

# The Impact of Integrity and Ethical Conduct of Rangers in South Africa on Organizational Commitment: The Case of Rhino Poaching Influencers in the Kruger National Park

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**Abstract:** *This study was aimed at examining the link between employee motivation, commitment, integrity and ethical conduct of rangers and how these influences work-related performance in the context of the Kruger National Park (KNP) in South Africa. The findings from descriptive research design comprising of 57 out of 70 randomly selected participants comprising of game rangers and some relevant departmental officials indicated that poor performance of rangers in the Kruger National Park was as a result of lack of application of effective employee motivational strategies. Adoption and implementation of the Maslow Hierarchy of Need was recommended as a possible innovative strategy to solve challenges associated with rangers violating their integrity and ethics regarding their work-related performance. The study made theoretical and practical contributions to the enhancement of employee performance strategies whereby motivation plays a significant role.*

**Keywords:** integrity, ethical conduct, employee motivation, job satisfaction, organisational commitment, security, work-related performance, socio-economic needs, Maslow's hierarchy of needs

## 1. Introduction

This study is aimed at examining the link between motivation towards organizational commitment, integrity and ethical conduct of employees. The study is focused on rangers and how these elements influence work related performance of rangers deployed in the Kruger National Park (KNP) in South Africa. The findings are intended to contribute to theoretical and practical strategies to resolve challenges associated with the integrity and ethical conduct of rangers. The Kruger National Park was elected due to the fact that it is a stronghold to one of the most threatened species in rhino in South Africa and in Southern Africa, the rhino and so the level of threat brings about new dynamics and require a deepened commitment from the ranger core. The study will start by assessing the interaction between two variables, performance – of rangers - and law enforcement in the context of a protected area. The study then goes on to examine whether integrity and work ethic are key drivers of performance where the protection of Rhino is concerned. Basing on this view, the relationship between integrity, work ethics and level of commitment will be focusing more on game ranger's desire to be involved in rhino poaching or not. On the other end, commitment is assumed in the context of this study to be the outcome of motivational strategies and job satisfaction in the context of the Maslow Hierarchy of Needs Theory.

Several research studies have debated the controversy as to why people engage in poaching activities. For instance, Becker's Side-Bet Approach theory stipulates that the relationship between an employee and the organization is found on behaviors confined to a "contract" of economic gains (Meyer and Allen, 1991). In other words, employees are committed to the organization because of certain underpinning economic interests or investments sometimes called side-bets. Once these economic demands are violated,

employees are subject to withdraw or neglect the expected organizational services that they are supposed to render (Meyer and Allen, 1991). On the other hand, the Psychological Attachment theoretical approach argues that employee's commitment and retention to work entirely relies not only on economic gains, but are more so psychologically affective (emotional attachment and involvement with that organization) hence Mowday, Steers and Porter (1979; p.226) define commitment as "the relative strength of an individual's identification with and involvement in a particular organization." Basing on these contradictory views, one would want to find out whether the current poaching challenges in the context of South Africa are associated with the Side-Bet Approach, the Psychological approach or both.

The above theoretical controversies also open a literature gap as to why the two theoretical approaches should be separated when dealing with such comprehensive challenges of poaching where South Africa as an example has lost alarming number of Rhinoceros through poaching activities in the previous 10 years.

## 2. Literature Review

### 2.1 Socio-economic factors that influence the involvement of rangers in poaching

A study entitled "A Literature Review on Organizational Commitment – A Comprehensive Summary" Ghosh and Swamy (2014) found that the relationship between an employee and the organization is founded on behaviors bounded by a "contract" of economic gains in compliance to Becker's theory. These researchers believe that when employees enter the job markets, they have different socio-economic goals and values which they seek to satisfy through employment. They expect enough financial gains to

develop their social lives and those of their families once these socio-economic gains are satisfied. Ghosh and Swamy (2014) believe that workers will be characterized by feelings of identification, belonging and emotional involvement to job satisfaction, motivation and commitment to work. Write (2005) supports this view by stating that Commitment is the most important variable for employee's attitude towards the organization, a mold of work-related behavior in terms of work ethics and integrity. Socio-economic status of a ranger plays a great role in whether a game ranger should decide to either join in on the poaching activities or not (Duffy, 2010)

Ostrom (2010) makes use of human behavior which from an economic model based analysis stipulates that the decision of a workers is influenced by an intention to maximize their utility and that this is based on the principles of the benefit and satisfaction one gets from trading a good. In applying the same models in the context of the rangers, it is assumed that circumstances that invite a decision to join poaching are associated with poverty, low salaries, lack of financial rewards and lack of financial benefits and other necessary benefits (Mathekga, 2017).

Literature analysis further indicates that economic inequality on the basis of pay disparity affects workers' motivation to work and perform effectively (Masson et al., 2018). According to the research made by Masson (2018) in the South Africa context, people apply work in organisations because of the motivation to an income enough to sustain themselves and their families. The same researcher goes on to mention that it is also important to consider such important elements such as work life balance, culture, and leadership as factors that can affect the motivation of an employee. This is the reason why current studies show several symptoms of employee motivation as a critical factor in an organisation's survival. This is also the reason why poor salaries among rangers cannot be dissociated with deciding to poach to fill in a financial gap.

## 2.2 The Psychological factors that influence the involvement of rangers in poaching

As highlighted above, Psychological Attachment theoretical approach builds a close psychological connection towards performance of any organization. This approach seems to run away from the idea of linking commitment of an employer to economic satisfaction. It entirely perceives commitment as a phono-logical reaction to gain organizational citizenship. According to this theory, employee retention is attributed to emotional influence. It is characterized by a belief in and strong acceptance of the company's values, norms and goals, apart from economic factors (Mowday, Steers and Porter 1979; p.226). However, the theory seems not to specifically focus on certain factors that can affect mental and emotional working spirit of an employee to such an extent that the level of commitment can be adversely affected.

For instance, in the South African context, a study made by Mathekga (2017) indicates that rangers are being killed daily as they are constantly confronted by poachers who sometimes leave them dead. In most cases, it is either death, severe injuries, or severe bodily harm by infliction of torture

from these poachers (Adams, 2012:24; Mathekga, 2017). Apart from the dangerous poachers, rangers also face the risk of being attacked by the same wild animals that they protect (Adams, 2012:24; Mathekga, 2017). The position of a ranger is associated with many dangers not only related to poaching and dangerous wild animals but also dehydration, which causes health complications such as low blood volume, shock, heart injury, urinary and kidney problems and seizures. Furthermore. The rangers are also exposed to insect bites such as mosquitoes that cause malaria (Adams, 2012:24; Mathekga, 2017). While these rangers are being forced to strictly abide to their law enforcing duties of protecting wild life, Khooshie Lai Panjabi (2014:5-7) states that no proper pre cautions are being taken for the safety and security of these rangers despite the unendurable pressures they are confronted with in the eyes of the brutal poachers and the wild animals.

Research associate elements such bad working conditions with psychological obstacles and work related stress that according to Adams (2012:24 and Mathekga (2017) is associated with physical and emotional responses that occur when the conditions of the job no longer match the capabilities of the worker. Job stress has also been associated with poor health and even injury.

According to Ajzen (1991) such psychological experiences influence changes in employees, work related attitudes also influence work related behavior. For example the theory of planned behaviour according to Ajzen (1991) states that a person's behaviour can be influenced by attitude, or perceived pressures as well as availability of required knowledge, skills and resources (Ajzen, 1991). Because of such psychological pressures, (Mathekga, 2017) other rangers neglect the role of law enforcement and join syndicates manned by corrupted parks agencies, government officials, and private sector businesses who are engaged in ivory and rhino horn trafficking.

## 2.3 A brief background of the South African National Parks

The South African National Parks, are custodian of 49% of South Africa's White Rhino (Ferreira et al., 2017). The Kruger National Park in South Africa has the largest population of rhino on the planet. In her statement in August 2015, the late Minister of Environmental Affairs, Dr BEE Molewa, informed the public that South Africa now hosts 80% of the world's rhino with about 18000 white rhinos. She further reported that an estimated 8000 to 9000 white rhinos, were concentrated in the Kruger National Park, which is about half of the country's population ("South Africa's Kruger Park Still a Magnet for Rhino Poachers," 2015).

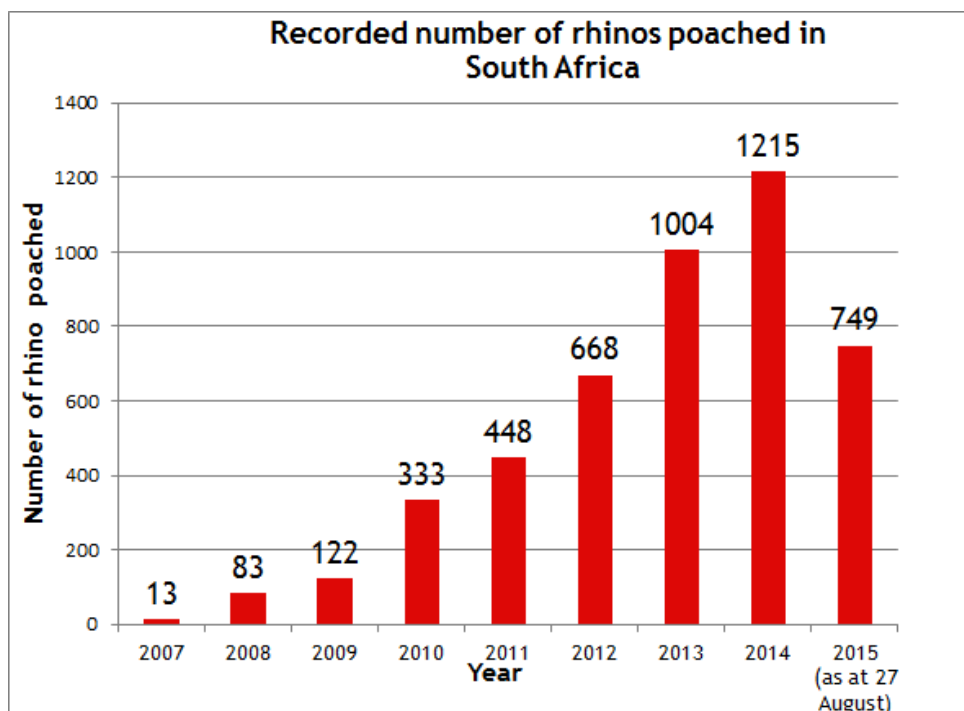
In the same briefing, the Chief Executive Officer of SANPARKS, Mr. Fundisile Mketeni, also pointed out to the size and topography of the Kruger National Park, equating it to Israel. The Park shares a 450km border with Mozambique. ("South Africa's Kruger Park Still a Magnet for Rhino Poachers," 2015). It is the largest of the 22 South African National Parks' parks. It is half the size of Switzerland, about 20 000km and employs almost 4000

people that serve the 1.2 million visitors that enter through the 8 access gates per year. It extends from North to South and hosts about 300 tree species, 49 fish species, 33 amphibians species, 118 reptiles species, 492 bird species and 147 mammal species including Elephant, Lion and Rhino (*Protected Areas and Managing Parks from an Ecosystems Perspective Case Study*, n.d.).

Unfortunately, the Kruger National Park continued to be the hardest hit by poaching of rhinos, having suffered a 60-64% of the total poaching during 2012 and 2013, an apportion that increased to 68% in 2014. From a legal framework, the national strategy for the safety and security of the rhinoceros population in South Africa, the Biodiversity Management Plan for White Rhinoceros, Notice No. 1191 of 2015 (Republic of South Africa, 2015) is grounded on NEMPAA and NEMBA. This strategy is in line with the National Environmental Policies and Strategies No. 874 and is embedded in the Biodiversity Management Plan under

NEMBA (Republic of South Africa, 2015). So far, South Africa has the largest number of rhinos and they are the hardest hit by poaching.

Figure 2.1 shows that the country's poaching statistics skyrocketed to 1 215 poached rhinos during 2013/14. However, in 2015, substantial progress was noted regarding the implementation of rhino management, as the number dropped to 749 poached rhinos (DEA, 2015a). Research has confirmed that most of the Kruger National Park has the most poached rhinos. From a comparative point of view, parks that are being managed by Ezemvelo KZN Wildlife have been found to have South Africa's largest rhino populations, with an estimate of 53% in 2013 (DEA, 2015a). The following statistical analysis done by Department of Environmental Affairs (2015) give clues to the status of the endangered rhinos through poaching activities in the context of KZN



**Figure 1.1:** Recorded number of rhinos poached in South Africa  
Source: Department of Environmental Affairs (2015)

A research by Child (2012) indicates that in South Africa, the main driving force of rhino poaching are the ever-escalating prices of the rhino horns for illegal traders. The following were the estimated figures earned by these traders in the illegal market (Child, 2012):

\$5000/kg of rhino horn in 2009,  
\$10 000/kg in 2010  
20 000/kg by the end of 2011,

In the South African context unfortunately, the illicit killing and trafficking of Rhinos, at times includes conservation caretakers – the rangers themselves - and other law enforcement agencies entrusted with the protection of these animals. With 21 suspects arrested in 2017 for rhino related crimes in South Africa (*Rhino Poaching: Latest Figures Show a Decade of Bloodshed in South Africa | The Independent*, n.d.)

Over time Rangers have been caught with their hands in the cookie jar, with one of the recent incident having taken place in May 2018, where two rangers were arrested for Rhino Poaching (*BREAKING NEWS\_ Field Rangers Arrested for Suspected Rhino Poaching \_ Lowvelder (1).Pdf*, n.d.). This study will examine the link between Rhino poaching and ranger performance in the Kruger National Park. With the understanding that for any organization to achieve its objective, human resources play a very important role in terms of the value that they will add, it is also important for each employee to have a reasonable level of job satisfaction and motivation in whatever form in order to provide valuable performance (Pushpakumari, n.d.)

Work place stress and job satisfaction cannot progressively coexist (Hassan, n.d.) for the reason that Workplace stress,

which can be traced back to an individual, emanates from stress. Michie, refers to stress as an interaction between the situation and an individual. This, Michie affirms, occurs when the individual cannot keep up or meet the demands of the environment, thus influencing greatly, the different dynamics that inform decisions that any employee would make about the type and level of performance to provide in any situation (Michie, 2002).

Naturally, the local communities residing along the boundaries of these parks are also regularly an important part of the poaching equation, especially that most of the rangers are members of the same communities. Their socio-economic welfare is thus important to consider as well. The literature review will attempt to ascertain if there is any influence that this element has on the decisions that the rangers make in relation to their performance. This entail how an individual reacts to social pressures induced stress. Apart from the home, the workplace is the one place where individuals form credibility and self-worth.

There are obvious and notable differences between a conventional office workplace where performance is monitored closely, and every decision can be audited, and risks possibly mitigated before the impact manifests. The ranger environment is one where the Game Ranger is required to make decisions independently about the cause of action to take, largely relying on their integrity. In this instance, motivation should play a particularly important role on the choice to be made, noting that the impact of this decision might not be noted soon enough to avert the risk from prevailing

Taking into consideration the highlighted socio-economic and psychological factors as linked to work performance, one would still that desire to establish the impact of rangers' involvement in poaching on their performance regarding roles, responsibilities, integrity and ethics as their core duties.

Roles and responsibilities of the rangers in the context of the South African legal framework for protected areas

According to literature, Game ranger ethics is a set of rules according to which a ranger is expected to confirm in carrying out their duties in line with the national legal framework of the country and principles of the organization in order to meet the organizational goals with diligence, commitment and a positive attitude. It is also to note that ranger ethics go together with integrity, which is referred to as the quality of being honest and having strong moral principles. In the South African context, the NEMA legal framework stipulates that all rangers are designated environmental management inspectors (EMI), whose jurisdiction to protect the rhino lies within the Kruger National Park.

The ranger, as a peace officer and as a law enforcement official, must adhere to a certain set of ethical behavior, this behavior is aligned to the provisions of the stated laws that require that the ranger prioritizes and ensures the integrity of the park as well as the welfare and protection of the animal. (NATIONAL-ENVIRONMENTAL-MANAGEMENT-ACT-

*NO.-107-OF-1998.Pdf*, n.d.). The career planet describes a filed ranger as a person who is responsible for the management of a game reserve, he/ she works with ecologists, game reserves and wildlife managers to carry out their function.

In line with the above list, Mathekga analysed rangers' traits and their working conditions and found that Rangers are forced to work under very difficult conditions and, as a result, they are expected to "have particular traits to sustain them". According to the International Anti-poaching Foundation (IAPF) (2014) and Kruger (2011:83), in order to adhere to the above roles and responsibilities rangers were expected to "be passionate about wildlife protection and conservation, able-bodied incumbents who have the ability to handle stress daily and who can stay calm under pressure, have the stamina to walk for many hours, as well as the ability to track and monitor wildlife, have good observational and communication skills to report any abnormality in the terrain, be able to fight fires, and have the capacity to survive in the wilderness under unforgiving weather conditions."

However, the socio economic and psychological challenges associated with the current experiences of the rangers seem not to create an opportunity of successful implementation of the ranger's roles, responsibilities ethics and integrity as linked to the above traits (Du Toit, 1990). Organizational commitment is referred to as an individual's psychological link or connection to the organization (Rothmann & Coetzer, 2002). Organizational commitment is associated with certain predictions to work related variables (Rothmann & Coetzer, 2002)., However, job satisfaction and organizational commitment have been shown to be different in relation to employee attitudes about their work. Job satisfaction is more focused on the individual's response to certain specific aspects of the job, for an example salary and working conditions (Du Toit, 1990).

Despite the difference or similarities of the terms, there is an assumption that that the South African rangers are not enjoying a status of job satisfaction, motivation and commitment because of unfavourable working conditions. Such circumstances are assumed to also drive rangers into poaching activities. In other words, the assumption is that these 3 variables are lacking within a game ranger and implementation of the identified roles and responsibilities are suffering. This is the reason why there is need for research so as to fully establish the impact of ranger's involvement in poaching on their performance as it relates to legal roles, responsibilities, integrity and ethics as their core areas of performance before contextualising it to the Kruger National Park.

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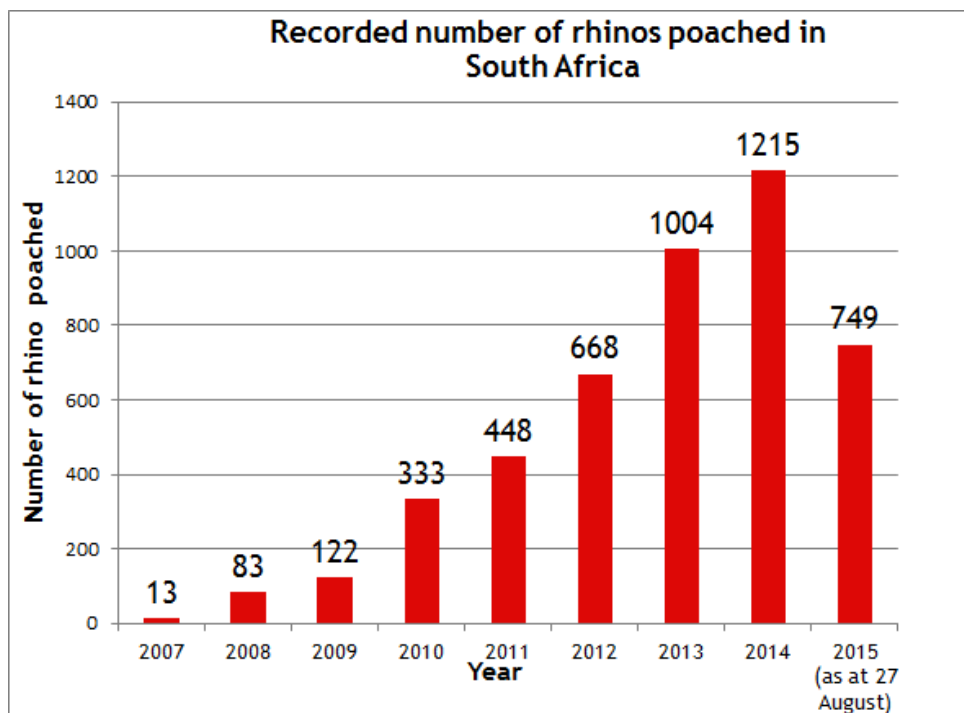
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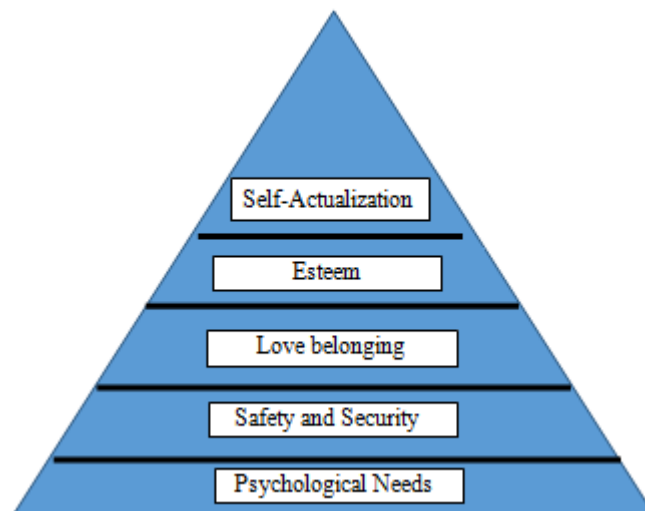
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### 3. Theoretical Framework

According to DuBrin (2005:114) “motivation is the process by which behavior is mobilized and sustained in the interest of achieving organizational goals.” In other words, motivation provides a driving force for accomplishing organizational goals for the sake of job satisfaction and meeting intended needs. A clinical psychologist Abraham M. Maslow Maslow’s developed s theory of motivation called Maslow’s “Hierarchy of Needs” (DuBrin, 2005:114). In a chronological and hierarchical order, the following needs arranged in what is supposed to be a pyramid –shaped model must be met one after the other for motivational purposes (DuBrin, 2005:114, Modiba, 2018:10-11):



**Figure 2.3:** Maslow Hierarchy of Needs  
Source: Adapted from Denishas (2013)

Based on the information on figure 2.1, Maslow arranges human needs into a pyramid shaped model with basic physiological needs at the bottom and self-actualisation at the top with the assumption that lower needs must be satisfied first before the higher needs as explained below (Denishas, 2013; DuBrin, 2005:114):

**Physiological needs:** Water, air, food, rest and sleep are the first level basic needs that must be satisfied before moving on to the next level. If they are not satisfied, then going to the next level may be difficult. Employees like rangers are so much exposed to situations and environments where some of these basic needs are scarce.

**Safety and security:** The second level comprise of the need for financial security and health, safe working conditions that are not subject to threats. It has been realised that those employees who work in dangerous jobs such as rangers, would be motivated by working in safer conditions. When an employee feels financial safe and secure, they can go the next level of needs. In the context of rangers, lack of safety and security may drive them into poaching activities, and they are by violating their roles and responsibilities and work ethics.

**Social and love needs:** This level implies that there is a need by every employer to belong to a group whereby love is expressed through relationships such as family attention, affiliation with people and social groups and also engaging in sexual activities. If managers provide an opportunity to ensure that these needs are satisfied, the employee seeks to satisfy esteem needs. It is also important in the context of this study to find out if lack of social love is one of the factors driving rangers into poaching and how this impacting their performance.

**Esteem needs:** This stage involves need for self-respect, respect from other colleagues, recognition, and appreciation. It is believed that occupation with high status satisfy esteem needs. Managers are expected to satisfy the esteem needs of employees by praising their work and giving them the opportunities for recognition. After satisfying the need for

self-esteem, will strive to achieve more through self-actualization

Self-actualization: This is the last stage right at the top whereby a person strives for self-fulfillment and personal development and the need to grow to one's fullest potential. Provision of challenging assignments by managers to such people can allow employees to satisfy the need for self-actualization.

The legislation applicable to rangers in the Kruger National Park, and the overarching Rhino related legislation applicable to rangers in the Kruger National Park, that assists the rangers is the National Environmental Management Biodiversity Act of 2004, as well as the Protected Areas Management Act. These two Acts guide the ranger on how to treat the rhino and how it and its species should be handled with the park, which is a protected area. It is almost impossible for a ranger to undertake his work without understanding applicable provisions of these Acts. The NEMBA PROVIDES THE ranger with the specific way in which an animal should be treated as a biological species classified and regulated by this act, whilst the PASM, on the other hand, provides a guideline on how the rhino should be treated in a designated protected area, which the KNP is one. Both these acts, the academic qualification plus the ranger training that the ranger has received should provide a comprehensive understanding.

Section 24 of the Constitution of the Republic of South Africa, mandates the Department of Environmental Affairs (DEA), to protect the right of citizens to an environment that is not harmful to the health and well-being of South Africa (South Africa et al., 2015), so as to counter the effects of the consumption of the earth's resources that is at ever increasing and unsustainable rates. This burden is added to the effects of accelerating trends of environmental degradation and climate change globally.

Both these threaten to undermine the existing and future developmental potential and opportunity, placing the protection of the environment at the core, if not the main strategic objective for the DEA. Aiming to counter the effects of these and to become aware of risks and threats to achieving this agenda is key to the department as a business unit of government that is aimed at achieving a prosperous and equitable society that is in harmony with natural resources. As part of its values, the DEA further recognizes integrity as an important ingredient to high performance (*Overview of the Department | Department of Environmental Affairs*, n.d.)

The role of Rangers in the protection of rhino

At the heart of this impressive growth and success has been the vets and the rangers, who are at the coalface of protecting the Rhino species, they are in the frontline of protecting the Rhino ("Celebrating World Ranger Day 2018 Save the Rhino International," 2018).

The core job functions of a ranger in the Kruger National Park includes the following: (The list is not exhaustive). In addition to the roles and responsibilities of a ranger and the

work ethics and integrity, below is an additional of the core functions of a ranger in the Kruger National Parks as noted on their website....(*South African National Parks - SANParks - Official Website - Accommodation, Activities, Prices, Reservations*, n.d.)

A section ranger should ensure that his/ her section is adequately patrolled on a regular basis and that all irregularities are detected on time. The section is patrolled by well-trained field rangers on foot, by bicycle or by vehicle.

Anti-poaching is priority for a ranger, they therefore responsible for follow up on incursions as well as eventual apprehension of suspects.

They are also responsible for law enforcement related to tourism behavior

They oversee the utilisation of natural resources.

Due to the various biomes and different distribution of plants and wildlife, there are specialized and different functions with regards to endangered animals. For an example, the roan antelope breeding enclosure in the north of the KNP, whilst the rhinoceros will be largely concentrated in the South. Rangers also interact closely and consistently with the neighbouring communities in various meetings in order to build constituencies (*Snapshot*, n.d.).

Rangers, are at the coalface of the Rhino poaching war, faced with an enormous task to protect these animals against often brutal criminals with heavy ammunition that leaves a lot of what they need to do survive, to mere determination, commitment and how far they are willing to go to protect the wealth of their country. Yet, the extent of their integrity in as far as their performance is concerned has not yet been scientifically determined.

This study is thus aimed at examining elements that influence or has an impact on workplace performance specific to game rangers, whose work includes the protection of the Rhino species.

The study sampled the Rangers in the Kruger National Park, a Rhino stronghold in South Africa, and a Park bearing the most brunt of Rhino poaching. Having established that Rhino poaching is a syndicated crime with levels across the supply chain ranging from poachers who comprise members of the community and the employees of the Park all the way to the rich kingpins who are based in alleged consumer countries in the far East Asia. ("Rhino Issue Management report.pdf," n.d., 16)

### Research Design

Since this study is geared towards firstly descriptive analysis of data and exploring of the relationship between ranger involvement in poaching, job performance, job satisfaction, motivation and commitment without looking for cause and effect both a descriptive design and correlation design has been found suitable for this study (Neuman, & Neuman, 2006).

**Research Philosophy**

This study makes use of the positivism philosophical approach because of the nature of the research topic which demands a quantitative research strategy.

**Approach**

In the context of this study, the deductive approach was used considering that Maslow’s theory of motivation has been adopted right from the start. Hypothesis test has been performed to either accept or reject the theories.

**Strategy**

This study made use of the (survey) quantitative which uses statistical measurement to collect and analysis data basing on the fact that quantitate strategies are well structured, objective, reliable as compared to the qualitative research method (Saunders et al, 2016; McMillan & Schumacher, 2010:395).

**Data Collection Technique**

Questionnaires have been selected in this study for the collection of data. This is the last peel of the research onion. Basing on the fact that a questionnaire covers a large geographical area, guarantee to anonymity, and that levels of reliability are high as well as taking into consideration that they saves time and reduces expenses, they were found suitable for this study (McMillan & Schumacher, 2010:395) Both hand delivered and emailed questionnaires will be were distributed to the respondents in the same organization.

**Validity and reliability**

Cozby (2004) identified some of the common types of validity measured which include face validity, content, and internal validity. To ensure content validity the researcher used literature to check the content validity of the questionnaire. The extent to which the literature and the questionnaire contents correlated indicated validity.

**A Pilot study**

In this study, pre-testing was done by conducting a pilot study using a small randomly selected sample from a population like the one where the final sample is to be withdrawn (McMillan & Schumacher, 2010:395). Reliability can be achieved through careful wording of the survey questions and through a high response rate (Gulba and Lincoln, 1981). In that regard the researcher tried to achieve a high response rate in the study to ensure that the results obtained in the research are a true representative of the opinions of the entire population. Use of the Cronbach Alpha score to check for reliability where a statistical the SSP software calculates the internal consistency reliability of an instrument (Cronbach, 1951: 297).

**Sampling**

**Data collection**

The researcher collected the hand delivered questionnaires manually while some responded through emails. A total of 70 questionnaires were distributed and 57 were successfully collected back from the field.

**Data analysis**

Descriptive statistics by means of the SPSS was used in this study by means of graphs and pie charts for the demographic information analysis. The mean, together with the standard deviation as well as frequency tables were described the central tendency. Correlation tables by means of cross tabulation was used to test for Hypothesis using the Chi-Square (x<sup>2</sup>). Exploratory factor analysis using the Principal Component Analysis (PCA) assisted the researcher in measuring construct validity.

**4. Presentation of the Results and Findings**

**Table 1:** Performance traits for organizational effectiveness

Questions/Statements	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Mean	Standard Deviation
Initiating Job satisfaction by the managers	Count	16	15	14	9	3.56	1.21034
	Row N %	28.1%	26.3%	24.6%	15.8%		
Providing adequate motivation and increasing communication level between managers and the rangers to ensure adequate protection and conservation of the resources in the Game Reserve	Count	18	16	9	9	3.58	1.32217
	Row N %	31.6%	28.1%	15.8%	15.8%		
Providing enough law enforcement resources and equipment to curb anti-poaching activities	Count	4	9	15	11	2.47	1.28321
	Row N %	7.0%	15.8%	26.3%	19.3%		
Providing rangers with adequate training and giving them opportunities to upgrade qualifications	Count	15	10	9	7	3.02	1.58668
	Row N %	26.3%	17.5%	15.8%	12.3%		
Providing financial motivation and security for job satisfaction of rangers.	Count	0	7	12	16	2.07	1.04982
	Row N %	0	12.3%	21.1%	28.1%		
Average percentage		38.6%		20.7%	40.7%		

Table shows the mean and standard deviation for each item under objective 3b. The mean values for the individual participants were used to measure the Status of Performance traits being practiced. The values in Table 4.8 suggest that “Initiating Job satisfaction by the managers” and “all items had a mean value above 3, which shows the level of agreement that that Kruger National Park is positively

practicing the performance traits for organizational effectiveness

Examining the impact of poaching by game rangers on their performance in terms of violation of legal roles, responsibilities, integrity and ethics



To what extent do you agree or disagree that the rangers at Kruger National parks involved in poaching are not violating

the following legal roles, responsibilities, integrity s and ethics as their core duties of performance?

**Table 2:** Violating the following legal roles, responsibilities, integrity and ethics as their core performance duties

Questions/Statements		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Mean	Standard Deviation
Mismanagement of animal populations	Count	0	5	12	31	9	2.23	0.82413
	Row N %	0	8.8%	21.1%	54.4%	15.8%		
Neglecting health of animals	Count	0	4	11	28	14	2.09	0.85106
	Row N %	0	7.0%	19.3%	49.1%	24.6%		
Mismanagement of nature reserves of the park	Count	2	5	8	25	17	2.12	1.05340
	Row N %	3.5%	8.8%	14.0%	43.9%	29.8%		
Disobeying park rules	Count	9	11	13	18	6	2.98	1.26054
	Row N %	15.8%	19.3%	22.8%	31.6%	10.5%		
Promoting poaching even by outsiders	Count	9	10	14	15	9	2.91	1.31313
	Row N %	15.8%	17.5%	24.6%	26.3%	15.8%		
Promoting destruction of natural resources	Count	8	10	15	17	7	2.91	1.24328
	Row N %	14.0%	17.5%	26.3%	29.8%	12.3%		
Lack of promotion of Educating to the public on conservation	Count	0	4	13	13	26	1.91	0.98707
	Row N %	0	7.0%	22.8%	24.6%	45.6%		
Lack of engagement with local communities	Count	0	3	13	23	9	2.02	0.87610
	Row N %	0	5.3%	22.8%	40.4%	31.6%		
Demonstrates low level of moral or ethical convictions and doing the wrong things in all circumstances	Count	0	10	5	25	17	2.14	1.04264
	Row N %	0	17.5%	8.8%	43.9%	29.8%		
Average percentage		17.5%		20.3%	62.2%			

Table 2. shows that the mean values for the individual participants were used to measure the Impact of poaching by game rangers on their performance. The values in Table 2 suggests that all items had a mean value below 3, which shows the level of disagreement that the rangers at Kruger National parks involved in poaching are not violating the following legal roles, responsibilities, integrity s and ethics as their core duties of performance at Kruger National parks involved in poaching are not violating the following legal roles, responsibilities, integrity s and ethics as their core duties of performance from a National and provincial legal perspective.

Examining the impact of job satisfaction, motivation and commitment through the implementation of Maslow Theory of Human Motivation in changing rangers work attitude and behaviour in terms of integrity and work ethics in relation to their performance.

Examining the impact of the characteristics of Maslow Theory of Human Motivation on performance regarding job satisfaction, motivation and commitment

To what extent do you agree or disagree that Maslow’s Theory of Human Motivation” Model is an effective tool for complying the following traits for improving performance and avoiding rangers’ desire to join poaching?

**Table 3:** Effectiveness of Maslow’s Theory of Human Motivation

Questions/Statements		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Mean	Standard Deviation
Job satisfaction is one of the important elements of job performance, where the management of the Game Reserve needs to create a conducive working environment by paying living wages to rangers	Count	12	23	11	8	3	3.58	1.13306
	Row N %	21.1%	40.4%	19.3%	14.0%	5.3%		
Providing adequate motivation and increasing communication level between managers and the rangers to ensure adequate protection and conservation of the resources in the Game Reserve	Count	17	19	12	9	0	3.77	1.05251
	Row N %	29.8%	33.3%	21.1%	15.8%	0		
Providing enough law enforcement resources and equipment to curb anti-poaching activities	Count	14	21	9	11	2	3.60	1.16281
	Row N %	24.6%	36.8%	15.8%	19.3%	3.5%		
To provide rangers with adequate training and giving them opportunities to upgrade qualifications.	Count	11	25	11	7	3	3.60	1.09967
	Row N %	19.3%	43.9%	19.3%	12.3%	5.3%		
A motivating work environment play significant roles in job satisfaction of rangers	Count	16	35	6	0	0	4.18	0.60127
	Row N %	28.1	61.4	10.5	0	0		
Average percentage		67.7%		17.2%	15.1%			

Table 3: shows that the mean values for the individual participants were used to examine the impact of job satisfaction, motivation and commitment through the

implementation of Maslow Theory of Human Motivation in changing rangers work attitude and behaviour in terms of integrity and work ethics in relation to their performance.

The values in Table 3 suggest that all items had a mean value above 3, which shows the level of agreement. In response to the items above (Table 4.11), 67.7% of participants either agreed/Strongly agreed that Maslow’s Theory of Human Motivation”. Model is an effective tool for complying the traits for improving performance. An average of 17.2% of participants were undecided and 15.1% of participants strongly disagreed/disagreed that Maslow’s Theory of Human Motivation” Model is an effective tool for complying the following traits for improving performance.

Examining Effectiveness of the implementation of Maslow’s Theory of Human Motivation” Model in compliance to the following TYPES of attitude and behaviours

To what extent do you agree or disagree that Effective implementation of Maslow’s Theory of Human Motivation complies with the following TYPES of attitude and behaviours?

Discouraging Rangers’ desire to poach

Improves the integrity and ethical conduct of Rangers

Influences positively the rangers’ work commitment

**Table 4:** TYPES of attitude and behaviours

Questions/Statements		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Mean	Standard Deviation
Will detract the Rangers’ desire to poach	Count	18	32	5	0	2	4.12	0.84664
	Row N %	31.6%	56.1%	8.8%	0	3.5%		
Improve the integrity and ethical conduct of Rangers	Count	20	30	6	0	1	4.19	0.76622
	Row N %	35.1%	52.6%	10.5%	0	1.8%		
Influences positively the rangers’ work commitment	Count	17	28	10	0	2	4.02	0.89625
	Row N %	29.8%	49.1%	17.5%	0	3.5%		
Average percentage		84.8%		12.3%		2.9%		

Table 4 shows that the mean values for the individual participants were used to examine the impact of job satisfaction, motivation and commitment through the implementation of Maslow Theory of Human Motivation in changing rangers work attitude and behaviour in terms of integrity and work ethics in relation to their performance. The values in Table 4. suggest that all items had a mean value above 3, which shows the level of agreement. In response to the items above (Table 4.), 84.8% of participants either agreed/ Strongly agreed that that Effective implementation of Maslow’s Theory of Human Motivation”. Model complies with the stipulated TYPES of attitude and behaviours. An average of 12.3% of participants were undecided and 2.9% of participants strongly disagreed/disagreed that Effective implementation of Maslow’s Theory of Human Motivation”. Model complies with the stipulated TYPES attitude and behaviours.

their motivation to work and perform effectively (Masson, 2018). Psychological theorists relate to psychological factors as such as lack of commitment changes the ranger; attitude towards work which can with time be characterized by negative emotions towards work (Mowday, Steers and Porter, 1979; p.226). Primary findings confirm that both the economic and psychological factors have adversely affected some of the rangers at Kruger national parks to join poaching.

Examining the impact of socio-economic and psychological factors regarding rangers’ desire to poach in terms of job satisfaction, motivation and commitment as some of the identified performance traits in the context of Kruger National Park

Secondary findings have indicated an assumption that implementation of Maslow Theory of Human Motivation has a positive impact on job satisfaction, motivation and commitment in changing rangers work attitude and behaviour in terms of integrity and work ethics in relation to their performance. According to DuBryn (2005:114), a clinical psychologist Abraham M. Maslow developed a theory of motivation called Maslow’s Hierarchy of Needs which pride a strong platform of building motivation and commitment to employees in order to effectively accomplish organizational goals for the sake of job satisfaction. Primary results have confirmed that Maslow’s theory is a possible tool for improving performance of rangers and making them not to join poaching activities.

Results of Table 1 confirmed that that Kruger National Park was negatively implementing the performance traits for organizational effectiveness comprising of job satisfaction, motivation and decreasing risks, ensuring enough law enforcement resources and equipment to curb anti-poaching activities, providing adequate training and providing financial motivation and security. Critical analysis of literature has been done in order to establish assumptions about the impact of socio-economic and psychological factors regarding rangers’ desire to poach in terms of job satisfaction, motivation and commitment as some of the identifies performance traits from a general perspective and national perspective with special reference Kruger National park. Literature analysis indicates that economic, inequality affects workers in terms of pay disparity and it also affects

**5. Recommendations**

**Recommendations are made based on the findings of this study**

Findings of this study indicated that socio-economic and psychological challenges resulting in economic and psychological emotions have caused rangers join poaching activities. These challenges are associated with lack of job satisfaction, motivation and commitment have resulted in rangers undergone stressful experiences full of frustration, depression loss of hope among rangers who had no option except indulging into poaching activities. Basing on this as

the main factors associated with involvement of rangers in joining poaching activities, this study therefore recommends South African national parks including Kruger national park adopt and implement Maslow's Theory of Human Motivation which has been confirmed according to the findings of this study that it is a possible tool effective enough to contribute to the theoretical and practical innovative strategies for ensuring job satisfaction, motivation and commitment among rangers in relation to their work performance following the following stages (Denishas, 2013; DuBrin, 2005:114; Maslow, 1987):

**Physiological needs:** Ensuring that rangers are provided with adequate Water, air, food, rest and sleep as the first level basic needs that must be satisfied before moving on to the next level.

**Safety and security:** Ensuring that rangers are provided with adequate finances for socio-economic survival as well as tight security and health. They also need safe working conditions so that they are not subjected to threats. Once these needs are satisfied, they motivated to move to the next level.

**Social and love needs:** Ensuring that opportunities are given to all rangers to belong to a social group whereby love is expressed through relationships such as family attention, affiliation with people and social groups and also engaging in safe sex with their spouses sexual activities. If managers provide an opportunity to ensure that these needs are satisfied, the rangers seek to satisfy esteem needs.

**Esteem needs:** Ensuring that rangers are accorded self-respect, respect from other colleagues, recognition and appreciation. It is believed that occupation with high status satisfy esteem needs. After satisfying the need for self-esteem, will strive achieve more through self-actualisation

**Self-actualisation:** Ensuring that opportunities are created for self-fulfillment and personal development and the need to grow to one's fullest potential. Provision of challenging assignments by managers to such people can allow rangers to satisfy the need for self-actualisation.

### Recommendations for Further Research

It is recommended that a comparative study of other animals at risk in addition to rhinos in many national parks, be made, to check if the rangers are affected in the same way by the same variables in other parts. This should be done to have a wider view of challenges encountered in poaching as a way of coming up with more comprehensive strategies for performance and integrity management in game parks.

### 6. Contribution of the Study

The study has contributed to the theoretical and practical strategies of eliminating rangers' involvement in poaching by recommending adoption and implementation of Maslow's theory of motivation as a reference tool.

### 7. Conclusion

Based on the findings, this study concludes that the involvement of rangers in poaching adversely affects their work performance. It also concludes that socio-economic status does have an influence on the commitment of people to their organisation. This suggests an indirect link between the socio-economic status on the protection of species. Further research might need to be conducted on how socio-economic development influences security of species. The hypothesis of whether the amount of investment that employees put into their performance is dependent on their socio economic needs or their integrity is something that needs to be investigated further, despite having established that there is a link between these elements. There might still be a need to establish whether this is isolated to the matter or whether generally needs do determine the level of integrity and thus influence security in general. However, this study indicates that implementation of Maslow theory of Motivation is a possible strategy of avoiding rangers from joining poaching activities. It is also a way of boosting their work performance.

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