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Analysis of Women Empowerment in South African Water Boards: A Special Reference to Historically Disadvantaged Individuals (HDIs) in South Africa.

V.M. Mmbengwa [1*], T.P. Ntili[2], R. Haines[3], J.A Groenewald[4], H.D. van Schalkwyk[4]

[1] National Agricultural Marketing Council (NAMC), Pretoria, Republic of South Africa & North West University, Potchefstroom Campus, Potchefstroom, Republic of South Africa

[2] Nelson Mandela Metropolitan University, Port Elizabeth, Republic of South Africa & Department of Water Affairs, Pretoria, Republic of South Africa

[3] Nelson Mandela Metropolitan University, Port Elizabeth, Republic of South Africa

[4] North West University, Potchefstroom Campus, Potchefstroom, Republic of South Africa

* Corresponding Author: V.M. Mmbengwa
Tel.: +27 72 831 3678, Fax: +27 86 515 3308, E-mail: VMmbengwa@namc.co.za
vmmmbengwa@gmail.com

The aim of the study was to investigate women's empowerment in water boards of South Africa. The study was carried out in all South African water boards (n=14) using both qualitative and quantitative methodologies. A non-probability sample (which used a purposive sampling frame) was used, resulting in a non-representative sample size (n=409). Qualitative data were collected through a combination of literature reviews, interviews, questionnaires, and observations. The results revealed that males have fair access to managerial and advisory positions such as junior management and water expert categories at a relatively young age. However, at the governance level, males compared to females are dominant at executive level. Very little women empowerment at these boards was evident. Women appear to lack succession prospects in other critical governing positions of South African water boards. The study recommends for a special attention to affirm women in the water boards in a sustainable manner.

Keywords: gender, representation, governance, empowerment, boards

The Inter-American Development Bank (2010) defined women's empowerment in terms of expanding the rights, resources, and capacity of women to make decisions and act independently in social, economic, and political spheres (Kabeer, 2012). On the other hand, the United Nations (2001) defined women's empowerment in terms of five components: "women's sense of self-worth; their right to have and determine choices; their right to have access to opportunities and resources; their right to have the power to control their own lives, both within and outside the home; and their ability to influence the direction of social change to create a more just social and economic order, in both national and international levels". In its report entitled: "*Towards an enabling environment for women economic empowerment in South Africa: A status quo report"*, the Department of Trade and Industry (DTI) (2011) referred to the term "women's economic empowerment" as the ability of all women to fully participate in, contribute to, and benefit from economic growth and development. The report associated the women's empowerment concept with a broad term that encompasses a range of diverse but integrated socio-economic strategies. In addition, McCallum (2005) views this concept as inextricably linked to both the ability and opportunity to make decisions and to act for oneself. Thus, empowerment is associated with a strategy that sought to achieve an egalitarian society, where competence and the right of people to take charge of their own destinies are guaranteed. Whilst empowerment is defined as a multi-dimensional social process that helps people gain control over their own lives (United Nations, 2012), evidence does exist of societies that resist its implementation (Shackleton *et al*, 2011).

The Network on Gender Equality (GENDERNET) (2012) subscribes to the view that women's economic empowerment is a prerequisite for sustainable development and pro-poor growth. Therefore, a society without women who are empowered will always be under stress. The question to be asked is why women's empowerment and not human (regardless of gender and race) empowerment? Other researchers found that, in many developing countries, women and girls are still the poorest, least educated, most unhealthy, and most marginalised segments of the population (Crown *et al*, 2003).

In South Africa, women constitute the poorest group and are more likely to be unemployed or underemployed (Kabeer, 2012.). Kabeer (2012) seems to believe that the existence of unequal power relations in societies has the potential to block women's capacity to participate in, and help to influence, development processes and highlighted the nature of the changes that might serve to promote this capacity at both individual and collective level. It is the aim of this study to investigate the empowerment of women in the water boards of South Africa by examining their proportional representation in the boards. It is assumed that the representation of women in the structures of governance shows the readiness to provide women with the opportunity to help shape the direction of the services of the water sector in South Africa.

Literature review

In general, literature evidence acknowledges that women are largely marginalised from decision-making processes that affect their lives, particularly at the level of water management (Crown *et al*, 2003; Olsson, 2010 & Ngcaba, 2012). Women tend to be over-represented among the poor and are also more likely to be unemployed than men (Kornegay, s.a. & Duflo, 2012). This restricts their opportunities and potential to contribute to the country's economy (Shackleton *et al*, 2011). Also, the poor water and sanitation situation in the country tends to affect women more severely as they play a much more central role in water usage, particularly in the poorer and rural areas of the country (World Bank, 1996), Water Research Commission (2009), United Nation (2010). For gender-mainstreamed research questions to meet the expected complexities of transformation dynamics of the water sector in the study, it was important to unpack the different roles of men and women (Crown *et al*, 2003). According to the United Nations Human Settlement Programme (2013), the relationships between these roles within the water society are regarded as important in the study to advance gender equality. In particular, these roles enable the societies to conceptualise the thesis and anti-thesis of how transformation dynamics impact the roles and relations of the gender in the water sector with regard to policy formulation. Therefore, understanding these roles will make it possible for policy makers to engage in a constructive manner with the situation on the ground and to facilitate addressing not only the practical needs, but also the strategic needs of women in terms of equal participation in decision making and equal access to the benefits of water.

Method

There are fourteen (n=14) water boards in South Africa. These boards provide strategic direction and compliance in terms of the water sectors' requirements. These boards also advise the Minister of Water Affairs and their respective accounting officers. Due to the sensitive nature of the research, the following data collection methodologies were used: both quantitative and qualitative research methodologies (where the former used the survey questionnaire and later used the face-to-face interviews) were preferred. These data collection methodologies were opted for due to their relative advantage over each other. Therefore, their complementarities were exploited to advance the quality of the research output. A non-probability sample (which used a purposive sampling frame) was used, resulting in a non-representative sample size (n=409). Qualitative data were collected through a combination of literature review, interviews, questionnaires and observations. The literature review

included published articles and government reports. On the other hand, quantitative interviews were conducted using the opinions of key informants in water sectors of South African society. A standard questionnaire was administered to collect quantitative data information. Prior to the commencement of interviews and the administration of the questionnaire, permission to collect the data was requested from the respondents. Upon the granting of permission, interviews were conducted. The participants' information collected from the participants was kept confidential. The analyses of results were conducted through descriptive and inferential procedures using the SPSS statistical software package. A descriptive analysis focused on the demographic representation by generating means and standard deviation of sample population. The demographic profile of the participants provided the distribution of the respondents of the sample. On the other hand, the inferential analysis used two-way Analysis of Variance (ANOVA) as a statistical technique to analyse variation (continuous random variable) measured under conditions defined by discrete factors (classification variables, often with nominal levels). The study has two categorical explanatory variables, namely gender and areas of involvement (positions).

Results and discussion

This section presents the results of the analyses of women's empowerment within the water boards of South Africa. These results are presented from of descriptive and inferential analyses. The presentation of the results was coupled by their discussion. In presenting the results and discussions, descriptive analyses were presented followed first by the inferential analysis.

Descriptive analysis

In these analyses, a null hypothesis (Ho) for the equal representation in different job categories of water boards was assumed. Table 1 and Figure 1 show the proportion of the gender representation within the South African water boards. According to the results, it is clear that the sample population has unequal representation in both male {n=239 (41.57%)} and female {n=170(58.44%)} category. The results further indicate that females (1.71%) have slightly higher numerical advantages relative to males (0.49%) in the level of accounting authority. In the senior management level, males appear to be represented two times (31.54%) more than female (16.87%) counterparts. In junior management, a slightly balanced representation appears to exist with a slight advantage of representation from the females (15.40%) as compared to male 14.18% counterparts. The results show that at the level of experts, males were dominant (8.07%) compared to females (6.85%). At the level of the executive authority, females are represented five times less than male counterparts. If the above representation is the true reflection of water board gender representation, women can be said to be underrepresented in senior management, on water expert level and in the executive authority. The latter seems to represent a dire scenario, followed by senior management. According to Schreiner and Koppen (2003), gender mainstreaming as a strategy may be required to address issues related to this structural gender inequality in order to induce a fundamental transformation through eradication of gender prejudice and power imbalances between men and women in structure of governance. This approach means recognising that women and men often have different needs and priorities, face different constraints, have different aspirations, and contribute to development in different ways (World Bank, 1995b; Schreiner *et al*, 2012).

Table 1: Case processing of the gender representation in the sample population of the water boards

Respondents' gender		Value Label	N	%
Female	Respondents' gender	Female	170	41.565
	Area of Involvement	Accounting Authority	7	1.711
		Senior Management	69	16.870
		Junior Management	63	15.403
		Water Expert	28	6.846
		Executive Authority	3	0.733
Male	Respondents' gender	Male	239	58.435
	Area of Involvement	Accounting Authority	2	0.489
		Senior Management	129	31.540
		Junior Management	58	14.181
		Water Expert	33	8.068
		Executive Authority	17	4.156
	Total		409	

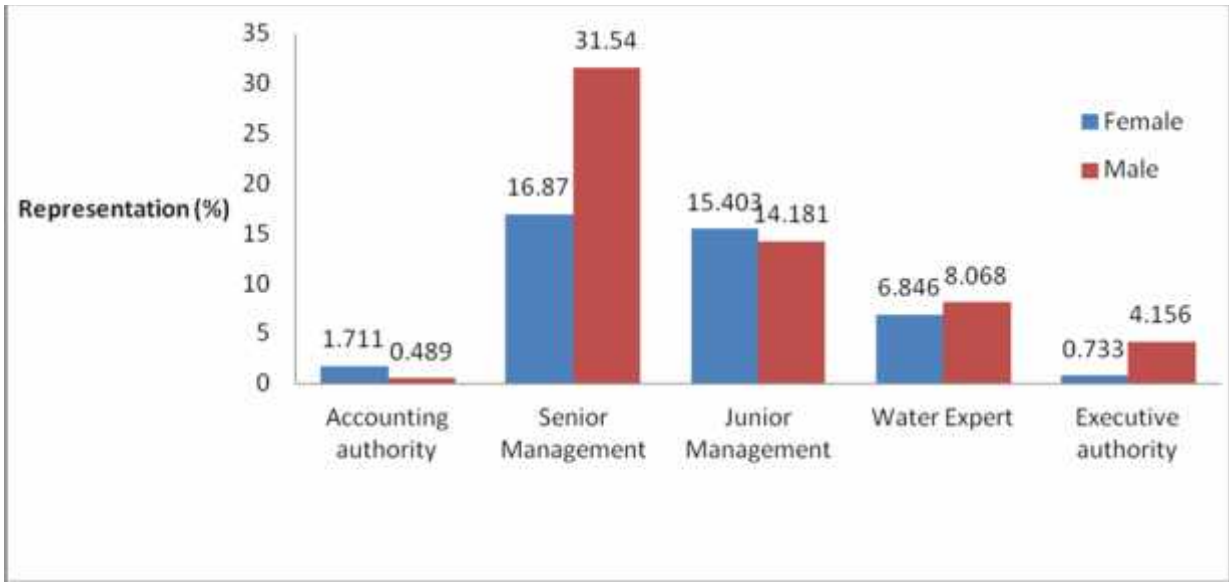

Figure 1: Gender representation in terms of water board managerial level

In view of the above-mentioned results, it appears that the impact of gender transformation (where the redress of women and youth representation is prioritised) is felt more in some positions than others. This observation may be regarded as highly probable due to the fact that transformational processes may be more successful in some levels than others; especially in levels where resistance by other gender groupings may not pose a serious threat to company or institutional image. Table 2 represents the mean age and 95% confidence interval of respondents in the study where female had a mean of 45.185 (with standard error being 1.412 at 42.397 to 47.973% of the 95% confidence interval), relative to 44.86 mean age of male (with standard error of 1.334 at 42.233 to 47.488% of 95% confidence intervals). According to the results, approximately 95% (confidence interval) of the scores for female ages fall between 42 and 48 for the respondents. In the case of male counterparts, the mean is 44.860 with a standard deviation of 1.334. From these results, it appears that the scores for the male ages falls between 42 and 47 range (95% confidence interval) . These results reveal that the work force consists of mid-aged respondents with more experience and knowledge about the water sector.

Table 2: Descriptive statistics for gender respondents in water boards

Dependent Variable: Age of the respondents				
Respondents' gender	**Mean**	**Std. Error**	**95% Confidence Interval**	
			Lower Bound	**Upper Bound**
Female	45.185	1.412	42.397	47.973
Male	44.860	1.334	42.233	47.488

According to results, the depicted different areas of involvement (positions) for the respondents on gender basis are presented in Table 3 and Figure 2 and 3 respectively. The mean scores for age of the respondents in relation to the area of involvement show that it takes relatively more than five years to have a male accounting officer relative to a female counterpart. In the senior management level, it is clear that a female is likely to reach such a level two years earlier than a male counterpart. In addition, it also appears that a female is likely to be in a water expert position three years earlier than a male counterpart. On the contrary, females appear to reach executive authority positions in the water boards five years later than male counterparts. These results appear to indicate that the water boards have better succession planning for women's empowerment in the accounting office and senior management positions. On the contrary, water boards appear to have a lack of succession planning that empowers women as water experts, in executive office and in junior management positions. These disparities in succession planning for women's empowerment have some advantages and disadvantages for water boards and the society in general. It appears that at a level where succession planning seems to be good, it is mere compliance to government legislation. According to the Department of Trade and Industry (DTI) (2011), the Republic of South Africa has passed several items of legislation to, among others, protect the rights of women, promote gender equality and facilitate women's empowerment. This author outlines the following as some of the legislative conditions: Constitution of South Africa (1996), Promotion of Equality and Prevention of Unfair Discrimination Act (2000), Employment Equity Act (1998), Electoral Act (1998), Municipal Systems Act (2000), Basic Conditions of Employment Act (1997), Domestic Violence Act (1998), Communal Land Rights Act (2004), and Sexual Offences Act (2007). So, by having good succession planning for women's empowerment in some top positions, a good picture of transformation is achieved and that has a serious corporate advantage. On the contrary, having bad succession planning in the middle management positions does present an advantage to the institutions at the expense of the ideal of the sustainable development of women and thus reduce women at the top to be less influential (UN-OHRLLS, 2012).

Table 3: Area of involvement (positions) for water board respondents

Dependent Variable: Age of the respondents					
Respondents' gender	**Area of involvement**	**Mean**	**Std. Error**	**95% Confidence Interval**	
				Lower Bound	**Upper Bound**
Female	Accounting Authority	45.429	3.624	38.274	52.583
	Senior Management	43.710	1.154	41.431	45.989
	Junior Management	44.238	1.208	41.853	46.623
	Water Expert	44.214	1.812	40.637	47.792
	Executive Officer	48.333	5.535	37.404	59.263
Male	Accounting Authority	50.000	6.017	38.146	61.854
	Senior Management	44.326	.749	42.850	45.802
	Junior Management	43.241	1.117	41.040	45.443
	Water Expert	42.970	1.481	40.051	45.888
	Executive Officer	43.765	2.064	39.699	47.831

The executive authority category is always managed politically. The junior and senior management and water experts are part of the administration of the institution. The appointments of experienced and matured personnel became challenging regarding the selection and recruitment of the technical and administrative personnel of the water institutions. Therefore, more female recruits in the technical and administration components of the water institutions need to be strengthened at an early age for succession planning to be implemented.

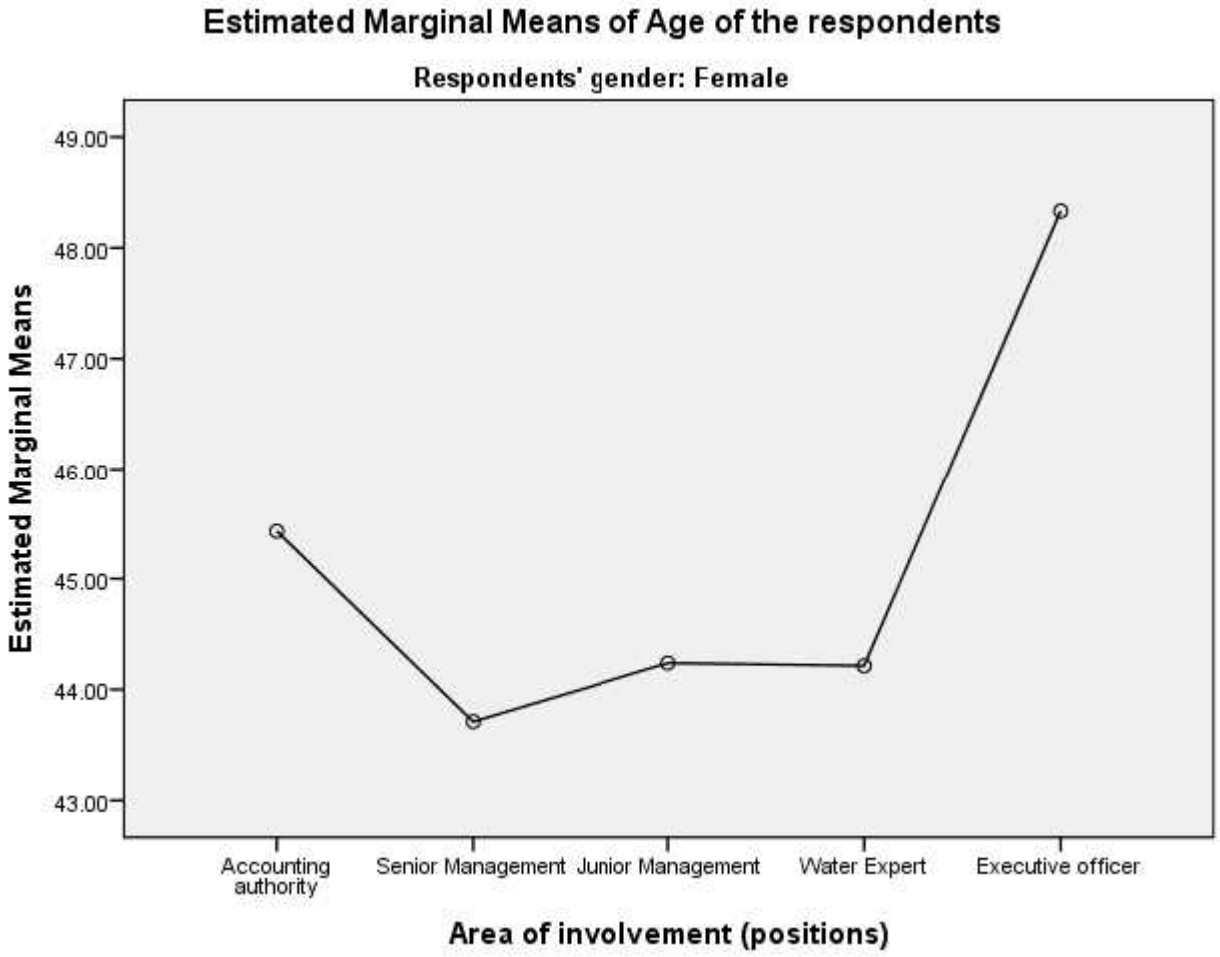

Figure 2: Representation of estimated marginal means of age for female respondents

However, the mean scores for age of the male respondents in relation to the area of involvement are highly involved in the category of accounting authority being 50, to the least involved in the category of junior and senior management and water expert of employment between 43 and 44 years of age, respectively. This means that male counterparts are still leading in the administration roles of water boards, as depicted in Figure 3.

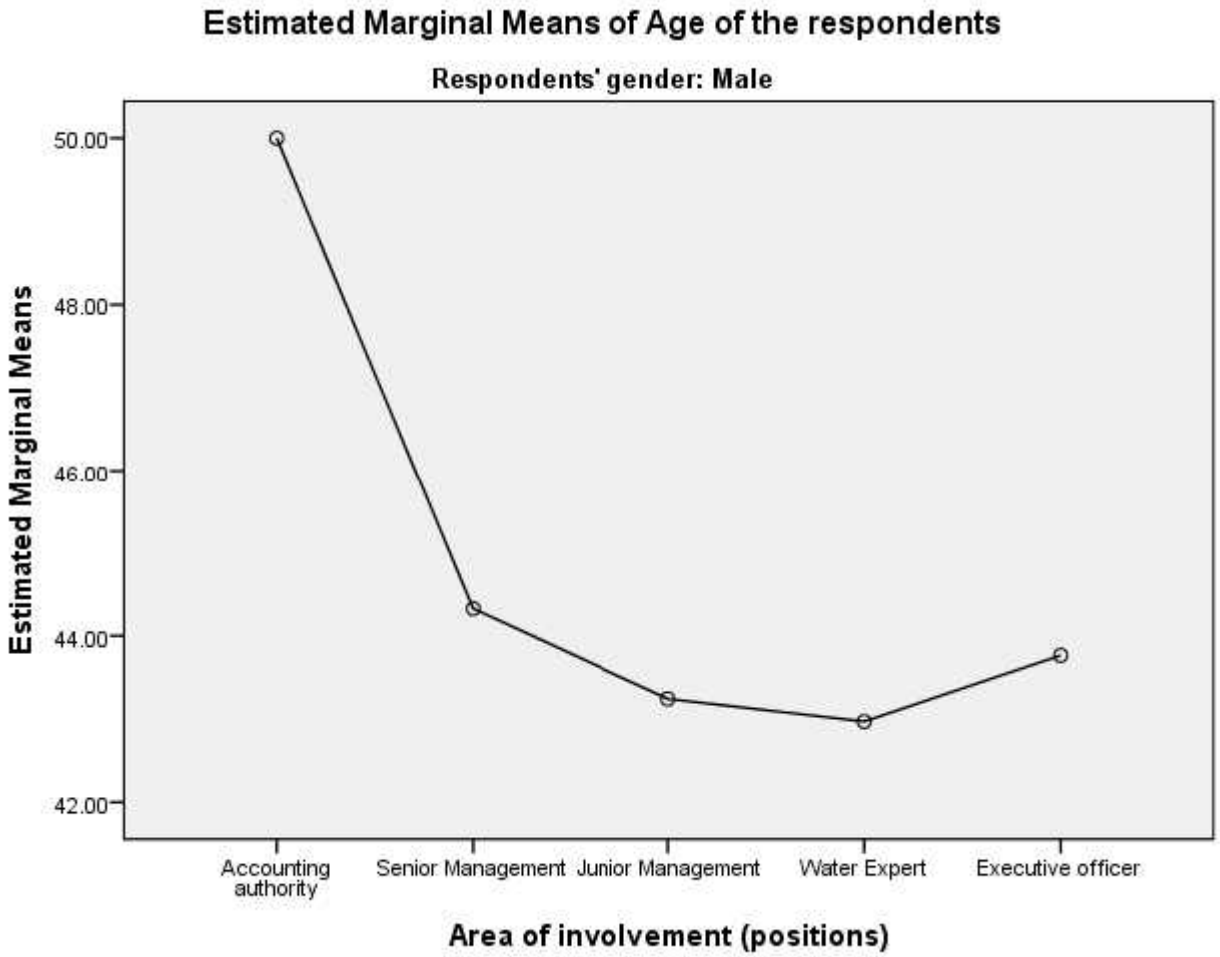

Figure 3: Representation of estimated marginal means of age for male respondents

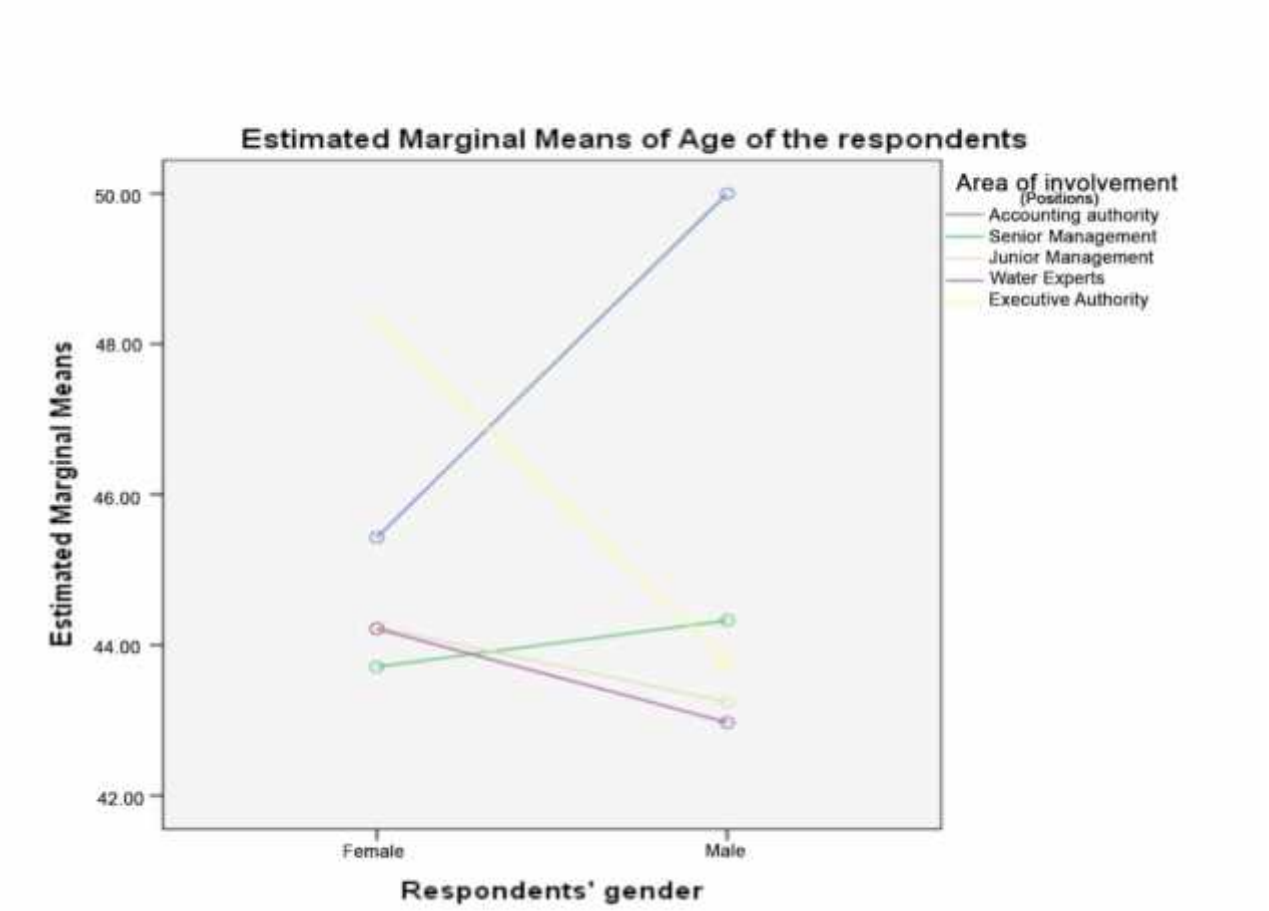

Figure4: The representation of estimated marginal means of age for respondents in area of involvement (positions) and gender

The profile plot as represented in Figure 4 is a line plot for the average age of the respondents in the study (Pallant, 2010). It provides an interaction between gender and area of involvement. In addition, it determines whether the interaction observed is significant by observation (subjective measures). Male respondents seem to have access to water expert, junior management and other positions at a relatively young age (meaning that males appear to have easy access to these jobs relative to female counterparts). On the other hand, it appears that females have fairly good access to senior management and accounting authority positions at a younger age. This may be an indicator of the impact of the implementation of affirmative action (employment equity legislation) and transformation processes that are required in the water sector with special reference to how respondents are reflected the governance of water boards. According to the United Nations (2010), regarding the unprecedented expansion of the tertiary student body over the past two decades, one of the most noticeable improvements in women's enrolment was registrations at the tertiary level. Men's dominance in tertiary education has been reversed globally and gender disparities currently have declined in favour of women, except in sub-Saharan Africa and Southern and Western Asia. The distribution of tertiary enrolment across various fields of study brings to light the gender dimension of, and inequalities in, participation in tertiary education. Gender differences in tertiary participation are apparent throughout the world, with women predominant in the fields of education, health and welfare, social sciences,

humanities and art, while they remain severely underrepresented in the fields of science and engineering (United Nations Human Settlement Programme, 2013; Grigg, 2007). Table 4 indicates descriptive statistics as calculated separately for each area of involvement (positions) occupied by the respondents in the water sector and as defined by their gender in the study.

Table 4: Descriptive Statistics for water board gender respondents

Dependent Variable: Age of the respondents				
Respondents' gender	**Area of involvement/Positions**	**Mean**	**Std. Deviation**	**N**
Female	Accounting Authority	45.4286	7.06770	7
	Senior Management	43.7101	8.45942	69
	Junior Management	44.2381	10.80280	63
	Water Expert	44.2143	9.95678	28
	Executive Authority	48.3333	6.65833	3
	Total	44.1412	9.49762	170
Male	Accounting Authority	50.0000	8.48528	2
	Senior Management	44.3256	7.98256	129
	Junior Management	43.2414	10.46181	58
	Water Expert	42.9697	6.52632	33
	Executive Authority	43.7647	8.34063	17
	Total	43.8828	8.47505	239
Total	Accounting Authority	46.4444	7.10829	9
	Senior Management	44.1111	8.13576	198
	Junior Management	43.7603	10.60819	121
	Water Expert	43.5410	8.22916	61
	Executive authority	44.4500	8.12712	20
	Total	43.9902	8.90389	409

According to Pallant (2010), the factors (gender) are not identical to the values obtained from analysing the variable as a whole. These descriptive statistics are calculated separately for male and female factors. They represent the marginal means of one factor collapsing across the levels of the other factor. They are not identical to the values obtained from analysing the variable as a whole. The descriptive analyses seem to represent the grand (or overall) values obtained from analysing the variable as a whole. These are identical to what would be obtained if the "Frequencies" or "Descriptive" procedure had been used (Field, 2009). The results of the mean age and corresponding standard deviation of the respondents are presented in Table 4. According to the results, there are very small differences in variances as measured by the standard deviation.

Inferential analysis

Table 5 provides the results of the Levene's test; which assesses the homogeneity of the sample by assuming the null hypothesis that the standard deviations amongst the variances are equal.

Table 5: Levene's Test of Equality of Error Variances [a]

Dependent Variable: Age of the respondents				
Respondents' gender	**F**	**df1**	**df2**	**Sig.**
Female	1.393	4	165	.238
Male	4.657	4	234	.001

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.
a. Design: Intercept + Gender + AI + Gender * AI

According to Field (2009), the Levene's test is used to assess the homogeneity of variances, which is a pre-condition for parametric tests such as the ANOVA. Levene's test works by testing the null hypothesis that the variances of the group are homogenous (the same). The output probability is the probability that at least one of the samples in the test has a significantly different variance. If this is greater than a selected percentage (usually 5%), then it is considered too great to be able to usefully apply parametric tests. SPSS easily provides the Levene's test statistic for parametric tests that need it. Levene's test offers a more robust alternative to Bartlett's procedure (Pallant, 2010). That means it will be less likely to reject a true hypothesis of equality of variances just because the distributions of the sampled populations are not normal. When non-normality is suspected, Levene's procedure is a better choice than Bartlett's procedure. Table 5 shows the results of the Levene's test for the mean age and standard deviation. According to the results, F is equal to 1.393 and 4.657 for female and male respectively, with the numerator degree of freedom being equal to 4 for genders and the denominator degree of freedom being equal to 165 and 234 female and male respectively, p-values equal to 0.238 and 0.001 for female and male respectively. On the basis of the above-mentioned results, the p-value for the males is less than 0.05 for males. This appears to indicate that the Levene's test was found to be significantly different at 5% confident interval for male respondents. These results imply that the condition of homogeneity of the variances is rejected for males and accepted for the female counterparts.

Table 6 represents "Test of Between – Subjects Effects" in providing testing of three hypotheses, about the main effect of gender, the main effect of positions (areas of involvement) , and gender-by-position (areas of involvement) interaction.

Table 6: Tests of gender and position for water boards (Between-Subjects Effects)

Dependent Variable: Age of the respondents							
Respondents' gender	**Source**	**Type III Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**	**Partial Eta Squared**
Female	Corrected Model	77.885[a]	4	19.471	.212	.932	.005
	Intercept	94126.170	1	94126.170	1024.006	.000	.861
	Gender	.000	0	.	.	.	.000
	Position	77.885	4	19.471	.212	.932	.005
	Error	15166.727	165	91.920			
	Total	346480.000	170				
	Corrected Total	15244.612	169				
Male	Corrected Model	151.745[b]	4	37.936	.524	.718	.009
	Intercept	81923.910	1	81923.910	1131.454	.000	.829
	Gender	.000	0	.	.	.	.000
	Position	151.745	4	37.936	.524	.718	.009
	Error	16942.975	234	72.406			
	Total	477338.000	239				
	Corrected Total	17094.720	238				

a. R Squared = .005 (Adjusted R Squared = -.019)
b. R Squared = .009 (Adjusted R Squared = -.008)

According to Pallant (2010), Table 6 is explained as "Corrected Model" statistics reflecting the overall between-group variability. They are a function of the group means and sample sizes. The "Gender" and "Positions" statistics are a function of the level (marginal) means and sample sizes. "Mean Squares" are estimates of the variances associated with each source. The means square for gender equals the variability of the sample means of the two gender groups. Whereas the means square for the positions (areas of involvement) equals the variability of the sample means of the five positions groups. The error means square is the variability of the observations within the ten (10) cell means, that is 2 (gender) x 5 (positions). The "Between-Subjects Intercept" here refers to the average score of the participants in the study and the significance test determines whether that average is different from zero. This is often not an informative test. The "Gender and Positions" (interaction) statistics reflect the between-group variability not accounted for by the factors. The corrected model provides the sum of squares for the effects in the ANOVA. Table 6 indicates gender case effect, in the case of the females; the corrected total is equal to 77.885. On the other hand, in the case of the males, the corrected model was 151.745. The degrees of freedom associated with the corrected model (or simply "positions") are equal to the number of groups which is 5 (independent variable: positions) minus 1 equals 4. Results indicated the age of respondents had no significant main effect for positions (female) factor, F (19.471/91.920) = 0.212, p = 0.932, partial eta squared equals 0.005. In the case of the positions (males) factor, no significant main effect was obtained, where F (37.936/72.406) equals 0.524, p-value equals 0.718 and partial eta squares equals 0.009. The effect of the gender seems to be similar for positions (areas of involvement). The absence of interaction indicates that it is reasonable to believe that the difference in the average age of respondents between males and females is the same for all positions (areas of involvements) of the respondents. This means the null hypothesis of equality for both gender and position is accepted. The variable positions do not have an influence on the age of respondents in the study. The null hypothesis of no interaction effect is not rejected.

Conclusion and recommendations

The aim of the research study was to investigate women's empowerment in water boards in relation to the proportional representation based on age and gender variables within areas of involvement (positions). The results in this study revealed that a high number of male respondents participated as compared to females overall. The males have access to managerial and advisory positions such as junior management and water expert categories at a relatively young age. The females occupy certain managerial positions such as senior management and accounting authority at a younger age. In the governance level, the highest numbers of governors (executive authority) are males as compared to females. The results show that there were no significant differences between gender and age. The outcome of the findings reflects that very little transformative transfer of resources and influence of women in the business of water boards was uncovered. Women appear to lack succession prospects in other governing positions of South African water boards. These findings confirm the outcomes of previous studies in the slow implementation of affirmative action and transformation processes, which are required by legislation in water boards and municipalities (Ngcaba, 2012). Therefore, it is recommended that women's empowerment in water boards be monitored with the objective of ensuring that this empowerment is implemented at all governance structure levels of these water boards.

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References

Department of Trade and Industry. (2011). *Towards an enabling environment for women economic empowerment In South Africa: A status quo report.* Pretoria: DTI.

Commission for Gender Equality. (2011). *Gender off the agenda? Assessing gender mainstreaming and women's empowerment in the water sector in South Africa. : South Africa.* Pretoria: CGE.

Duflo, E. (2012). Women Empowerment and Economic Development. *Journal of Economic Literature*, *50*(4), 1051–1079.

Field, A. (2009). *Discovery statistics using SPSS.* London: Sage.

Gender Equality (GENDERNET). (2012). *OECD DAC Network onWomen's economic empowerment. Promoting pro-poor growth: the role of empowerment. Who is the publisher and what is the place? http://www.oecd.org/dac/povertyreduction/50157530.pdf .* GENDERNET.

Grigg, N. (2007). Water sector structure, size, and demographics. . *Water Resources Planning and Management*, *133,* 60–66.

Grown, C., Gupta, R. and Khan, Z. (2003). *Promises to Keep: Achieving Gender Equality and the Empowerment of Women. .* Washington, D.C.: International Center for Research on Women.

Inter-American Development Bank. (2010). *Operational Policy on Gender Equality in Development. .* Washington, D.C.: Inter-American Development Bank.

Kabeer, N. (2012). *Women's economic empowerment and inclusive growth: labour markets and enterprise development. Sig Working Paper 2012/1.* United Kingdom: School of Oriental and African Studies.

Kornegay, E. ((s.a)). *South Africa's National Policy Framework for Women's Empowerment and Gender Equality.* Pretoria: The Office on the Status of Women National Gender Policy Framework.

McCallum, C. (2005). *Beyond equality and difference: Empowerment of black professional women in post-apartheid South Africa. PhD Thesis.* Pretoria: UNISA.

Ngcaba, A. (2012). *Achievements in Women Empowerment. [Retrieved online]. Available at: www.dimensiondata.com.*

Olsson, J. (2010). *Thematic paper on MDG 3: Promote gender equality and empower women. http://www.undg.org/docs/11421/MDG 3_1954-UNDG-MDG3-LR. Accessed in February 2014. .* United Nation Development Group.

Pallant, J. (2010). *SPSS: Survival Manual. A step by step guide to data analysis using the SPSS program.* Berkshire: McGraw-Hill.

Republic of South Africa. (1996). *Constitution of the Republic of South Africa (Act 108 of 1996) .* Pretoria: Government Publishers.

Republic of South Africa. (1998). *Employment Equity Act (Act 55 of 1998).* Pretoria : Government Publishers.

Saleth, R. S. (2003). Water, poverty and gender: an overview of issues and policies. . *Water Policy*, *5,* 385–398.

Schreiner, B. M. (2012). Strategies for gender-inclusive integrated Water Resources Management in South Africa. . *Third WaterNet/WARFSA Symposium*, (pp. 1–7). Johannesburg.

Shackleton, S. P. (2011). Opportunities for enhancing poor women's socio-economic empowerment in the value chains of three African non-timber forest products (NTFPs). *International Forestry Review*, *13*(2),136-150.

United Nations. (2001). *Guidelines on women's empowerment for the UN Resident Coordinator System. Secretariat of the UN Inter-Agency Task Force on the Implementation of the ICPD Program of Action: .* New York: United Nations.

United Nations. (2010). *The world's women 2010. Trends and statistics. .* Oxford University.: New York.

United Nations. (2012). *Promoting gender equality and women's economic empowerment on the road to sustainable development: good practices from UNECE region.* New York and Geneva: United Nations Economic Commission for Europe.

United Nations Human Settlement Programme. (2013). *State of women in cities 2012 – 2013. Gender and the prosperity of cities. .* Nairobi: UN-Habitat.