
A descriptive-analysis of the views of ordinary citizens on littering: An empirical study in the Bloemfontein Central Business District (CBD)

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Abstract

Environmental pollution of our world has been gaining momentum at an ever-increasing rate. Despite the alarming statistics and reports by authoritative researchers, it appears that the vast majority of ordinary citizens continue with their lives unperturbed, doing nothing or hardly anything about the impending environmental crisis. The leading research question in this article is: What is the ordinary citizen's view of littering in the Bloemfontein CBD? The approach to the study is empirical. This article aims to describe the experience of ordinary citizens with regard to littering in the Bloemfontein CBD.

1. Introduction

Practical Theology, as a diverse and broad discipline of Theology, has challenged the traditional practice of theology, which focused on the clergy and ecclesiastical praxis towards developing a concern for the social context. In one of his descriptions of Practical Theology, Lartey (1996:22) mentions that it is a form of theological involvement in a given social context, in order

to engage social injustices for the purpose of serving and representing the Kingdom of God. This shift in focus in Practical Theology has made the social issue more significant. Hence, Practical Theology should play a role in renewing, developing, transforming, and reconstructing society (Heyns, 1997:31; Louw, 1998:22; Heitink, 1999:51). The social issue to be engaged in this study is littering in the Bloemfontein CBD, Free State province, South Africa.

In order to conscientise the various sectors of the society about littering as a growing environmental crisis and understand the experience of the ordinary person in the community, this study conducted a survey in the Bloemfontein CBD, with the aim of describing the experience of ordinary citizens with regard to littering as waste generation in the Bloemfontein CBD. To further elucidate the issue of littering in the Bloemfontein CBD, the following main research question serves as a guideline: What is the ordinary citizen's view on littering in the Bloemfontein CBD? Focusing on the Bloemfontein CBD and using the public clean-up action initiatives of the Towers of Hope (TOH) Leadership Foundation as a key in describing people's experiences and perceptions, this study intends to make a further contribution to the urgent ongoing debate of increasing environmental pollution, which has adversely affected human existence. The TOH Leadership Foundation is a Dutch Reformed Church (DRC) Non-Profit Organisation (NPO) for the congregation within the Bloemfontein CBD. It has, for over a decade, functioned as a NPO and is involved in public clean-ups in the Bloemfontein CBD.

Among Africans and other indigenous societies, there is a strong awareness of the spirit world that influences the activities of the physical world; life is thus viewed holistically, without separating religious and social life, or natural and spiritual life (Mshana, 2010:179; Vumisa, 2012:43). Africans are described as being incurably religious, because religion permeates all aspects of their lives (Kunhiyop, 2008:15, 18). This intrinsic link between physical and spiritual world influenced the view of nature as divine and filled with religious significance (Adeyemo, 1997:19; Van der Walt 2006:288). It is not surprising that Africans, in particular, regard the land, forests and animals as sacred and to be handled with care, respect and sanctity (Mbiti, 1970:90, 99, 109). According to Vumisa (2012:60), this high admiration of creation led Africans to believe that creation manifests God's nature and makes it possible to relate, know and understand God.

The above discussion clearly shows that the predestined relationship of human beings with nature and the environment is visible in the mutual respect and co-existence for the sake of creation's survival. Thabo Mbeki,

former president of South Africa, also highlighted this mutual respect and co-existence between human beings, the environment and nature:

I owe my being to the hills and the valleys, the mountains and the glades, the rivers, the deserts, the trees, the flowers, the seas and the ever changing seasons that define the face of our native land ... the fragrance of nature have been a pleasant to us as the sight of the wild blooms of the citizens of the veld. (Mbeki, 1996).

Mbeki's speech accentuates an intrinsic relationship of African life with the land and other creation. It relates about the Africans' dependence on the land and other creation for their existence. However, at present, that predestined relationship between human beings and the environment, including nature, has shifted from mutual co-existence to dominance and exploitation. Human beings no longer feel obliged to respect nature and the environment as part of creation. Human beings have polluted the earth to such an extent that they no longer smell the pleasant fragrance of nature, but have replaced it with the nauseating smell of pollution. Various reasons, ranging from external forces to religious and human error, are to be blamed for this slump in the relationship between human beings, nature and the environment.

This broken relationship is so ruinous that it contributes to cultural and environmental crises. According to Conradie (2011:12, 13), the cultural crisis entails a degeneration of values and beliefs underlying global cultural and economic practice. It also implicates lack of moral vision, imagination, and will to adhere to quality ethical rules for the survival of all creation.

The environmental crisis has become one of the world's uppermost challenges (De Witt, 2000:61; Feulner 2015:5), due to the gluttonous consumption of resources, causing pollution, increasing waste, and depleting the ozone. All of this ultimately leads to threatening climate change and environmental crisis. South Africa is one of the countries that is most affected by the environmental crisis and its response thereto is still in its fledgling stage, compared to other countries in Europe and North America. This difficult situation raises the question: Who is responsible for this environmental crisis? Who should initiate the remedy for this environmental crisis?

At present, the environmental crisis is no longer considered a matter of concern for a select few, but for everybody (Abraham, 1994:65). It is a matter for politics, business, and even religious organisations. It affects everyone, the poor and the rich, men and women, animals and plants. This concerns global survival. Every institution has a role to play in restraining the environmental crisis. Churches, in particular, have a moral and psychological role to play in promoting awareness and enhancing our relationship with nature.

Local organisations, including churches, tend to ignore global issues and focus on parochial matters (Conradie, 2008:12), due to the ignorance that a global issue may adversely affect a local context (Mshana, 2010:176). It is appropriate to realise that every local context has its own problems in terms of the environment and that every responsible individual must be aware of the need to be involved (Gnanakan, 1999:1). In the Bloemfontein CBD, littering (in the form of papers, plastics, and debris) is an environmental problem more than anything else. This affects the once beautiful image and value of the city of Bloemfontein known as the City of Roses. If this environmental problem is not resolved, businesses will withdraw and unemployment will increase. Consequently, the local impact of the environmental problem will become a national crisis especially when loss of jobs is experienced and quality of life due to littering is compromised. The following discussion will be about theory on environmental challenges, types of environmental wastes and their sources followed by the discussion on empirical data.

2. Littering as environmental challenge

There are many global challenges, but the most urgent one relates to the environment (Feulner 2015:5). The many environmental challenges range from those that directly affect the living species such as animals and plants, to those that affect essential resources such as air, water, and land (De Witt 2000:61). According to IPSOS Global Advisor (2018:3) the top environmental issues around the world are climate change, air pollution, and dealing with waste. This study focuses on a challenge of environmental waste in a form of littering in the Bloemfontein CBD.

Littering in South Africa is an example of waste generation. According to the Department of Environmental Affairs (DEA) (2018:16), waste is “any substance that is surplus, unwanted, rejected, discarded, abandoned or disposed of, which the generator has no further use of, for the purpose of production that must be treated or disposed of”. The DEA (2012:3) understands littering, as part of waste generated by human beings, “as waste products that have been disposed improperly, without consent, at an inappropriate location”. In short, this study understands littering as waste generated, unwanted and not deposited into a public litter container, but improperly disposed of (Mangaung Metropolitan Municipality (MMM), 2013:16).

Waste generation in South Africa is increasing and becoming a disturbing factor in the relationship between human beings and the environment (Le Roux, 1987:40, DEA 2018:2, 17). According to DEA (2018:v) in 2017, South

Africa generated approximately 42 million tonnes of general waste. Roughly 90% of the waste generated is disposed of to landfill sites and 10% is recycled. As a rule, municipalities collect and dispose of waste in the landfill. In addition, the average amount of waste generated per person per day in South Africa is 0.7 kg, which is closer to the average produced in developed countries (0.73 kg in the UK and 0.87 kg in Singapore) than the average produced in developing countries (0.3 kg in Nepal) (Nkosi, Muzenda, Zvimba & Pilusa, 2013:305). This is an alarming situation, as the waste generated contaminates resources such as water, air, and land, which has to bury and absorb the waste, thus affecting human beings and creation tremendously. Therefore, something needs to be done, in order to reduce the quantity of waste generated.

3. Sources and kinds of waste in South Africa

In this modern era, many waste generators produce a variety of waste. According to the DEA (2012), there are different sources of waste in South Africa. The agricultural sector produces waste in an organic form. The municipal sector generates solid waste. The mining and power-generation sectors generate minerals and solid waste. The industrial sector produces hazardous waste such as harmful chemicals and gases. Hospitals and laboratories generate healthcare risk waste such as laboratory, pathological and gene-toxic waste.

By contrast, in Bloemfontein (MMM, 2013:17), waste generators include property owners, households, organisations and businesses, the inhabitants, the occupants or employees at a recycled centre, scrap dealers, and buy-back centres. It was observed that, in the Bloemfontein CBD, the main culprits of littering are the businesses and the ordinary citizens.

4. Category of waste generated

The DEA (2018:17, 18) has categorised waste into two major forms, namely hazardous and general waste. The DEA defines hazardous waste such as, for example, gaseous waste, batteries, waste oil, mineral waste, healthcare risk waste, and sewage sludge as “any waste that contains organic or inorganic elements or compounds that have [a] detrimental impact on health and the environment”. By contrast, general waste, including domestic or municipal waste, building and demolition waste, business waste, and inert waste, is described as waste that does not pose an immediate hazard or threat to

health or to the environment. In this study, littering refers to general waste produced within the municipal area.

The long-term impact of littering on health and the environment is detrimental. For example, Greenworks (n.d.) mentions that littering has the following impact on human beings and their environment: It can be dangerous to people particularly when it involves items such as broken glass, rust metals, needles, and syringes; it can be a fire hazard such as when lit cigarettes are thrown out; it encourages crime, as areas that are not taken care of are viewed as unprotected and easier crime targets; and, it can kill aquatic life directly and indirectly through its impact on water quality when it lands in rivers, dams, and the sea. It is, therefore, crucial that littering should be considered unsightly, unhealthy and detrimental to the survival of creation.

4.1 Littering as municipal solid waste

Littering is categorised under municipal waste as generated from residential and non-industrial commercial resources. According to the DEA (2012:3), municipal waste is categorised into bio-degradable waste, consisting of food, kitchen waste, and papers that are mostly recyclable. Recyclable material includes paper, plastics, glass, bottles, cans, and metals. Another category of municipal waste is inert waste, consisting of construction and demolition waste material, dirt, rocks, and debris. Composite waste consists of waste clothing, polystyrene, and plastic toys. Domestic hazardous waste and toxic waste consist of medication, paints, chemicals, light bulbs, spray cans, fertilizer, pesticide containers, batteries, and shoe polish. Based on our observations, in the Bloemfontein CBD, recyclable material is the most prevalent type of waste.

5. Reasons for uncontrolled waste generation

The relationship between human beings and their environment has diminished since their numbers have increased and they have ceased caring for the creation (White, 1987:1; Habel, Rhoads & Santmire, 2011:3). The reasons for uncontrolled waste generation in the form of littering can be classified into three main categories, namely the Western tradition of technology and science; skewed interpretation of the received religion, especially in terms of man and nature, and the people's attitude towards the environment.

5.1 Technology and science

Technological and scientific development has unleashed uncontrolled power of human beings over nature, thus adversely causing negative, palliative and partial human behaviour (White, 1987:2; Bauckham, 2011:1). This is evident in the exploitation of mineral resources, chemicals released in the air and deforestation which lead to consequences like extreme weather events, natural disasters, climate change and collapse of the ecosystem (The Global Risks Report 2018:3). The influence of all this technological and scientific development has to a certain extent adversely influenced human being to develop an attitude of dominance over nature and the environment (Conradie, 1996:34). This attitude of dominance has tendency to disregard cultural and ethical rules that protect nature and the environment and instigates human being to disregard the consequences of his/her actions and behavioural impact on others and the environment (Conradie, 1996:34; 2nd South Africa Environment Outlook 2016:29, 39). The ultimate consequence of this uncontrolled power of the human being through technological and scientific development culminates into exploitation and lack of respect for the environment and other creation (Abraham, 1994:66; Greenworks, n.d.).

Although the development of technology and science improved life and sustained the environment in many respects (2nd South Africa Environment Outlook 2016:42, technology and science are mostly to blame for the environmental crisis, due to misuse and greed. Kwazo, Muhammad, Tafida and Mohammed (2014:84) discusses various science based technologies and their impact on environment. For example, health technology which is used to prevent, diagnose and treat illnesses and diseases is the major user of energy and generator of waste hence health care technological industry is regarded as a significant contributor to environmental problems like pollution and climate change. Construction technology involves erecting substructures and superstructures and basic services such as water, gas, electricity and drainage. In many of the developed and developing countries, construction technological industries yield significant waste that pollutes to a great extent the environment in the local area. Agricultural technology refers to the machinery and techniques used to control the growth and harvesting of plants and animals products. This extensive use of the agricultural machinery and techniques for tilling, intercropping, crop rotation and of pesticides affect the biodiversity of agricultural fields, as well as the environment outside of fields. Furthermore, technology and science promoted conflict between the developed and the underdeveloped world. According to Conradie (1996:18), the underdeveloped world is often the victim of the developed world with

its flourishing and luxurious lifestyle and its tendency to exploit earth's resources. This exploitation leads to air and water pollution, industrial waste, and littering.

5.2 Type of received christian religion

According to Kunhiyop (2008:15, 18), to Africans, God is the Creator of all the universe, and spiritual beings such as ancestors are subordinate to God. In the Christian context, God revealed Himself through nature and His involvement in human history and the sacred scripture. According to Mbiti (1991:45, 46), Africans learnt about God through reflection on nature, the realisation of human limitations and the observation of natural phenomena such as day and night, the expanse of the sky, and the powers of the weather. Kunhiyop (2008:16) also relates that, to Africans, knowledge of God is not only for intellectual reasons, but also for practical reasons; hence, our response to Him should be practical devotion in the way He shows us. Moreover, to Africans, African religion and community are the authors of morality and values (Kunhiyop, 2008:25). Africans are obliged to observe taboos, moral laws, and values prescribed by God, spiritual forces, and the community. The consequence of breaking a taboo and transgressing moral laws and values is shame on an individual and disgrace from society.

Human ecology is deeply conditioned by beliefs about nature and its destiny (White, 1987:3). In ancient times, pagan animism believed that every item of creation, living or not, is possessed by the spirit. Man, animals and forest were equal and treated with respect. Prior to cutting down any tree in the forest or slaughtering an animal, an appropriate spirit had to be placated (White, 1987:3). The arrival of Christianity, in conjunction with the colonial empire in the early 18th century among the indigenous African, Indian and Chinese people, has adversely affected the traditional beliefs of indigenous people and emphasised the distinction of man and nature (White, 1987:3; Daneel, 1999:102; Bauckham 2011:2). This resulted in the acculturation and de-humanisation of the indigenous people and culminated in the relationship between the human being and nature, shifting from being part of nature to becoming foreign to nature (White, 1987:3; Saayman, 1991:32). Conradie (2011:12, 13) describes the consequence as a cultural crisis, which is about loss of values underlying cultural practices in the world, lack of moral vision, imagination and the will to adhere to the required ethical and moral laws set by society and God. Subsequently, this cultural crisis, acculturation and de-humanisation of the indigenous people, led to a loss of self-respect for the individual and the other. This opened the doors to

many other destructive behaviours towards nature and the environment. For example, the researchers in this article have observed that some people who want to justify their irresponsible behaviour reason that it is great to litter, because it keeps municipal workers busy and not out of jobs. Thus, this kind of behaviour indicates that some people do believe it is someone's job to prevent littering (Greenworks, n.d.). One of the common destructive behaviours in South Africa occurs when workers or citizens protest against a specific issue with the government. They tend to throw debris in the street, turn dustbins over, block roads with burning tyres and stones. This kind of behaviour manifests anger vented against the other form of creation which in this instance is the polluting of the environment.

To Western-oriented people, the dominance of Western Christianity did not help a great deal in improving the relationship between the human being and the environment. This was due to many churches' skewed interpretation of scripture. This led to their ignoring the ecological justice and having limited influence on cultural practices (Van der Walt, 2006:31; Mshana, 2010:176). Habel *et al.* (2011:3) argue that, in the era of dominance of Western Christianity, Christian theology and ethics emphasised two dimensions, namely the relationship with God and other human beings, but not necessarily the creation. The relationship of man with animals, land and trees was not a matter of urgency and of much concern.

The relations between a human being and nature and the environment were further exacerbated by the adherents of Western Christianity who misinterpreted the concept "*dominion*" in Genesis 1:26-28. According to Bouma-Prediger (2010:57), this is associated with encouraging exploitation. However, there is a contrasting view on human dominion in Genesis 1:26-28. Conradie (1996:36) mentions that human dominion is about loving care, development, and protection of God's creation. In addition, Van der Walt (2006:2) argues that human dominion in Genesis 1:28 is a mandate to believers to contribute towards the full development of creation's potential, because God expects us to be creative in the use of stewardship, love, and care. According to Bauckham (2011:2), creation has its value for us, itself and God. Therefore, human dominion in Genesis 1:26-28 is a mandate that human beings must represent God's rule over creation, practise stewardship, take care, and serve nature on behalf of God, all because we are ultimately accountable to God. In summary, human dominion in Genesis 1:26-28 is not for destructive and exploitative purposes, but for sustaining, protecting and caring for the creation.

5.3 *Man's own fault*

Another factor that contributes to uncontrolled waste generation is man's own fault. This manifests in the development of an attitude of ignorance, contemptuousness and frustration (Le Roux, 1987:41; Toerien, 1987:75). In religious terms, man's fault can be associated with man's sinful nature. The human being deliberately transgresses the law and the will of God against creation. In the African context, Rukuni (2009:72-80) argues that, with regard to African cosmology, the human being has both an evil and a good spirit. The extreme possession of the evil spirit is manifested in hatred and selfishness, while the extreme possession of the good spirit is manifested in love, freedom, and happiness. This possession of the good or the evil spirit is not unique to the African context. In Galatians 5:19-23, a human being controlled by the desires of the flesh bears sinful fruits such as lustful pleasure, anger, and selfish ambition. When controlled by the Holy Spirit, a human being bears love, gentleness, and self-control. The above discussion indicates that man's own fault can be due to ignorance, man's sinful nature, or possession by the evil spirit.

6. Why should Christians be involved?

It may seem unfair to claim that Christians alone should be involved in restraining waste generation in the form of littering, because over 60% of the South African population claims adherence to Christianity (Erasmus 2007:372, 373). What about the other 40% from other religions? Believers from other religions must be involved in the endeavour to restrain the environmental crisis. However, as Christians are a majority in South Africa and some hermeneutical interpretations of some Christians contribute to undermining the creation of God, Christian religion is expected to play a leading role in enhancing moral responsibility towards nature and the environment so that they are of a satisfactory standard. Based on the intensity of waste generated, this leaves much to be desired. This study believes that the role of Christians in reducing waste generation is essential and inevitable.

In addition, Gnanakan (1999:3) argues that Christians should be concerned with the intensity of littering for various reasons: the alarming level which the environmental crisis has reached and the debate that compels the church to abandon its apathetic concern; the strong demonstrations from environmentalists should persuade Christians to review their relation with nature and the environment, and the burden of guilt, especially from Western-oriented Christian mission, due to their onslaught on indigenous religions

that promoted unity with nature. This onslaught culminated in the loss of respect for the environment and nature that adversely affected the exploitive relationship between human beings, nature and the environment.

7. How should Christians be involved

There are various ways in which Christians could be involved in curbing unwanted waste generation such as littering. This study, however, focuses on the theological response, since environmental crises triggered by uncontrolled waste generation are not only technological or moral problems, but also spiritual problems.

7.1 Ecology and the review of traditional Christian beliefs

According to Pui-lan (1994:107), Western Christian traditional beliefs need to be reviewed in order to be appropriate for the contemporary world. For example, all theologies that encourage dominion and exploitative relationship with nature should be abandoned, because they promote a kind of human relationship with nature that is superior, complex, contemptuous, and willing to exploit nature for man's selfish purposes. Instead, a holistic understanding of creation, interrelatedness and interdependence of man and nature can be revitalised. Furthermore, the practice of transformative mission is useful. It pursues justice and respect for the integrity of creation and for developing the moral values and lifestyles that encourage respect for, as well as the care and protection of nature.

7.2 Growth model must be changed

Abraham (1994:66-67) mentions that modern lifestyle stimulated by technological and industrial growth must be changed. The reason for this is that modern lifestyle is driven by consumerist ideology, which exploits natural resources and promotes imbalance between different sectors. For example, in the Bloemfontein CBD, the uncontrolled growth of the taxi industry and the unrestrained number of hawkers have contributed to littering and pollution of the city. To change the growth model of technology and industrial companies, one needs to be oriented in the lifestyle of the Kingdom of Christ. According to Snyder (1983:208, 209), the Kingdom of Christ is all about living a simple lifestyle and godly life in the world. It involves human stewardship of nature, caring, serving and being concerned with justice.

7.3 Engage more in the practice of ecological justice

Abraham (1994:68) insists that unequal partnership and dominance impede justice between a human being and nature. For example, in the mining areas, one could often detect an attitude of dominance and unequal partnership. An attitude of dominance is reflected in the exploitation of natural resources by the mining sector. Unequal partnership is mirrored by the benefit of the mining sector and environment pollution, which adversely affect the community in the vicinity of the mine.

According to Mshana (2010:176), ecological justice involves both ecological sustainability and social justice. Many churches, however, are ignorant of ecological justice, because their local agenda is not informed by global issues. Hence, transformative mission that pursues justice and respect for the integrity of creation is now a *sine qua non* for contemporary ministry. To further highlight the significance of ecological justice, the theology of creation needs to be revived and emphasise ecological justice.

7.4 Ethics of care for creation and alleviation of poverty

The relationship of dominion and exploitation between human beings and nature promoted an attitude of superiority and contemptuousness towards nature, leading the human being to assume the role of master over nature and to exploit it for his/her own selfish purposes. A new approach is needed that involves the ethics of care for creation and alleviation of poverty (Abraham, 1994:68). Ethics of care for creation includes rights, rules, and respect for both nature and the human being. The human being is helped to transform from being a master to being a steward of creation, and from being ignorant to being an advocate of creation. Since environmental degradation is promoted not only by wealthy industries, but also by poverty, the poor community needs to be enlightened as to the opportunity of how to care for, and benefit from creation. For example, community members could be empowered in an alternative economic system that will provide life for both the earth and people (Mshana, 2010:190), by training them in recycling skills that can be used as a means of living.

7.5 A new sense of interdependence between man and creation

In the past and even in the contemporary era, human beings exercised an attitude of dominance, manipulation, exploitation and consumerism in relation to nature. Human beings assumed that they were gods and masters in a hierarchical relationship with nature. Through this attitude of arrogance and superiority, human beings viewed themselves as distinct from nature,

not as part of nature. Abraham (1994:69) argues that human beings need some renewal and help in order to develop a new consciousness that would promote a sense of dependence on nature, enabling power to preserve nature and maintain its integrity. In order to facilitate this interdependence between man and creation, there is a need to transform mission that changes values and lifestyles and confronts models of human domination of earth such as economic growth, profit, and material consumption (Mshana, 2010:191).

7.6 Transforming education

Due to colonial interference and the dominance of European Christianity in the 18th and 19th centuries, the world needs to be retrained in its relationship with nature and the environment. The type of retraining needed is one of transforming education that brings about a deep and lasting change of the human being. According to Bell (2010:93, 94), this transforming education touches on three aspects, namely learning, changing, and doing. Batchelor (1993:5) and Bell (2010:93) argue that learning refers to a process of creatively thinking and leading an individual towards a new attitude, orientation and fundamental change. Batchelor (1993:5) argues that change should help individuals produce and influence others into responsible behaviour through good motivation and incentives. Bell (2010:94) maintains that the changing process should shift the focus from the strategies and reflect instead on people who should undergo change. On the aspect of doing, Bell (2010:94) relates that, through continuous experience, the individual develops wisdom, with critical thinking and feedback for the purpose of development.

The end result of this type of retraining is beneficial for improving the environment. The outcomes of this transforming education can help individuals rediscover their true identity as children of God through spiritual transformation that equips the person to subsequently manage material and social challenges (Gorlorwulu & Rahshulte, 2010:200). Another outcome of this transforming education is that it facilitates change of the individual, not only rationally, but also in all dimensions.

8. How is Bloemfontein affected?

An environmental crisis varies according to its context. Bloemfontein has its own concerns. The city was officially founded by the British army major Henry Warden as a British outpost in 1846. However, it soon developed into a predominantly Afrikaner settlement, playing a crucial role as capital town for the area. After the first democratic elections of 1994, the character

of Bloemfontein changed. In 2013, the greater Bloemfontein area became the 8th Metro in South Africa, the 'Mangaung Metro'. In many respects, Bloemfontein has wonderful bylaws on paper such as MMM, Environmental services by-laws 2013; MMM, Waste Management by-laws 2013; MMM, Discharge of industrial effluent by-laws 2016 and MMM, Informal trading by-laws 2016. However, it appears that the problem lies with the policing of these laws and the lack of strong leadership (not encumbered by all kinds of political alliances and agendas). According to the DEA (2012:11), Bloemfontein produces the following quantity of waste: household waste 48%; green waste 17%; builders' rubble 10%, and commercial waste 25%.

9. Methodology

For data gathering, a face-to-face and e-mail survey was done whereby the participants responded to a questionnaire including closed and open-ended questions. From this survey, a questionnaire was designed to collect the data in order to describe the view of ordinary citizens on the prevalence of littering in the greater Bloemfontein. Roughly 350 questionnaires were distributed among our contacts (via e-mail or personally), handed out at churches and businesses, and completed by bystanders and volunteers during one of the public clean-up actions of Towers of Hope (TOH) in the Bloemfontein CBD.

Of these, 327 (93%) completed questionnaires were returned, of which just over 55% were completed by males, and 45% by females. The issue of racial identity was not included in the questionnaire. Respondents younger than 24 years of age filled in age-wise 15%, with the majority being between 36 and 49 years of age. Even though nearly 24% of the respondents did not mention their educational qualifications, approximately 22% of the respondents who did complete the questionnaire have at least completed Grade 12; another 30%, a diploma or first degree, and 14%, either an Honours, Masters or PhD degree. Only 10% of the respondents completed Grade 11 or less.

The aim of the questionnaire was to assess and describe the experience of ordinary citizens with regard to littering in the Bloemfontein CBD. The questionnaire included ten statements concerning littering in the city to measure some variables using the Likert scale, where the respondent could choose to 'totally agree', 'agree', 'disagree', or 'totally disagree', and mark his/her preference (cf. Table 1). This was followed by three questions that would provide the respondent's views on the causes of littering in the city, on what needs to happen in order to prevent littering in the city, and what would be the roles of the municipality, business, the church and the individual in

cleaning up the city. The next question was formulated in such a way that the respondent could give his/her view concerning littering univocally: Littering is a problem because ... The purpose of the follow-up question, Littering is 'not;' a problem because ..., was to balance the fact that we view (and presumably also our respondents) littering as a problem. The last question was an open-ended one, allowing the respondent to add anything regarding littering s/he has not yet mentioned (cf. Table 2).

10. Findings

10.1 Table 1: Ten statements regarding littering in the Bloemfontein CBD

To what degree do you agree with the following statements:	Agree totally	Agree	Disagree	Disagree totally	Do not know
	%	%	%	%	%
Littering in the city does not affect me	28	19	17	36	
People don't care about littering the city	50	38	7	5	
Littering in the city is not my problem	18	14	19	49	
I cannot do anything about littering in the city	13	21	33	33	
Littering in the city can be solved	62	32	4	2	
Solving littering in the city is the municipality's responsibility	21	36	28	15	
The municipality is succeeding in taking control of littering in the city	11	19	18	52	
Local businesses must take responsibility to clean the city of littering	26	47	18	9	
The church/faith must play a role in changing people's mind about littering	43	45	4	8	
Littering is not the church's business	18	24	26	32	

The completed questionnaires indicate that 53% of the respondents agree that littering does affect them, whereas 68% regard littering in the city as their problem. This is in line with Abraham (1994:65), who emphasises that an environmental crisis including littering affects everyone. It is a positive motivation to realise that the majority of the respondents do recognise the problem of littering as their problem.

On the issue of whose responsibility it is to prevent littering, 68% of the respondents stated that littering is their own responsibility; 73% of the respondents emphasised that the local business sector is responsible for preventing littering; 58% reported that littering is the church's business, and 88% even added that churches should contribute to mind-shifting about littering. Concerning the municipality, 57% of the respondents agreed with the statement that solving littering is the municipal's responsibility, whereas 70% of the respondents related that the municipality is not even succeeding in resolving the issue of littering in Bloemfontein.

In summary, the respondents conceded that littering is a problem that affects them as individuals. They also agreed that the individual, the business sector, the municipality and the churches should be responsible for resolving the problem of littering, although the municipality, according to the respondents, seems to fail in this regard. The respondents' view is in line with the literature, namely that littering is a problem and that everyone must take the responsibility for resolving the problem.

Is there anything that can be done concerning littering in the Bloemfontein CBD? Of the respondents, 94% agreed that littering can be solved, and 66% of the respondents conceded that they can do something about littering. If the majority of the respondents agreed that littering can be solved, what prevents them from taking action? The likely reason could be as follows: 88% of the respondents mentioned that people do not care about littering in Bloemfontein. The above seems to give the impression that littering can be resolved, and that a do-not-care attitude dominates and incapacitates their action.

10.2 Table 2: Education is essential to prevent littering in the city

What needs to happen to clear up (prevent or reduce) littering in the city?	%
Education to change mind-set, character and values	44
Institutions such as the municipality should play their role of policing and enforcing the existing laws	38
Private citizens should take the initiative	18
Total	100

As seen in Table 1, the majority of the respondents already agreed that littering can be resolved, even on an individual level. They even mentioned that churches should contribute to mind-shifting about littering as part of their responsibility to resolve the problem. On the question as to what needs to happen to prevent littering in the city, the majority of the respondents mentioned that education that brings about change in the mindset, character and values of ordinary citizens is essential to curb the problem of littering. Secondly, this could be complemented by the Municipality playing its role to enforce the laws and policies, while the individual citizen takes the initiative to prevent littering.

In summary, education is deemed essential in solving the issue of littering in the city. It should not be any kind of education, but education that transforms beliefs, values, behaviour and external actions of any deteriorating social context (Bell, 2010:94) in order to curb the problem of littering in Bloemfontein.

10.3 Table 3: Personal attitude is the main cause of littering

I believe the three biggest causes concerning littering in the city are...	%
Ignorance, lack of values, general public not acting responsibly	65
The Municipality not taking responsibility to enforce the laws	25
Infrastructural and global challenges in society at large	10
Total	100

The main cause of littering is the personal behaviour of ordinary citizens, followed by the lack of responsibility from the Municipality to enforce the laws. The other contributing factor is lack of infrastructure and global challenges. It is true that human behaviour is one of the factors that contributes to environmental crisis, including littering (Bauckham, 2011:1; 2nd South Africa Environment Outlook 2016:29, 39). The cause for this human behaviour is due to ignorance and lack of values. Again, one can add as well a sinful¹ nature of human being as a source to environmental crisis because of the tendency of the indigenous religions that respond to threatening changes in the natural environment as God reacting to sinful human practices (Bergmann 2009:170). By lack of infrastructure is meant lack of dustbins and incentives to prevent littering. In the Bloemfontein CBD, there are few dustbins and, if they are available, some of them are broken or vandalised. The lack of incentives has been proven by the Municipality's lack of support for the intensive work done by TOH to mobilise community members and business sectors to clean the Bloemfontein CBD. Global challenges include unemployment and abject poverty, causing people to loiter in the streets while searching the dustbins for food and recycling materials. In order to avoid unemployment and abject poverty some citizens have opted for informal and small businesses like taxi business and hawkers in the Bloemfontein CBD. The challenge with taxi business is that the taxi rank for local taxis in Bloemfontein CBD is non-functional at present. Taxis have occupied every available space in the Bloemfontein CBD. Although the hawkers have designated places from which to sell their products (MMM, Informal trading by-law 2016, Article 6), they are virtually everywhere in the Bloemfontein CBD.

In summary, from the respondents' reaction human fault is the main cause for littering and the situation is made more complicated by lack of infrastructure like dustbins and lack of responsibility from the Municipality to enforce the laws by controlling unrestrained business growth of taxis and hawkers who contribute to littering in the Bloemfontein CBD.

10.4 Role of stakeholders in society

The respondents were asked to mention at least three main roles of the Municipality, businesses, churches and individuals in the prevention of littering. The following roles of each of the above sectors were mentioned in order of preference: about 77% of the respondents reported the main role of the Municipality as keeping the city clean at all costs, enforcing better policing and laws, and creating an awareness programme to change the public

1 Cf. The latter added from the literature).

mindset about littering. In our observations, the Bloemfontein Municipality is struggling to fulfil these roles. It fails for the following reasons as observed by the researchers in this article: the tendering system is often offered to people who do not have adequate infrastructure to collect waste in the city; poor management of the employees who are responsible for collecting the municipal waste in the Bloemfontein CBD, and lack of finances to employ relevant human resources and buy adequate infrastructure, due to the misuse of funds in the Municipality and non-payment by ordinary citizens. It is not surprising that 70% of the respondents reported that the Municipality is not even succeeding in resolving the issue of littering in Bloemfontein.

Concerning the business sector, 33%² of the respondents mentioned its roles, namely to maintain its area clean by disposing of waste responsibly; co-operate with other stakeholders such as the Municipality to clean the city, and employees and clients should be educated about the danger of littering in the city. In the Bloemfontein CBD, the main culprits of littering are the hawkers and the taxi business industry. Both have their own designated areas of operation, but often they refuse or ignore to use them and operate throughout the Bloemfontein CBD. Due to a lack of space and funds to regulate both the taxi business and the hawkers, the Municipality is incapacitated to enforce its laws and policies.

Despite the old mainline churches, there is also a growing number of new emerging churches in the Bloemfontein CBD. These churches have a crucial role to play in the prevention of littering in the Bloemfontein CBD. About 59% of the respondents suggested that the role of the church in the prevention of littering is to educate and motivate its members through awareness programmes about littering, and then to participate in the clean-up actions in the city, like those of the TOH . About 41% of the respondents on the role of the church mentioned that they are not certain whether littering is the task and responsibility of the church. In our observation, it is regrettable to mention that the majority of the churches, especially those new emerging churches in the CBD, do not take part in, or empower their members concerning littering in the city. In fact, some of these new emerging churches contribute to pollution by distributing flyers to people in the city, while marketing their worship services. Furthermore, littering affects and is the responsibility of the church to engage it, because littering pollutes the earth and reflects how people relate with the earth.

2 The other 70% were not sure of the role of the business sector

Concerning the ordinary citizen, the 69% of the respondents reported the following roles: to set a good example by being more responsible in not littering; to teach others including children about cleaning and recycling in order to reduce littering, and to reduce littering. This highlighted the issue of education for the purpose of changing a destructive attitude and behaviour and of engaging in alternative economic practice such as recycling to promote life both to earth and humanity, as mentioned in the literature.

10.5 Table 4: Littering affects the environment and our health

Littering is a problem because:	%
It is a bad reflection on our city, and devalues it financially	23
It has a negative effect on the environment and public health	41
It is a bad reflection of a shallow spirituality and inadequate psychological development	36
Total	100

In our effort to understand why littering is really a problem, the respondents mentioned the following reasons: littering has an adverse effect on the environment and human health. This is in line with DEA 2012:3 and Greenworks (n.d.) that any amount of waste carries a potential health and environmental hazard. Secondly, littering is a reflection of shallow spirituality and inadequate psychological development. For the first time, in this instance, littering is linked with cultural, spiritual, or psychological defects. Mshana (2010:176) and Conradie (2011:12, 13) mentions that cultural crisis and poor spiritual relationship between humanity and nature contribute to the degeneration of values, beliefs and exploitation of nature for our selfish purposes. Lastly, littering is unsightly; it devalues the city, and eliminates business confidentiality. This is true in the Bloemfontein CBD. Hawkers occupy every available pedestrian pathway and every corner, thus causing heaps of uncollected waste. As a result, some businesses have moved away from the CBD to the outskirts of the city.

On the question of mentioning anything else with regard to littering and pollution in the city, three fifths of the respondents mentioned that they would really like to make a positive contribution to the prevention of littering; one fifth of the respondents appealed for help, and another one fifth racialised the issue by blaming other races for the litter in the city.

11. Interpretation of the results

11.1 What is the problem?

The overwhelming majority of the respondents agreed that “people do not care about littering in the city”. However, they also acknowledged that “littering in the city does affect them”, and that “littering in the city is their problem”. Upon carefully examining these different responses, one could ask whether the majority of the respondents agreed that littering is a problem and affects them; why do people display an attitude of “do not care about littering in the city”? The answer to the question is complex: the majority of the respondents indicated that there is a will to do something about littering, but the people do not know what to do or where to start. Rather than trying to do something, some people find it easier to blame ‘others’.

Although the majority of the respondents criticized the businesses, the church community and the individual for not taking adequate responsibility to clean the city of littering, the local Municipality must take the blame for the littering. The overwhelming majority of the respondents agreed that the Municipality does not succeed in keeping the city clean. Although the respondents were divided on whose primary responsibility it is, the majority of them mentioned that the Municipality must take their responsibility more seriously.

11.2 The role of the Municipality?

The majority of the respondents blamed the Municipality for the deteriorating situation in our city. They ascribed this to a lack of manpower, budget, resources, and poor leadership. The Municipality is also blamed for a lack of policing of the laws and bylaws governing waste removal and littering in the city. The remarks by, and answers from some of the respondents can literally be regarded as a “cry for help”, pleading the Municipality to move into action and do something. The majority of the respondents mentioned that it is the responsibility of the Municipality to keep the city clean by enforcing laws, employing more people, and improving the infrastructure.

11.3 What prevents a turn-around in the public’s perception and lack of action?

The overwhelming majority of the respondents indicated that they believe littering can be solved, and they can do something about it. Almost a third of the respondents mentioned that acting more responsibly in not littering and setting an example can solve the problem of littering. Practical advice

for the business community ranges from “keeping their own areas clean”, to educating their employees and clients regarding littering, and to co-operating better with other stakeholders such as the Municipality.

The majority of the respondents agreed that some of the biggest causes for littering in the city are ignorance, lack of values, and not acting responsibly. Therefore, much more energy, strategizing and planning has to go into education in order to change people’s mindsets and values systems. This appears to be one of the keys in changing the city for the better. However, it is important to note that some respondents were prepared to “get their hands dirty”, by volunteering to be involved in clean-ups or in some other form of active citizenry.

11.4 The role of the church and theology?

Surprisingly, the majority of the respondents stated that the church must play a role in changing people’s minds on littering. Only a minority stated that the church has no role to play in resolving littering; the church should rather focus on faith and salvation. On what exactly the role of the church should be, the majority of the respondents agreed that the church has a motivational and educational role, and make people aware of the different recycling and like-minded initiatives. Some even understood the church’s role as participating and initiating clean-up actions in the city. On the other hand, few respondents were not certain about the church’s tasks and responsibilities.

11.5 Summary

The relationship between the literature and the respondents’ reactions is evident in some instances. First, both the literature (DEA 2012:3) and the respondents agree that littering is an environmental challenge that can have an adverse impact on the health of the individual and society at large. Secondly, on the causes of littering, both the literature (Le Roux, 1987:41; Toerien, 1987:75) and the respondents agree that the ordinary citizen’s personal attitude and wrong spirituality are the cause of littering. Lastly, on the solutions to littering, both the literature (Bell, 2010:93) and the respondents agree that the value of education should be used to transform the mindset and character of ordinary citizens.

12. Conclusion

Although the majority of the respondents still viewed it as the Municipality's primary task to keep the city clean, they were prepared to take the responsibility themselves. The business community, the church and the individual must join hands with the Municipality to bring a lasting change in the prevention of littering, and in keeping our city clean. Networks, new initiatives, and education are essential to solve the problem of littering in the Bloemfontein CBD.

It is crucial to educate the general public with regard to the environment, to instill lasting values, and to motivate the public to do their share. In this respect, the church and theology have a crucial role to play. A very interesting finding was the role of the church. It might seem that the general churchgoer has a right not only to hear from church leaders about this, but also to do practical things (whether as church body or as an individual) with regard to meeting the littering problem head-on. The church as structure and as polity needs to take this to heart, and play a stronger and more visible role in not only providing the required leadership, but also playing a much more practical role in keeping our city clean.

In conclusion, the views of ordinary citizens in this survey have confirmed some of the views of the literature that littering is a problem that needs urgent attention, due to its effect on health and the environment. However, the in-depth analysis of the findings highlights that more education about the environment and the relationship between nature and human beings is crucial for the citizens, especially in Bloemfontein, in order to transform a nauseating smell from pollution into a pleasant fragrance of nature. It is most noteworthy that ordinary citizens affirm that littering does affect them and is a real problem, which individuals tend to ignore, even though they can do something about it.

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