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Analysing the human capital capabilities in the enterprise risk management function of South Africa's public institutions

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Abstract: The weak control environment in South Africa's public sector has, in the past, resulted in high levels of irregular, fruitless and wasteful, and unauthorised expenditure. In order to make a contribution to the discourse of mechanisms that could be deployed to reduce high levels of irregular, fruitless and wasteful, and unauthorised expenditure, this study analysed the capabilities of the human capital deployed in South Africa's public sector. Together with the National Treasury in the Office of the Accountant General, a questionnaire was designed and administered to the public institution's Chief Risk Officers in the first quarter of 2017.

The findings of the study are that inadequate risk management processes and ineffective practices that are partly responsible for the weak control environment in public institutions, could also be attributed to the capabilities of the human capital deployed in enterprise risk management functions. In this regard, the study found that some of the reasons for the inadequate risk management processes and ineffective practices stemmed from: the inadequate staffing of the enterprise risk management function; positions not being filled by candidates with adequate academic qualifications and experience; the time it takes to fill a vacant position; and inadequate budget allocations. When institutions address risk maturity, policies, processes, and practices, focus must simultaneously be directed to the human capabilities deployed within the risk management function.

JEL Classifications: M4

Keywords: Enterprise risk management, human capital, public sector

Citation: Moloi, T. (2018). Analysing the human capital capabilities in the enterprise risk management function of South Africa's public institutions. *Business and Economic Horizons*, 14(2), 375-388. <http://dx.doi.org/10.15208/beh.2018.27>

1. Introduction

The Organisation of Economic Cooperation and Development (OECD, 2009) contends that the widespread failure of organisations to perform enterprise-wide risk management by managing risks across their organisations contributed immensely to the 2007/8 global financial meltdown (financial crisis). Other studies, such as Rossouw (2005), Vaughn & Ryan (2006), Abdo & Fisher (2007), and the ASISA (2017) concur with this view, and recognise the inability of organisations to anticipate and react to risk as one of the main reasons for these corporate failures.

In response to weaknesses in the risk management programmes, literature on risk management has tended to focus on the risk processes followed (Coetzee & Lubbe, 2013; Domokos, Nyéki, Jakovác, Németh, & Hatvani, 2015), the practices applied (Braig, Gebre, & Sellgren, 2011; Vergotine 2012), the nature of risks faced by these institutions (Moloi, 2016a; Moloi, 2016b; Siswana, 2007), and the risk disclosures/reporting (Ntim, Lindop, & Thomas, 2013; Raemaekers, 2014).

For a programme to operate in the way in which it was intended to operate, three important pillars have to hold, namely systems, processes, and people. In this regard, related literature on the reasons for the weaknesses in an organisation's risk management programme seem to have focused more on the adequacy of risk management processes and the risk management systems that are in place, thus discounting the role and the capacity of human capital.

This study provides a different approach to the traditional approach of processes and practices. It analyses the capabilities of the human capital placed in the enterprise risk management (ERM) function. This is done in the South African public service context. South Africa was chosen because the Auditor General of South Africa, had in previous reports, consistently criticised the public sector for its inability to reign in irregular, fruitless and wasteful, and unauthorised expenditure (Auditor General South Africa (AGSA) (2014; 2015; 2016)

In line with the previous studies, the AGSA's reports appear convinced that the irregular, fruitless and wasteful, and unauthorised expenditure are a result of the weaknesses in risk management processes and systems. This study aims to introduce and provide evidence that a third layer, namely human capital capabilities deployed in the control environment, which if they are not properly capacitated could hinder the ERM programme, also contribute to the weaknesses in the controls

The following section reviews the related literature, and will be followed by a section that outlines the research process. An analysis and interpretation of findings is provided, and finally the conclusion is presented.

2. Associated literature

Literature aimed at determining the reasons for the ineffectiveness in the risk management programme has tended to focus on the risk processes followed (Coetzee & Lubbe, 2013), the practices applied (Vergotine, 2012), the nature of risks faced by these institutions (Moloi, 2016a; Moloi, 2016b; Moloi, 2017; Siswana, 2007), as well as risk disclosures/reporting (Ntim, Lindop, & Thomas, 2013; Raemaekers, 2014).

Moloi (2016a; 2016b) found that the mechanisms used for the purpose of accounting for risk management (Moloi, 2016a) and risk management practices (Moloi, 2016b) could be improved. Siswana (2007) observed that the risks that were focussed on were not broad, as the legislation, i.e. the Public Finance Management Act (PFMA) (RSA, 1999), had put more emphasis on financial risks.

Coetzee & Lubbe (2013) utilised a risk maturity scorecard in order to assess the comprehensiveness of the risk management strategies in the organisations in their study. They established that risk management processes were not as mature in the public sector as they are in the private sector. Vergotine (2012) responded to the perceived absence of risk management instruments in the state owned enterprises by constructing and evaluating a risk management instrument for these enterprises.

Ntim et al. (2013) sought to establish whether or not the quality of a firm's level of corporate governance has any impact on the firm's quality and extent of corporate risk-disclosures in the South African context, and they found that even though there was a

general increase in corporate risk-disclosure, this had not yet matured, and standardisation was still an issue.

In order to construct a risk disclosure matrix, Raemaekers (2014) used the information primarily based on the governance of risk described in Chapter IV of the King III's Report on Corporate Governance (IoD, 2009) to explore the patterns and trends in risk-disclosure of South African firms with a primary listing on the Johannesburg Stock Exchange (JSE) following the introduction of King-III in March 2010. In this study, Raemaekers (2014) found that there had been an "an increase in the quantum of risk-disclosure and an increased awareness of the importance of complementing traditional financial reporting with a more comprehensive review of organisations' key risks and their sustainability in the short-, medium- and long-term".

Elsewhere, other studies aimed at determining the ineffectiveness of risk management programmes are not necessarily different to the ones conducted in South Africa, for example, in Hungary, Domokos et al. (2015) focused on the Hungarian public service's risk management process, and their main finding was that there was a poor risk management culture.

In is a similar case in the United States, where Braig et al. (2011) investigated risk management in the public sector, the focus was on the "lasting and robust risk management in public-sector institutions". Following their investigation of risk management in the United State public sector, Braig et al. (2011) recommended that the United State public sector institutions should:

- Create transparency both internally and externally;
- Develop a "risk constitution";
- Initially focus on modifying a few core processes;
- Establish a dedicated risk-management organization;
- Build a risk culture.

From these recommendations, it is argued that Braig et al.'s (2011) study does not differ from other risk management studies, since the focus, as in many other studies on risk management across the globe, is on risk management practices and processes.

Perhaps it is studies such as those mentioned above that has triggered research like that of Bromiley, McShane, Nair, & Rustambekov (2014), who sought to highlight the need to expand ERM research to include management scholars. Similar to Moloi's (2017) argument, Bromiley et al. (2014) have also observed that academic research on ERM is still in its infancy. They further point out that ERM research largely appears in accounting and finance journals, yet rarely appears in management journals. Their recommendation is that the "ERM research (and practice) needs management research for its development".

It is argued that while the nature of the journals where the research appears is not of paramount importance, it is accepted that ERM research has to be expanded so that it develops. Contrary to previously conducted studies that tend to emphasize risk management processes and practices, this study attempts to understand the reasons behind the inadequate processes and poor practices. This is achieved through the process of analysing the capabilities of human capital placed in the ERM function, which is acknowledged here as a moderate contribution to extending research in this field.

3. Research process

To achieve the objective of analysing capabilities of the human capital placed in the ERM function, a joint research group was formed between the National Treasury, the Office of Accountant-General, and the University of Johannesburg.

These capabilities were defined as a function of various elements, such as: the qualifications of risk management human capital; years of experience in the risk management field; categories of employees; the number of employees engaged; whether or not there are positions vacant, and how long the position has been vacant.

A detailed questionnaire, consisting of various elements that included elements on the human capital capabilities was developed. This paper reports on responses relating to the human capital placed in the ERM function section of the developed questionnaire.

Following the development of a detailed questionnaire, it was disseminated via email through the Office of the Accountant General to national and provincial government departments, public entities, and municipalities (government/public institutions).

To supplement the data collection process, the Office of Accountant General distributed the questionnaire for completion to the Chief Risk Officers Forum delegates; the forum takes place biannually for national and provincial government departments and twice per annum for public entities.

One hundred questionnaires were returned by the respondents. All the questionnaires received were deemed valid for processing, since the respondents answered all the questions. The Statistical Package for the Social Sciences (SPSS) was used to analyse the questionnaires with the ultimate aim being to understand and interpret the research results. According to Heiman (2013), statistical analysis is the analysis of any sort of data that can be measured at a certain specific level.

As statistics are analysed, a descriptive or inferential statistics type of analysis could be undertaken. For the purpose of this study, the descriptive method of analysis was adopted. Maylor, Blakmon, & Huemann (2016) describe descriptive statistics as the statistics that contain a summary of the collected data based on a specific level of measurement. The University of Johannesburg's Statkon House was engaged in order to aid the researcher in capturing the questionnaire responses and for data analysis. The results of this process are outlined in the research findings and interpretation section below.

4. Research findings and interpretation

Respondents (Table 1) were asked to indicate the number of employees involved in the ERM function, excluding the Chief Risk Officer (CRO). Eighty eight respondents answered the questionnaire. As a minimum, national government departments (NGDs) have a minimum of one and a maximum of five employees in the ERM department. Public entities have a minimum of one and a maximum of 15 employees in the ERM function. Provincial government departments (PGDs) have a minimum of one and a maximum of 20 employees in the ERM function. Municipalities have a minimum of one and a maximum of five employees in the ERM function.

The maximum of 20 employees in the PGDs, which is a high number, is due to shared services. The maximum of 15 employees in the public entities is driven by larger entities.

TABLE 1. NUMBER OF EMPLOYEES IN THE ERM FUNCTION EXCLUDING THE CRO

TYPE OF INSTITUTION	MEAN	MEDIAN	MINIMUM	MAXIMUM	STD. DEVIATION	N
National government departments	2.27	2.00	1	5	1.489	11
Public entities	2.94	2.00	1	15	3.023	36
Provincial departments	3.12	2.00	1	20	3.648	26
Municipalities	1.67	1.00	1	5	1.397	15
Total	2.69	2.00	1	20	2.890	88

TABLE 2. CATEGORIES OF EMPLOYEES IN THE ERM FUNCTION

TYPE OF INSTITUTION		DEPUTY DIRECTORS (RISK MANAGERS)	ASSISTANT DIRECTORS (SENIOR RISK PRACTITIONERS)	RISK ASSISTANTS
NATIONAL GOVERNMENT DEPARTMENTS	Mean	1.10	.50	.75
	Median	1.00	1.00	.50
	Minimum	1	1	1
	Maximum	3	2	2
	Std. Deviation	.738	.756	.886
	N	10	8	8
PUBLIC ENTITIES	Mean	1.41	.81	1.17
	Median	1.00	1.00	1.00
	Minimum	1	1	1
	Maximum	7	5	8
	Std. Deviation	1.635	1.497	1.605
	N	34	26	29
PROVINCIAL DEPARTMENTS	Mean	1.29	1.61	1.21
	Median	1.00	1.00	1.00
	Minimum	1	1	1
	Maximum	6	6	4
	Std. Deviation	1.334	1.340	1.032
	N	24	23	19
MUNICIPALITIES	Mean	1.63	.43	1.38
	Median	1.00	1.00	1.00
	Minimum	1	1	1
	Maximum	5	1	5
	Std. Deviation	2.134	.535	1.506
	N	8	7	8
TOTAL	Mean	1.36	1.02	1.16
	Median	1.00	1.00	1.00
	Minimum	0	0	0
	Maximum	7	6	8
	Std. Deviation	1.494	1.351	1.348
	N	76	64	64

Respondents were requested to indicate the categories of positions held by employees in the ERM function (Table 2).

NGDs have a maximum of three employees categorised as Deputy directors (Risk managers), and two employees categorised as Assistant directors (Senior risk practitioners) and Risk assistants respectively. Public entities have a maximum of seven employees categorised as Deputy directors (Risk managers), five employees categorised as Assistant directors (Senior risk practitioners), and eight employees categorised as Risk assistants. PGDs have a maximum of six employees categorised as Deputy directors (Risk managers), six employees categorised as Assistant directors (Senior risk practitioners), and four employees categorised as Risk assistants respectively. Municipalities have a maximum of five employees categorised as Deputy directors (Risk managers), one employee categorised as an Assistant director (Senior risk practitioner), and five employees categorised as Risk assistants.

TABLE 3. IDEAL NUMBER OF EMPLOYEES IN THE ERM FUNCTION

TYPE OF INSTITUTION	MEAN	MEDIAN	MINIMUM	MAXIMUM	STD. DEVIATION	N
National government departments	8.00	5.50	2.00	24.00	6.769	12
Public entities	5.40	4.00	1.00	16.00	4.272	40
Provincial departments	6.22	5.00	2.00	25.00	4.582	23
Municipalities	3.17	2.00	1.00	9.00	2.167	12
Total	5.67	4.00	1.00	25.00	4.675	87

Here, respondents were requested to indicate the ideal number of employees they would prefer to have in the ERM function (Table 3). Eighty seven respondents answered the question.

NGDs would prefer to have a minimum of two employees in the ERM function, excluding the CRO, and a maximum of 24 employees, excluding the CRO. Public entities would prefer to have a minimum of one employee in the ERM function, excluding the CRO, and a maximum of 16 employees, excluding the CRO. PGDs would prefer to have a minimum of two employees in the ERM function, excluding the CRO, and a maximum of 25 employees, excluding the CRO. Municipalities would prefer to have a minimum of one employee in the ERM function, excluding the CRO, and a maximum of nine employees, excluding the CRO.

TABLE 4. IDEAL CATEGORIES OF EMPLOYEES IN THE ERM FUNCTION

TYPE OF INSTITUTION		DEPUTY DIRECTORS (RISK MANAGERS)	ASSISTANT DIRECTORS (SENIOR RISK PRACTITIONERS)	RISK ASSISTANTS
NATIONAL GOVERNMENT DEPARTMENTS	Mean	2.27	3.55	2.40
	Median	2.00	2.00	1.50
	Minimum	1	1	1
	Maximum	4	12	7
	Std. Deviation	1.104	3.532	2.119
	N	11	11	10

TABLE 4. IDEAL CATEGORIES OF EMPLOYEES IN THE ERM FUNCTION

TYPE OF INSTITUTION		DEPUTY DIRECTORS (RISK MANAGERS)	ASSISTANT DIRECTORS (SENIOR RISK PRACTITIONERS)	RISK ASSISTANTS
PUBLIC ENTITIES	Mean	1.53	3.40	1.71
	Median	1.00	1.00	1.50
	Minimum	1	1	1
	Maximum	7	51	6
	Std. Deviation	1.576	8.503	1.548
	N	36	35	34
PROVINCIAL DEPARTMENTS	Mean	1.40	2.45	3.08
	Median	1.00	2.00	2.00
	Minimum	1	1	1
	Maximum	6	6	21
	Std. Deviation	1.041	1.270	3.877
	N	25	29	26
MUNICIPALITIES	Mean	.92	1.18	2.17
	Median	1.00	1.00	1.50
	Minimum	1	1	1
	Maximum	1	2	6
	Std. Deviation	.289	.751	1.642
	N	12	11	12
TOTAL	Mean	1.50	2.81	2.29
	Median	1.00	2.00	2.00
	Minimum	1	1	1
	Maximum	7	51	21
	Std. Deviation	1.285	5.620	2.613
	N	84	86	82

Respondents were requested to indicate the ideal categories of positions they would prefer to have in the ERM function (Table 4).

NGDs would prefer to have a maximum of four Deputy directors (Risk managers), 12 Assistant directors (Senior risk practitioners), and seven Risk assistants. Public entities would prefer to have a maximum of seven Deputy directors (Risk managers), 51 Assistant directors (Senior risk practitioners), and six Risk assistants. PGDs would prefer to have a maximum of six Deputy directors (Risk managers), six Assistant directors (Senior risk practitioners), and 21 Risk assistants. Municipalities would prefer to have a one Deputy director (Risk manager), two Assistant directors (Senior risk practitioners), and six Risk assistants

Respondents were requested to indicate the ideal level of qualification they would prefer a Deputy director (Risk manager) position to hold in the ERM function (Table 5).

Nine NGDs would prefer to have Deputy directors (Risk managers) with a Bachelor degree/B Tech degree, and four NGDs indicated that they would prefer to have Deputy directors (Risk managers) with an Honours degree. Twenty two public entities would prefer to have Deputy directors (Risk managers) with a Bachelor degree / B Tech degree. Nineteen public entities would prefer to have Deputy directors (Risk managers) with an Honours degree, six would prefer to have Deputy directors (Risk managers) with a Masters degree/MBA, whilst three public entities would prefer to have Deputy directors

(Risk managers) with national diplomas. Twenty three PGDs would prefer to have Deputy directors (Risk managers) with Bachelor degree/BTech, eight would prefer to have Deputy directors (Risk managers) with a national diploma, while four would prefer to have Deputy directors (Risk managers) with an Honours degree, and two would prefer to have Deputy directors (Risk managers) with a Masters degree/MBA. Seven municipalities would prefer to have Deputy directors (Risk managers) with an Honours degree, six would prefer to have Deputy directors (Risk managers) with a Bachelor degree / B Tech, three would prefer to have Deputy directors (Risk managers) with a national diploma, and one municipality would prefer to have Deputy directors (Risk managers) with a matric qualification.

TABLE 5. IDEAL QUALIFICATIONS FOR DEPUTY DIRECTORS

QUALIFICATION	NATIONAL GOVERNMENT DEPARTMENTS	PUBLIC ENTITIES	PROVINCIAL DEPARTMENTS	MUNICIPALITIES	TOTAL
GRADE 12/ MATRIC	0	0	0	1	1
NATIONAL DIPLOMA	0	3	8	3	14
BACHELOR DEGREE / B TECH	9	22	23	6	60
HONOURS DEGREE	4	19	4	7	34
MASTERS DEGREE / MBA	0	6	2	0	8

TABLE 6. IDEAL QUALIFICATIONS FOR ASSISTANT DIRECTORS

QUALIFICATIONS	NATIONAL GOVERNMENT DEPARTMENTS	PUBLIC ENTITIES	PROVINCIAL DEPARTMENTS	MUNICIPALITIES	TOTAL
GRADE 12/ MATRIC	0	0	1	1	2
DIPLOMA	0	1	1	0	2
NATIONAL DIPLOMA	6	15	17	6	44
BACHELOR DEGREE / B TECH	4	21	13	9	47
HONOURS DEGREE	1	10	2	1	14
MASTERS DEGREE/MBA	1	1	0	0	2

Respondents were requested to indicate the ideal level of qualification they would prefer an Assistant director to hold in the ERM function (Table 6).

Four NGDs would prefer to have Assistant directors with Bachelor degree /B Tech, one NGD indicated that it would prefer its Assistant director to hold an Honours degree and a Masters degree/MBA, and six NGDs indicated that they would prefer to have Assistant directors with a national diploma. Twenty one public entities would prefer to have Assistant directors with Bachelor degree/B Tech degree, 10 public entities would prefer to have Assistant directors with an Honours degree, one public entity would prefer to have Assistant director with an Masters degree/ MBA, whilst 15 public entities would prefer to have Assistant directors with a national diploma and one public entity would prefer to have an Assistant director with a diploma. Thirteen PGDs would prefer to have Assistant directors with Bachelor degree /B Tech degree, two PGDs would prefer to have Assistant

directors with Honours degree, one PGD would prefer to have an Assistant director with a matric qualification, whilst 17 PGDs would prefer to have Assistant directors with national diplomas, and one PGD would prefer to have an Assistant director with a diploma. Nine municipalities would prefer to have Assistant directors with Bachelor degree /B Tech degree, whilst six PGDs would prefer to have Assistant directors with national diplomas, and one municipality would prefer to have an Assistant director with an Honours degree and matric.

TABLE 7. IDEAL QUALIFICATIONS FOR RISK ASSISTANTS

QUALIFICATIONS	NATIONAL GOVERNMENT DEPARTMENTS	PUBLIC ENTITIES	PROVINCIAL DEPARTMENTS	MUNICIPALITIES	TOTAL
GRADE 12/ MATRIC	0	2	2	1	5
DIPLOMA	3	7	9	4	23
NATIONAL DIPLOMA	8	23	17	9	57
BACHELOR DEGREE / B TECH	1	14	7	4	26
HONOURS DEGREE	0	1	0	0	1

Respondents were requested to indicate the ideal level of qualification they would prefer for Assistant directors position in the ERM function (Table 7).

One NGD would prefer to have a Risk assistant with Bachelor's degree/B Tech degree, eight NGDs indicated that they would prefer Risk Assistants to hold national diplomas, and three NGDs indicated that they would prefer to have Risk assistants with diplomas. Twenty three public entities would prefer to have Risk assistants with national diplomas. Fourteen public entities would prefer to have Risk assistants with Bachelor degree/B Tech degree, one public entity would prefer to have a Risk assistant with an Honours degree, whilst seven public entities would prefer to have Risk assistants with diplomas, and two public entities would prefer to have Risk assistants with a grade 12/matric qualification. Seven PGDs would prefer to have Risk assistants with Bachelor degree/B Tech degree, whilst 17 PGDs would prefer to have Risk assistants with national diplomas, and nine PGDs would prefer to have Risk assistants with diplomas, and two PGDs would prefer to have Risk assistants with matric/Grade 12. Four municipalities would prefer to have Risk assistants with Bachelor degree/B Tech degree, whilst nine municipalities would prefer to have Risk assistants with national diplomas, and four municipalities would prefer to have Risk assistants with diplomas, and one municipality would prefer to have a Risk assistant with a Grade 12/ matric qualification.

TABLE 8. IDEAL YEARS OF RISK MANAGEMENT EXPERIENCE FOR DEPUTY DIRECTORS

YEARS	NATIONAL GOVERNMENT DEPARTMENTS	PUBLIC ENTITIES	PROVINCIAL DEPARTMENTS	MUNICIPALITIES	TOTAL
2-5 YEARS	3	11	15	7	36
5-10 YEARS	9	26	15	4	54
10-15 YEARS	0	4	2	3	9
15-20 YEARS	0	1	0	0	1

With regard to the years of experience that Deputy directors should have in the Risk management space, the following was noted - Table 8.

Three NGDs would prefer to have Deputy directors with 2-5 years' experience, and nine NGDs would prefer to have Deputy directors with 5-10 years' experience. Eleven public entities would prefer to have Deputy directors with 2-5 years' experience, 26 public entities would prefer to have Deputy directors with 5-10 years' experience, four public entities would prefer to have Deputy directors with 10-15 years' experience, and one public entity would prefer to have a Deputy director with 15-20 years' experience. Fifteen PGDs would prefer to have Deputy directors with 2-5 years' experience, another 15 PGDs would prefer to have Deputy directors with 5-10 years' experience, and two PGDs would prefer to have Deputy directors with 10-15 years of experience. Seven municipalities would prefer to have Deputy directors with 2-5 years' experience, four municipalities would prefer to have Deputy directors with 5-10 years' experience, and three municipalities would prefer to have Deputy directors with 10-15 years' experience.

TABLE 9. IDEAL YEARS OF RISK MANAGEMENT EXPERIENCE FOR ASSISTANT DIRECTORS

YEARS	NATIONAL GOVERNMENT DEPARTMENTS	PUBLIC ENTITIES	PROVINCIAL DEPARTMENTS	MUNICIPALITIES	TOTAL
1-2 YEARS	0	4	5	1	10
2-5 YEARS	11	29	26	9	75
5-10 YEARS	0	7	2	4	13
10-15 YEARS	1	2	0	0	3

Eleven NGDs would prefer to have Assistant directors with 2-5 years' experience (Table 9), and one NGD would prefer to have an Assistant director with 10-15 years' experience in the risk management function.

Four public entities would prefer to have Assistant directors with 1-2 years' experience, 29 public entities would prefer to have Assistant directors with 2-5 years' experience, seven public entities would prefer to have Assistant directors with 5-10 years' experience, and two public entities would prefer to have Assistant directors with 10-15 years' experience. Five PGDs would prefer to have Assistant directors with 1-2 years' experience, 26 PGDs would prefer to have Assistant directors with 2-5 years' experience and two PGDs would prefer to have Assistant directors with 5-10 years' experience in the risk management function. With regard to the municipalities, one would prefer to have Assistant directors with 1-2 years' experience, nine municipalities would prefer to have Assistant directors with 2-5 years' experience and four municipalities would prefer to have Assistant directors with 5-10 years' experience.

TABLE 10. IDEAL YEARS OF RISK MANAGEMENT EXPERIENCE FOR RISK ASSISTANTS

YEARS	NATIONAL GOVERNMENT DEPARTMENTS	PUBLIC ENTITIES	PROVINCIAL DEPARTMENTS	MUNICIPALITIES	TOTAL
0-2 YEARS	10	24	24	11	69
2-5 YEARS	2	17	6	4	29
5-10 YEARS	1	2	1	0	4

Respondents were required to indicate the ideal number of years in risk management they would prefer their Risk assistants to have (Table 10).

Ten NGDs would prefer to have Risk assistants with 0-2 years' experience, two NGDs would prefer to have Risk assistants with 2-5 years' experience, and one NGD would prefer to have a Risk assistant with 5-10 years' experience.

Twenty four public entities would prefer to have Risk assistants with 0-2 years' experience, 17 public entities would prefer to have Risk assistants with 2-5 years' experience, and two public entities would prefer to have Risk assistants with 5-10 years' experience.

Twenty four PGDs would prefer to have Risk assistants with 0-2 years' experience, six PGDs would prefer to have Risk assistants with 2-5 years' of experience, and one PGD would prefer to have a Risk assistant with 5-10 years' of experience.

Eleven municipalities would prefer to have Risk assistants with 0-2 years' experience, and four municipalities would prefer to have Risk assistants with 2-5 years' experience.

TABLE 11. VACANT POSITIONS IN THE ERM FUNCTION

IS THERE A VACANT POSITION IN THE ERM UNIT/SECTION?	OPTION	NATIONAL GOVERNMENT DEPARTMENTS	PUBLIC ENTITIES	PROVINCIAL DEPARTMENTS	MUNICIPALITIES	TOTAL
	Yes	4	17	20	8	49
	No	7	23	9	8	47

The results on Table 11, Table 12, and Table 13 are based on questions that were asked with the main aim of gauging vacancies in the ERM functions. For an organisation to operate efficiently, it must manage its institutional memory and avoid a high staff turnover. It should also fill all vacant positions within a reasonable time to avoid inefficiencies in the performance of activities. In this regard, respondents were required to indicate the period for which positions have been vacant in the ERM function.

In Table 11 above, obtained results indicate that 49 positions were vacant in the ERM functions, four in NGDs, 17 in public entities, 20 in PGDs, and eight in municipalities.

Table 12 and Table 13 below gauge the reasons for the availability of these positions, as well as the time span these positions have been available.

TABLE 12. VACANT POSITIONS IN THE ERM FUNCTION

REASON FOR VACANT POSITIONS	NATIONAL GOVERNMENT DEPARTMENTS	PUBLIC ENTITIES	PROVINCIAL DEPARTMENTS	MUNICIPALITIES	TOTAL
RESIGNATION	2	1	4	3	10
BUDGET	0	7	9	3	19
RESTRUCTURING	1	8	3	2	14
MORATORIUM ON POSITION	0	1	3	0	4
DIFFICULTY FINDING A SUITABLE CANDIDATE	1	0	1	0	2

To understand the reasons for the vacancies in the ERM function, respondents were required to indicate the reasons for the vacant position. An analysis of the obtained data reveals that the main reasons for the vacancies in the ERM function were: resignations; insufficient headcount budgets; restructuring; moratorium on hiring new employees; and difficulties in finding suitable candidates.

TABLE 13. VACANT POSITIONS IN THE ERM FUNCTION

HOW LONG HAS/HAVE THE POSITION/S IN THE ERM FUNCTION BEEN VACANT	PERIOD	NATIONAL GOVERNMENT DEPARTMENTS	PUBLIC ENTITIES	PROVINCIAL DEPARTMENTS	MUNICIPALITIES	TOTAL
	Less than one year	1	9	6	3	19
	Between two and three years	0	3	3	1	7
	More than three years	3	4	7	3	17

The analysis of obtained data reveals the following results.

One NGD reported that the position has been vacant for less than a year, and three NGDs reported that they have had vacant positions in the ERM function for more than three years.

Nine public entities indicated that the ERM positions have been vacant for less than one year; three public entities indicated that the ERM positions have been vacant for a period of two to three years, and four public entities indicated that the ERM positions have been vacant for more than three years.

Six PGDs indicated that the ERM positions have been vacant for less than one year, three PGDs indicated that the ERM positions have been vacant for a period of two to three years, and seven PGDs indicated that the ERM positions have been vacant for more than three years.

Three municipalities indicated that the ERM positions have been vacant for less than one year; one municipality indicated that the ERM positions have been vacant for a period of two to three years, and three municipalities indicated that the ERM positions have been vacant for more than three years.

This section interpreted the results analysed using the SPSS. The following section provides the conclusion, which uses the above results to draw inferences that the capabilities of human capital deployed in the risk management space have an impact on the risk management programme.

5. Conclusion

The literature on risk management in general, and specifically on risk management in the public sector, has focused on risk management processes and practices. Related literature has largely found that risk management processes are inadequate and that the practices applied are ineffective, hence for these studies' recommendations for improvement. Using the South African public service context, this study analysed the capabilities of the human

capital deployed, in order to determine whether or not this had a role in impeding the effective risk management processes and practices.

On aggregate, a gap was observed in the actual number of employees and the ideal number of employees that should be in the public sector's ERM function. The study observed that, when aggregated, there were two employees deployed in the in the public sector's ERM function compared to the ideal of four employees.

In addition to the above, it was observed that respondents would ideally prefer to have highly academically qualified candidates, and highly experienced candidates filling various categories in the ERM function. Furthermore, budget allocations and the duration it takes for the position to be filled in the ERM function were highlighted as a cause of concern.

In this regard, the inability of staff to control functions such as the ERM with the ideal number of employees, the inability to fill the position with the candidates that possess the required proficiencies, and the inability to fill vacancies as they become available, could hamstring such an important control environment function, potentially being one of the contributors to the high levels of irregular expenditure, fruitless and wasteful expenditure, as well as the unauthorised expenditure seen in South Africa today.

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