarial profession.

Due to the unique circumstances of South Africa, South Africa actuaries’ understanding of commitment may differ from that of actuaries in other countries. The model that the subsequent research will develop may, therefore, differ by country or region.

1. **RESEARCH METHOD**

INTERVIEWS

In order to check the feasibility of this study and to inform its direction, 10 actuaries who represent the diverse demographics of South Africa were interviewed. Their demographic information is shown in table 2 – 7 below.

**Table 2: Gender profile of participants**

|  |  |
| --- | --- |
| **Gender** | **Number** |
| Female | 5 |
| Male | 5 |
| **Total** | **10** |

**Table 3: Age profile of participants**

|  |  |
| --- | --- |
| **Age** | **Number** |
| 20 – 29 | 2 |
| 30 – 39 | 4 |
| 40 – 49 | 3 |
| 50 – 59 | 1 |
| **Total** | **10** |

**Table 4: Racial profile of participants**

|  |  |
| --- | --- |
| **Race** | **Number** |
| African Black | 3 |
| Coloured | 1 |
| Indian & Oriental | 1 |
| White | 5 |
| **Total** | **10** |

**Table 5: Sectors where participants work**

|  |  |
| --- | --- |
| **Sector** | **Number** |
| Academic | 2 |
| Consultancy | 2 |
| Insurance | 4 |
| Non-actuarial | 1 |
| Reinsurance | 1 |
| **Total** | **10** |

**Table 6: Job positions of participants**

|  |  |
| --- | --- |
| **Position** | **Number** |
| Director or Senior Manager | 7 |
| Actuary | 2 |
| Non-actuarial | 1 |
| **Total** | **10** |

**Table 7: Cities where participants work**

|  |  |
| --- | --- |
| **City** | **Number** |
| Cape Town | 6 |
| Johannesburg | 4 |
| **Total** | **10** |

Each interviewee was asked questions about their commitment to the actuarial profession. The questions were designed to allow the interviewee to give as much information as they deemed necessary in their responses. The interview was recorded and permission was sought from the interviewee to record the interview. Once the interview was transcribed, a copy was sent to each relevant interviewee to approve and give consent for its use in research. This period took about two months to complete.

1. **FINDINGS**

The findings from the interviews can be grouped as the interplay between commitment to the organisation, profession and professional association; levels of commitment; components of commitment; and life roles. These are discussed in detail below.

INTERPLAY BETWEEN COMMITMENT DOMAINS

In order to be referred to as an actuary, an actuarial professional needs to join an actuarial professional body that certifies actuaries. As such, being committed to one’s profession as an actuary requires a minimum commitment to an actuarial professional association. This requirement has resulted in 9 out of the 10 participants seeing the commitment to their profession and professional body as one.

An actuarial professional practices their profession as an employee of an organisation. Participants that work in an actuarial consultancy firm and a reinsurer noted that it was part of their work responsibility to participate in actuarial professional associations and to be seen as doing so. This is part of marketing their skills and keeping up-to-date with changes in the market. One participant mentioned that his organisation’s support and encouragement for his participation in the actuarial professional body was probably why he had remained with the organisation for so long.

Participants who work at traditional actuarial employers explained the conflict they experience between being business executives and professionals. One said, “*As you move into executive management I think there is certainly pressure to become more an executive and less an actuary which can affect your commitment to the profession.*” They also mentioned being more committed to their organisation as it is a source of income for their family and they were contractually obligated to their organisation. If their ability to participate in the actuarial professional association clashed with participation in their organization then they would delay their participation in the professional association. All participants spoke about the importance of being professional when carrying out their work.

Another participant noted that, “*How involved you are allowed to be in the profession depends on where you are in your career, how long you have been qualified, who you work for, what type of company you are in and how pressurized your role is.*” He noted further that an actuary who is committed to their profession but is not in a supportive environment will have limited ability to participate in the professional association compared to if they were in a supportive environment.

LEVELS OF PROFESSIONAL COMMITMENT

Based on the interviews, the varying levels of professional commitment were identified as compliance, citizenship and championing. These are described below.

Compliance

This is a minimum level of commitment to the profession. Professionals with this level of commitment only do the bare minimum to keep their professional status i.e. participating in and submitting the record of their continuous professional development to their professional association. Some may complain while doing so. Others may see the need for this and may also attend seminars and adhere to the bylaws of the profession.

One out of the 10 interviewees displayed this level of professional commitment. She said, *“I wasn’t really a committed, interested actuary, and I’ve realized that two things, first life is too short to do something you’re not interested in and not enjoying and secondly, you’re not going to make a success of something you’re not interested in and you’re not enjoying. You are going to always feel at a loss as if you don’t really know where you are and what you are doing. The actuaries that are interested in what they’re doing will rise up above you because they will be always learning more things, reading up and taking part in CPD, which I was a bit averse to because I wasn’t interested. I would rather find something else to do with my free time.”*

Citizenship

Actuaries who see the need to get more involved in their profession, other than just complying, show citizenship behaviour. This is where commitment to the profession leads to participation within the professional bodies. The participation may be self-driven or encouraged by their organisation.

Those who act as citizens of the profession see themselves as a reflection of the profession in their lives. They hold the integrity of the profession highly, volunteer in professional associations and participate in forums where they share their knowledge and expertise.

Six of the participants can be classified as showing the citizenship level of professional commitment. There were varying levels of citizenship involvement among these participants. One of the six participants said, *“Some people have to lead the way and then create the avenue where other people can also contribute. A handful of people will have to be the ones who actually give more of their time and their effort and create the platform where other people can then come and do what they need to do.”*

Championing

This is the highest level of commitment to one’s profession. One needs to become a citizen of the profession before they can champion it. Championing includes actively creating awareness about the profession, encouraging potential members to join and providing them with access to the profession. This includes mentoring actuarial students and actuaries, actively contributing to the transformation of the actuarial profession and being genuinely concerned about the legacy of the actuarial profession – “*if you are committed to the profession you are also worried about what happens when you are gone... It is bigger than you.*”

One participant stated that, “*If a profession isn’t diverse then it would reflect that and that is reflected in the people’s commitment… People from the minority groups in the profession or the designated groups, as we call them in South Africa, are more committed for their causes – like ASABA and transformation.*” Other women actuaries echoed his sentiments saying that their gender and/or race affected their participation within the actuarial professional associations and society at large. One of the participants said, *“I will always help another woman.”*

Taking the responsibility to lead the actuarial professional associations is also the behaviour of a champion of the profession. One of the interviewees was a founding member of ASABA. Three of the interviewees showed the championing level of professional commitment.

COMPONENTS OF COMMITMENT

The dimensions of commitment were introduced above as affective and continuance commitments. The actuaries that were interviewed for this study showed high levels of emotional attachment to the actuarial profession, implying an affective commitment. Participants used phrases such as “*remain a life-time member of the professional association even if not in any traditional actuarial roles,*” “*portray through your entire image and life that you are an actuary*” and “*I won’t do anything else. I love it.*” One actuary said that if he were to look for a new organisation he would require the organisation to support his current involvement with the actuarial professional association and would make sure to discuss this during his interview.

There were also signs of continuance commitment to the profession with a participant mentioning that, “*my profession also contributes to the health of my family life, from the pure basics of earning an income from what I do.*” Others spoke about joining the profession for “*job and financial security.*” One participant mentioned that he was looking for work in a recessionary environment and the only places where there were vacancies were in actuarial roles. He took on an actuarial role even though he was not interested in the profession. He realized that sitting actuarial exams would lead to financial security and this led to his eventual qualification as an actuary.

LIFE ROLES

Amatea et al. (1986) developed the Life Role Salience Scale (LRSS) when they realised that the then existing measures were not effective in measuring men and women’s role expectations. The roles included in this measure are split in to occupational, marital, parental and homecare roles. The LRSS assesses the personal importance or value one attributes to participation in a particular role and one’s intended level of commitment of personal time and energy resources to enactment of a role. The role that an individual assigns the highest score to is assessed as the individual’s salient life role.

Actuaries who participated in the interviews were asked about their life roles and whether these affected their commitment to the profession. One participant said that his life roles did not affect his commitment to the profession because commitment to the profession is commitment to professionalism and “wherever you are working, there is that expectation that you are an actuary and therefore you have to uphold professional standards. So I don’t think the other life roles would affect commitment to professionalism.”

The other participants agreed that life roles could potentially affect commitment to the profession as they saw commitment to the profession to go beyond just professionalism; to include the varying levels of participation in the actuarial professional associations that were mentioned above (compliance, citizenship and championing). Participants mentioned other roles that are not included in the LRSS. These include their role in society at large, extended family roles (which are relevant in South Africa since it is a developing country) and role as a friend.

1. **RECOMMENDATIONS**

The following recommendations are made for the next phase of this study:

1. Determine the correlation between the professional and professional association commitments of actuaries. This would be used to verify the common understanding of commitment to the actuarial profession that was observed by 90% of the interview participants – i.e. professional commitment goes beyond commitment to professionalism, involving a certain level of commitment to the actuarial professional association(s).
2. Test the following hypotheses:

* Professional commitment of actuaries is associated with involvement in actuarial professional association(s)
* Being in an organisation that encourages/values involvement in actuarial professional association(s) while the actuary is highly committed to the professional association(s) is associated with high organisational commitment
* Professionals who work in non-corresponding organisations (e.g. actuaries in a life office or investment firm) are more likely to experience professional-organisational conflict compared to professionals who work in corresponding organisations (e.g. actuaries at an actuarial consultancy firm or reinsurer).

1. The LRSS would need extensive adjustments and testing in order to make it appropriate for actuaries in South Africa. Based on the interviews, it is best not to pursue this as part of the study of the commitment of actuaries to their profession. It is recommended that the adjustment and testing of the LRSS in this regard be left for further research.

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1. Based on data received from the Actuarial Society of South Africa in 2013. [↑](#footnote-ref-1)
2. Statistics South Africa, 2011. [↑](#footnote-ref-2)
3. Actuarial Society of South Africa [↑](#footnote-ref-3)