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Consumption, Waste and the Middle-Class Mindset: A Qualitative Exploration of Gendered Attitudes and Beliefs in South African Suburbs

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CONSUMPTION, WASTE AND THE MIDDLE-CLASS MINDSET

A QUALITATIVE EXPLORATION OF GENDERED ATTITUDES AND BELIEFS IN SOUTH AFRICAN SUBURBS



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A DISSERRTATION FOR THE MASTER OF ARTS PROGRAMME BY
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SENATE PLAGIARISM POLICY

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__09_____day of ___October_____20_23_____at_____Stellenbosch_____

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To God be the glory for all the opportunities I have been given and for everything I have achieved. "*For I know the plans I have for you", declares the Lord, "plans to prosper you and not to harm you. Plans to give you hope and a future*" – Jeramiah 29:11

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Introduction

Moving, eating, drinking – our most basic needs drive us to consume, and consumption and subsequent waste production are activities that all human beings take part in daily. But how often do we reflect upon consumption in society? And how much of our consumption do we experience as waste? All we consume eventually turns into waste, because to waste or to leave some kind of man-made trail behind us, is part of what it means to be human.

But waste is not merely a by-product of human existence. It is also a symbol of our lifestyle choices and social identities. Waste reflects our attitude on what products are important to our survival and our enjoyment in life. Waste also reflects our lack of responsibility or accountability regarding the rubbish we persist in producing.

When considering waste, we cannot simply look at the physical debris that has been left behind. Critical scholarship must consider *who* wastes, what they waste, and why. Several other factors therefore impact our attempt to understand the waste phenomenon, including our own gender, race, culture and even class.

A recent study for example, found that the richest 10% of the world's population consumes about 20 times more energy than the poorest of the world (Wiggins 2020). With greater consumption comes greater waste, and *The New York Times* (2015) reported that food waste (the most tragic types of waste since over 800 million people still go hungry) is increasing in-line with a global rise in the middle class. And the wealthier a country is, the more waste (especially food waste) they produce. The knock-on effects of this are severe – food waste is so dangerous to our health that it is ranked third in the world for methane emissions – after entire countries China and the USA.

It is clear that there is therefore a direct link between consumption, waste and class, and these social factors are what this research is focused on. In this research, I try to uncover how class (specifically the contested category of the middle class) interacts and reacts with the issue of waste in relation to their own consumption and waste production. Race is also considered as a further dimension of analysis since it is so

closely tied to identity within a South African context. Media is also given notability, since it has the power to influence the way people consume. However, the most prominent overarching theme in this research, is gender. How does a person's gender affect their consumption habits? Is waste production a gendered experience too? And how do the different genders experience waste? These are some of the questions this research explores.

The purpose of considering class as a main contributor or at least as a relevant factor when trying to understand waste production and responsibility, is to emphasize that waste is not merely a by-product of consumption, but is correlated to class status and mind-set and should therefore be thought of as a social, psychological and anthropological issue – not just an environmental one. Furthermore, genders experience consumption and waste differently. While women typically do most of the grocery shopping (Nielsen 2021), they also tend toward being more environmentally conscious and more likely to consume green alternatives (Hunt 2020). More than this, there is the general perception that recycling as a waste-management practice is "feminine", which is one factor that deters men from environmentally-friendly behaviour (Swim et al., & Gillis & Hamaty 2019).

The literature review unpacks these issues in a systemic way. First, consumption is unpacked as a human phenomenon. Then waste is considered – both on a global scale and within the context of South Africa. Third, middle class is defined and explored in relation to consumption and waste. Then gender is used as the basis for the theoretical framework, which relies on feminist theory to discover how gender roles continue to determine consumption and waste behaviours and attitudes in South Africa.

Research Aim

This study is concerned with the gendered perceptions, beliefs and narratives of middle class participants in South Africa's suburbs, in relation to their own consumption and waste. Furthermore, this study sought to understand the gendered

mind-set that the middle-class has when it comes to matters of waste production and responsibility, and how this mind-set dictates our waste narrative.

In order to understand this, I conducted a qualitative study, in which a purposive sample of 16 middle-class South Africans were interviewed about their relationship with, and attitude toward consumption and waste. These participants were also asked to keep a "waste diary" in which they record the waste they produce or are exposed to over a 24-48 hour period. I then conducted a secondary interview where I asked respondents to discuss their experience with keeping a waste diary. Lastly, an online survey comprised of 10 multiple-choice questions was sent to each participant.

The below questions were used to guide this research.

Primary Research Question

- *How do middle class women and men in South Africa, perceive waste and waste responsibility in relation to their own consumption?*

Secondary Research Question

- *How does race, gender and class affect the perception the South African middle class has on consumption, waste, and waste responsibility?*

Objectives

As a South African citizen who considers herself to be middle class, the main objective of this study was to see how class, consumption and waste correlate with one another, and to what extent our waste behaviour is affected by our gendered experiences.

Furthermore, this research sought to understand factors related to quantities of waste produced by the middle class, including whether or not they feel driven to consume and less driven to care about waste by the media or by other social and cultural drivers. I also tried to understand how the middle class views waste as an issue or not as an issue within society, and what social issues are considered more important than waste for middle-class South Africans. It was necessary to establish whether or not the

middle class uses their class status to push waste responsibility or blame onto other classes, and to ascertain who middle-class South African's think is responsible for waste (both the production and disposal thereof).

Another objective of this study was to understand the influence that gender and race has on middle-class perceptions of consumption and waste. I unpack how race, gender and class are interrelated considerations when trying to understand consumption and waste behaviour in a holistic manner.

Expected Contribution of this Study

This research aims to offer new insights into how South African suburban middle-class participants might view and deal with matters of waste. It is postulated that a deeper understanding of this intersection between class with matters of consumption and waste could result in a more contextual idea of how social ideologies lead to environmental issues. This research could also encourage local citizens to feel personally responsible for the waste they produce, since it ultimately affects us all. Furthermore, this research could promote a greater interest in and reporting on the environment. Finally, this research could serve to emphasise our connectedness to nature, and that the media and social entities must play a bigger part in better informing each South African citizen of their potential impact and waste responsibility.

Literature Review: The Interrelatedness of Class, Consumption and Waste Through the Lens of Gender

The below literature is divided into four main interlinked sections. These are consumption, waste, the middle class and gender. Several key ideas are explored, such as how historical factors like apartheid have played a major role in waste management today; how consumption is directly correlated to gender, race, culture and class; how participant's perception of waste responsibility is largely influenced by a lack of education as well as existing gender roles; and how thinking about waste as an issue is, in the first place, an activity mostly done by those who can afford to see it as important. Figure 1 below demonstrates the factors that are most relevant to this study, and how they all come together to contribute to the complex issue of class, consumption and waste.

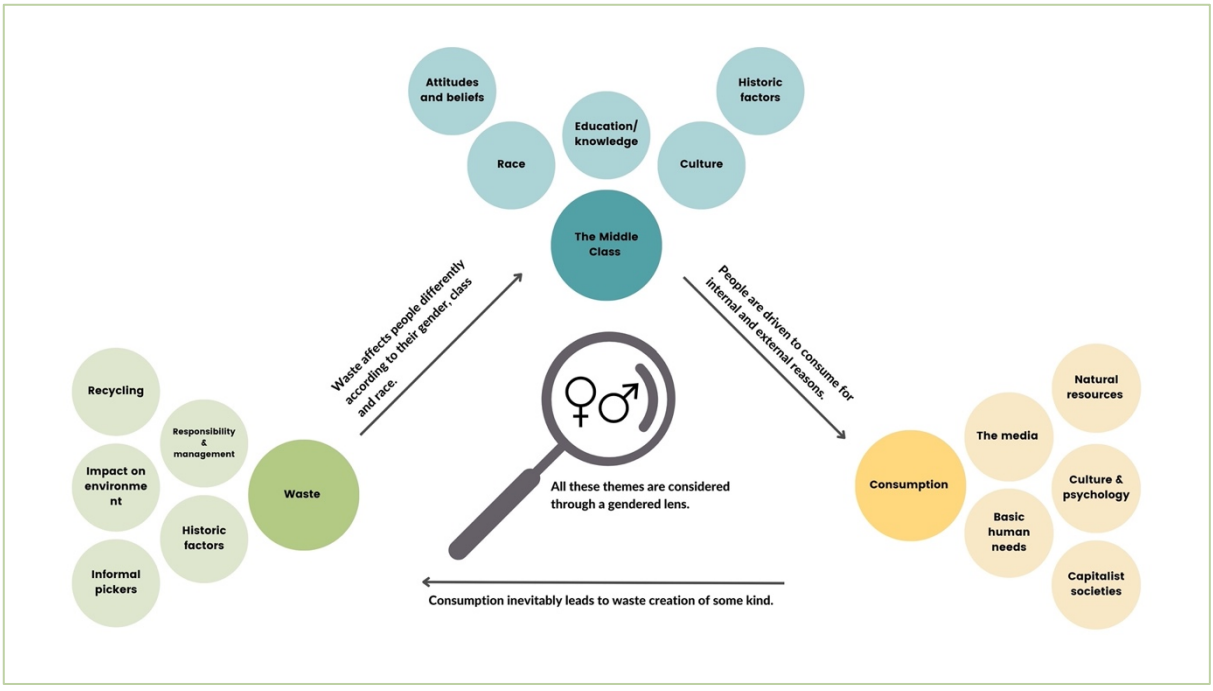


Figure 1: Visual Representation of the Study's Main Themes

Credit: Carina Mason

Consumption

As Besthorn (2004) poignantly puts it, “Today everything is for sale – politics, sex, love, marriage, and gizmos and promises of every size and description. We seem never quite content, ever on the search – spiritual searches, romantic searches, experiential searches, searches for meaning, searching for the better deal. We have become the quintessence of the consumer culture that enfolds us”.

Roach, Goodwin and Nelson (2019) define consumption as “the use of goods and services by households”. But consumption relates to much more than fulfilling basic survival needs and extends to cultural, social and psychological needs as well. The latter is of greater interest to this study, where the drive to consume (and even what to consume) is of relevance if we are to understand what motivates the middle class.

In a 2015 paper titled *Critical Consumption Studies in South Africa: Roots and Routes*, Iqani and Kenny put forward that consumption is not merely a casual activity done in a capitalist state, but a marker of freedom. In the context of South Africa, this means that people (namely those previously oppressed) consume as a tool to exert their freedom within a democratic society. This freedom is not only about being able to buy items previously deemed unaffordable, but also extends to an individuals’ ability to decide *what* they want to buy, *when* they want to buy it, and from *where* (Iqani & Kenny 2015: 99). It is this sense of freedom that makes the matter of consumption a complex one – specifically within the context of South Africa where apartheid denied millions of their freedoms. As Ruiters (2015: 98) puts it, “apartheid was environmental racism writ large”, which is to say that the climate of segregation gave way to more than just a lack of freedom to consume. It was a time that also dictated the relationship between race and consumption in South Africa. White people became synonymous with opportunities to buy luxurious items and lifestyles, while Black and Coloured people were left with little choice (and much less quality to choose from). Consumption, therefore, became a marker not only of freedom, but also of social status and importance. Has this changed since apartheid was abolished? In 2021, a study revealed that 64% of Black South Africans still live in poverty, while only 1% of whites do (Nqola 2021).

In the past ten years however, there has been a substantial increase of shopping centre development in townships around the country (Adatia 2021). Not only is this a marker of increased freedom, but also a sign that previously disadvantaged groups will continue to contribute greatly to overall consumption going forward. In fact, Buthelezi (2020) finds that most rural township shopping centres recovered more quickly after the COVID19 pandemic, compared with suburban shopping centres – signifying a strong consumer culture in poorer areas. Furthermore, research finds that individuals living in townships are continuing to spend more per head compared with other demographic groups.

Despite this increase in consumption by the working class, the distribution of wealth and spending power is still unbalanced. Most white people can still be found in gated communities able to afford luxury items, while millions of Black people still live in townships with less disposable come, and less waste-related infrastructure (Chatterjee & Czajka & Gethin 2021). This speaks closely to neoliberalism within the context of the "new apartheid". As Harvey (2005) puts it, neoliberalism refers to a political agenda that promotes privatisation, entrepreneurship and a reduction in government spending and control. While neoliberalism at its core promotes growth, equality and fairness, it is tainted when the society it is within is flawed. In his book *The New Apartheid*, Mpofu-Walsh (2021) describes South Africa's current political climate as a different version of apartheid, rather than a new post-struggle one. While people of colour have more rights and freedoms, they are still marginalised on a daily basis.

Because these power imbalances are seen around the world, it is clear then that consumption is also linked to political power. As Benton (1995) and Durbin (1994) put it, "environmentalism is a Western, if not white middle-class social movement, the main objective of which is to prevent developing countries from doing what those in the West have already done" (Westra & Wehane 1998). In other words, the global north - particularly countries like the United States - tend to promote the ideology of consumerism which only grows their economies while exploiting developing countries. Furthermore, historically dominant countries tend to raise environmental concerns about the global south to continue to consume, while forcing others to adopt "better policies". Mahathir & Lutzenberger (1992) and Jhamtani (1996) refer to this as eco-

imperialism. In fact, it is estimated that wealthier countries have drained developing countries by at least $152 trillion in natural resources over the last 50 years while they themselves continue to be the leaders in consumption and waste production (Hickel & Sullivan & Zoomkawala 2021).

Luckily, more and more perspectives are being considered in the conversation about consumption and waste – not just those of the global north. Indigenous peoples for example, were once seen as victims of environmental issues (Etchart 2017) but have more recently been described as the "original environmentalists" (Chadourne 2021) because of the way they tend to live in symbiosis with their surroundings rather than separate from it. Hundreds of court cases have been won by indigenous people around the world, in their defence and protection of natural resources from the West. According to Etchart (2017), there are around 370 million indigenous peoples in the world, who cover 24% of land worldwide (the same land that contains 80% of the earth's biodiversity). It is clear then, that marginalised perspectives matter when it comes to issues of consumption, waste, and the effects of this on the planet.

Consumption is indeed a global problem that signals who has power and freedom, but it also looks differently across cultures, races and classes. The Black middle-class in South Africa for example, is said to spend more compared with other local races. As Southall (2020: 174) states, "the poverty from which so many Blacks have come predisposes some to demonstrate their success through conspicuous consumption". Consumption therefore, is also a marker of expression where those who did not have a voice, now use their own purchasing power to make conspicuous non-verbal statements about how far they have come (even when it results in debt). But this show of power, freedom and expression has been met with criticism. James (2017: 1) for example, notes that the "shallow values of the newly upwardly mobile, labelled as 'Black diamonds' or 'coconuts' have been much criticised: the superficiality of consumerism seems out of kilter with the seriousness of the egalitarian aspirations that originally motivated the transition".

In her argument, James (2017) does touch on an important aspect of consumerism within the South African framework: that there was and still is major inequality in who can afford to consume what and from where. A study by the HSRC (2013) for example,

revealed that over half of all South Africans still do not have access to enough food. Food in this instance is not simply a means to survive – it reflects a deeper message of consumer power. In his book *The State of Africa: The Politics of the Belly*, Jean-Francois Bayart (2009) uses food as a post-colonial metaphor for the power that those who "sit at the table" have in Africa. As Ndlovu (2020) puts it, consumption acts as a symbol of South African identity. That to consume is to "racially regulate people's aspirations, interests and powers".

This is an interesting image within the South African context, where those in political power publicly consume (in food, drink, luxury goods and lifestyle) while those they represent and are meant to serve are quite literally starving. In this poignant reference, we see how consumption is not only linked to stereotypical ideas of race (that white people have historically been able to consume while Black people have not); but is also linked to mindsets within the same race (for example, that Black leaders in Africa fill their bellies while their followers watch in blind allegiance). Noteworthy is that many African political leaders criticize the west for the social issues tied to capitalism and consumption, yet they themselves take part in it. In one of many recent examples, Tahera Mather (a communications specialist hired by the Department of Health to run COVID-related campaigns) was found spending around R90 000 of these funds at Italian luxury-goods store Gucci in Sandton (Myburgh 2021). Endless other examples (Zuma's R270-million Nkandla home, Malema's Cape Town holiday splurges, the R17.5 million spent on luxury cars for ministers in 2017 alone etc.) demonstrate how deeply entrenched the idea of [self] consumption is in a post-apartheid country. Former president Thabo Mbeki in 2006 criticized Black people for "having absorbed the value system of the capitalist market" and that success for them meant "personal enrichment at all costs, and the most striking public display of wealth" (Death 2014: 1231). This is ironic since Mbeki himself received R13,7 million in maintenance between 2017, 2018 and 2019 (IOL 2019). It seems then that South African's tend to be motivated to consume to serve their own needs, but criticize others for doing the same. Robbins (2018) confirms that people are mostly self-serving in nature when he speaks about the Motivation Theory. This theory holds that people are most notably motivated by their own self-interests or by simplicity (the harder something is to do, the less likely people will do it). In other words, people who view consumption as servicing self-interest are more likely to keep consuming (Ryan & Deci, 2020). The inverse is also

true: people who view their involvement in helping the community (including proper waste management) as self-serving are more likely to engage in such initiatives. It is however clear, that such initiatives are difficult (there is no quick fix to waste problems) and do not serve the needs of the individual (or of a government) in an immediate or obvious way. Consumption is therefore linked to our psychology and individual mind-sets as much as it is linked to politics and power.

The Impact of Culture on Consumption and Waste

Research has shown that the citizens of the poorest countries of the world tend to indulge in "conspicuous consumption" (Charoenrook & Thankor 2008). While some cultures do this as a form of escape, others do it as a statement of identity. In South Africa, one subculture is of particular interest when considering the role that culture plays in consumption and waste. This sub-culture called Izikhothane is comprised of young Black men from townships, who "consume and destroy luxury brands in their pursuit and construction of consumer fame" (Oosthuizen 2020). A study conducted by Dr Liezl-Marie van der Westhuizen et al., (2019) revealed that the Izikhothane subculture consume and destroy material items in a show of wealth, affluence and dominance. In his research however, Mnisi (2015) finds that the behaviour of this cultural group is much more complex and "not crude materialism bordering on the immoral" but is rather a symbolic act of the aspirations the post-apartheid youth have (they aspire to have excess since this has been denied to them because of apartheid). In fact, these young men say that they want to be better and to do better than their oppressed forefathers, and that this act of burning luxury items is a marker of these dreams. In addition to this, Howell & Vincent (2014) find that the Izikhotane practise consumption and destruction as a means of youth identity within the framework of a new South Africa.

It is clear that such cultures reflect a much deeper issue within South African society. For one, it shows how historical injustices (namely apartheid) which prevented people of colour from consuming or enjoying certain goods, have caused some to react to now having access to such material things by destroying them. Consumption and waste are therefore not only an issue of human existence, but an issue of human

history and mind-set. The physical act of burning these goods is also a commentary on how temporary “stuff” is, yet how meaningful it has become to our sense of identity. As Death (2014: 1232) puts it, “The actions of the Izikhothane highlight something of the emptiness behind modern hyper-consumer culture”. Yet despite how empty these “things” are, people continue to consume and collect the material.

Indeed, this mindset of hyper-consuming to fit in to a materialistic society is seen around the world. Several diagnosable disorders have even stemmed from excessive consumption, including compulsive buying disorder and hoarding disorder (affecting about 2.6% of the world’s population – almost 200 million people). Both disorders are tied to people’s needs to belong or to feed unmet needs in some way (Norberg et al. 2019). Furthermore, DeSarbo and Edwards (1996) find that compulsive buying “helps individuals escape anxiety brought on by stressors such as poor family communication and social isolation”. Consumption, which is inherently wasteful, is then not only linked to media, motivation, politics, and culture, but to the private lives and the experiences of every individual. It is even a tool for coping with the modern world.

All these factors influence the way we consume and how we choose to spend our money, but the media plays an equally prolific role. Media and politics are interlinked – constantly using power over each other for some form of gain. In fact, the way the media portrays consumption as a marker of race in South Africa (and around the world), has influenced our very understanding of what it means to consume as part of our own identify. “The media highlight the precariousness of discourses of equality in the ‘new’ South Africa, in which rich Blacks are disproportionately criticised for displays of wealth, and the expenditure practices of rich whites are all but ignored (Iqani & Kenny, 2015: 100). As mentioned previously, consumption is in fact a predominantly white middle-class social movement used for profit and power (Westra & Wehane 1998). It is therefore ironic that the consumerist lifestyles represented by the western world are seen as a suitable framework for all, yet the physical act of consumption in the global south is spotlighted for environmental issues. This is the way it is portrayed in the media – developing countries are shown as dirty and unevolved, while America and Europe are the Mecca’s of cleanliness *as well as* conspicuous consumption.

Media is used as a vessel to drive this consumption and serve capitalism. As Humes (2013) argues, the messages from the media telling us to consume have contributed to our “disposable culture”. From advertisements of luxury items and their promise of fulfilment, to social media influencers and celebrities whose lives (often filled with excess) serve as aspirational frameworks for the growing middle class. As Iqani (2015:3) puts it: “our screens, retail spaces, and virtual experiences remain dominated by narratives of celebrity, sexiness, and a world of glossy artefacts calling out to us to own them and achieve happiness, no matter how fleeting”. But this desire to consume – and be consumed by – narratives of celebrity culture and all it represents is not an entirely conscious decision. Pappas (2012) says people are, in their most basic form, social creatures who benefit greatly from observing those “at the top” or those who are deemed better evolved than ourselves. People do this so that they too can be on top. They also follow others to create a sense of their own identity. It is partly this that motivates humans to continue to consume – even when they know that consumption is causing immense natural degradation.

For all our reasons, it is this drive to constantly consume that has led to so much global waste. According to the World Bank (n.d.), “the world generates 2.01 billion tonnes of municipal solid waste annually, with at least 33% of that not managed in an environmentally safe manner”. The same study reveals that waste is expected to grow by 3.40 billion tonnes by 2050. Even more troubling, is that Sub-Saharan Africa is one of the fastest growing regions in terms of waste production. In the next section, I consider a definition of waste, as well as the state of waste in South Africa with a brief overview on waste in the rest of the world.

Waste

What is waste? Waste can refer to any matter or dirt that has been created as a by-product of consumption, and is then discarded. Hawkins (2006) describes waste simply as “excess matter”. However, what one considers “excess” another might consider necessary, and this notion changes depending on the context too. In her seminal work titled *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*, (1966) Mary Douglas talks about the symbolic meaning of dirt, and how it can be defined as something that is out of place. For example, food on a plate is food, and

food in the mouth is food, but food on the floor is dirt or waste. This suggests that waste is matter that is out of its intended place for use. Furthermore, Douglas (1966) suggests that "purity", which is the desired state in most societies, is threatened by dirt or waste, and therefore dirt must be dealt with through a "ridding" process. In his own analysis on waste management and disposal taking place in less advantaged communities, Maina (2019) notes that where waste is disposed of says a lot about how that community is viewed. "To be connected with dirt is to lose respectability, and to lose respectability is to lose class status" (Maina 2019). He further says that it is a middle-class view that the poor are dirty. Similarly, Iqani (2020: 23) highlights that every culture around the world no matter the class, has one thing in common when it comes to dirt – that it "does not belong in the home and needs to be removed". Freud (2015: 73) agrees that cleanliness is linked to civilisation, which supports the idea that those who wish to see themselves as civilised will choose to be far away from waste and trash. This human need for distance from trash further entrenches the idea that we are separate from the mess we make – that somehow once we have made waste, it is no longer our responsibility.

For the purposes of this study, the term "waste" refers to any discarded items or matter that have been disposed of – either intentionally or unintentionally. Examples of the types of waste mostly covered here include food waste and solid waste (including plastic and/or packaging).

Waste in the Global South: An Overview

Waste is an inevitability of human existence. Since we discovered ways to optimise production and increase revenue, we have been trying to be more efficient while servicing the needs of a growing consumerist public. This has led to the invention of plastic and over-production of goods, which have contributed greatly to the global waste problem. At the same time, waste has fallen on the back burner of our list of social priorities.

The quantum of waste produced is increasing in Africa, but when it comes to correct waste disposal, Sub-Saharan Africa does not fare well again. It is estimated that 93% of waste is dumped openly, instead of in proper landfills (World Bank n.d.). But the impact of waste is far greater than destroying the natural environment. Its knock-on

effect can permeate all parts of society. Wolfville and Scotia (2002) argue that the diseases caused by waste aggravate poverty since those who fall ill are unable to work and provide food for their families, while Giusti (2009) says some waste-related diseases become more prevalent and kill more people – affecting livelihoods and the economy. The World Economic Forum states that between “400 000 and 1 million people die each year in developing countries because of diseases caused by mismanaged waste” (Edmond 2019). The health of waste pickers and workers is also greatly at risk, as well as those who live near waste or dumping sites (Goorah, Esmyot and Boojhawon 2009). Furthermore, waste that is not disposed of properly (for example, in dumps or open landfills) releases methane, which endangers communities and contributes to climate change. But who is responsible for protecting people’s health and managing waste responsibly?

As Kharas (2017) says, “Each individual thinks they can leave the problem to someone else to deal with – so few people change their behaviour and habits”. Waste responsibility and management is therefore a contentious subject, since people tend to expect their own waste to be disposed of or managed by others. In India for example, many middle-class citizens view the handling of waste as a “dirty activity that has to be kept as far from the private sphere as possible or outsourced to other people” (Upadhya, 2009: 26). Kubanza (2010: 97) found that Johannesburg residents tended to blame waste responsibility on the municipality, therefore pushing the responsibility away from themselves. On the other hand, it was found that municipal workers believe that waste management is the responsibility of all people.

This lack of individual responsibility is concerning given the sheer volume of waste that several major hubs produce on a daily basis. According to the National Waste Information Baseline (NWIB), South Africa generated around 108 million tonnes of waste in 2011, 59 million of which comprised general waste. The same study found that Johannesburg is the leading city in South Africa in terms of waste generation, which is no surprise given the high-density population and that fact that “It is the commercial and economic hub of South Africa and contributes approximately 47% to the provincial economy” (Dowling et al. 2012).

Makau (2006) says that solid waste management depends on the socioeconomic conditions of a particular household. For example, in richer white suburbs, waste is correlated to overconsumption and proper waste management. To add to this, the World Bank (n.d.) finds that higher income classes have their waste managed in a much more organised manner than those in the low income bracket. It is clear then that class status is correlated to waste management and responsibility. Middle and upper class areas receive better service delivery, while poorer areas lack these basic services and related infrastructure. Furthermore, while the upper and middle classes seem to push waste responsibility to others while still enjoying the benefits of proper service delivery, the working class tend to witness the full effects of improper waste management. The below figure shows how classes experience waste collection differently.

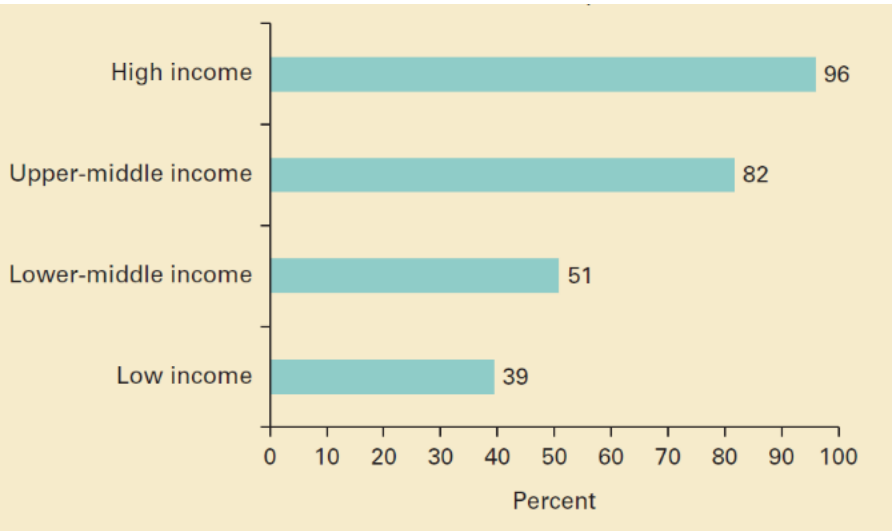


Figure 2: Global Waste Collection Rates by Income Level.

Credit: World Bank.

The proper or improper handling of waste is also largely dependent on government facilities and legislation. In South Africa, municipalities are said to spend between 20% and 50% of their expenditure on proper waste management (Wilson & Velis 2011). This is not nearly high enough to sustain rapid urbanisation and the increase in waste predicted for the years to come. In a content analysis, Fakoya (2017) notes that some of the major challenges in the South African waste management sector include a lack of experience among service officials; a lack of clearly defined roles and responsibilities; and a discrepancy between staff qualifications and actual job

requirements. Further to this, poor governance has meant that the existing waste-management infrastructure is almost 100 years old (Begg 2022). Corruption has also had a major impact on how funds are distributed and managed In the waste collection and disposal sector. In 2016/2017, around R323 million was allocated to address the sewage pollution at the Vaal catchment area. Only R36.4 million of those funds were actually spent on a wastewater treatment plant while the rest remains unaccounted for (Begg 2022).

From this context, private individuals and organisations have sprung up to take matters into their own hands. One such example is seen in the form of waste pickers. Schenck & Blaauw (2011: 411) note that even though we often see waste pickers in the streets of South Africa, little is known about them by the public at large. It is estimated that between 60 000 and 90 000 people earn a living as a waste picker in South Africa (Dlamini 2016: 5). Despite their importance, waste pickers are not only marginalised by civilians, but are restricted by government who views their involvement in the waste management process negatively (Sentime 2014). And even though there is a clear need for these people who play a crucial role in waste management and responsibility, they are often looked down upon and viewed as dirty by society (Schenck & Blaauw 2011: 412). Furthermore, a lack of inclusive legislation has made it hard for waste pickers to make a decent living, and has also negatively impacted their working conditions (Dlamini 2016: 6). Dlamini (2016: 54) also finds that waste pickers are often exploited since there is no formal body to represent them, nor is there legislation to protect their rights.

Sembiring and Nitivattananon (2010) confirm that waste is a subjective issue (to some it is considered an off-putting environmental hazard, while to others it is a useful resource that can generate income. To pickers, waste is their only source of pay. Not only do they sort our rubbish and (to some extent) clean our streets, they also contribute to the economy. In fact, it is estimated that around 2% of the world's population makes a living by dealing with waste material (sorting through it, repurposing it or selling it as scrap). On the other hand, waste pickers are only one part of the entire waste cycle and are thus dependant on other role players. As Medina (2007) puts it, waste pickers can only make a living if people generate waste, which in itself is a *catch 22*.

While in many African cities where 95% of waste is not properly collected or recycled, developed countries such as Sweden see their citizens individually drop off their waste at recycling centres (Simelane 2015). Mohee and Bundhoo (2015) attribute this juxtaposition by noting that developed countries have proper procedures in place for the disposal of waste (including adequate legislation). In South Africa, the picture is somewhat different. On top of the lack of personal responsibility among locals, South Africa's waste infrastructure is outdated and heavily reliant on unsafe methods such as the use of open landfills where over 90% of all waste is dumped (Strydom 2018). This overflow is a major concern particularly in South Africa. In fact, it was estimated that "the city of Johannesburg's landfill space will be completely depleted by the end of 2023" (Dlamini & Simatele & Kubanza, 2018). This deadline was extended to "three years" from April 2022 (Qukula 2022). Furthermore, impoverished areas which were severely underserviced during apartheid, still lack the proper infrastructure and waste-removal services two decades later.

This means that we not only need waste pickers, but citizens also need to play a role if we are to fill the gap where government has failed. This is because one way to mitigate the rising rate of waste is to collect it and either dispose of it correctly, or reuse and recycle it to prevent the overflow in landfills. According to the World Bank (n.d.), "Sub-Saharan Africa collects about 44% of waste while Europe, Central Asia and North America collect at least 90% of waste". The data suggests that not only is Sub-Saharan Africa growing in terms of how much waste it produces, but it also ranks poorly in terms of how waste is collected, managed and recycled.

But do South African's recycle in the first place? According to Widmer et al. (2005), the recycling industry in South Africa is established since the rates of collection for paper (52%) and tin-plate steel cans (63%) is growing steadily. However, in 2018 it was reported that only 9% of South Africans recycle (Strydom 2018). In a survey conducted, Strydom (2018) found that most South African's give five reasons for non-recycling behaviour. These reasons are: insufficient space; lack of time; the lack of hygiene associated with handling trash; lack of education or knowledge; and a lack of conveniently located recycling facilities. Such figures demonstrate the apathy that most South African's have toward issues of waste and proper waste management.

Apathy is so rife in South Africa, that a study revealed the majority of working and middle-class South Africans do not care about recycling, and simply find it “too much effort” (PETCO 2019). Interestingly, the study also showed that economic groups are motivated differently when it comes to recycling. According to the findings, working class people said they were inclined to recycle if there was an economic benefit (either as a financial incentive or through job creation), while middle class and upper class people said their biggest motivation to recycle was because it is better for the environment. “Their biggest barriers to recycling are a lack of facilities and space to store the items within the home and a lack of understanding of where to take recyclables” (PETCO 2019).

This apathy, along with a lack of basic services, infrastructure and policy, is further entrenched by poor education on the subject, as well as not enough reporting on environmental issues by the media. Nikravech et al., (2022) conducted a study in which they monitored the amount of food waste created by a group of people before and after educational programmes were delivered. They noted significant decreases in food waste production post the programmes, suggesting that education and awareness building does indeed play an important role in waste mitigation. Other research confirms that there is a strong link between education and improved environmental behaviour (Damerell et al., 2013; Goldman & Alkaher & Aram 2021). In her study, Kubanza (2010: 89) raises the point that the mismanagement of solid waste is due to a lack of knowledge or understanding of waste by the general public. As above, it was also found that there is a general lack of interest in waste, since “people do not care for their environment, even if the waste that results from their daily activities poses a threat to their lives” (Kubanza 2010: 90). Top-down education however, can only go so far. For the most part, individuals need to take responsibility for their own learning about waste, as well as the actions to mitigate it.

It is clear that there is a general lack of interest in issues of consumption and waste. How does this sense of interest and accountability (or lack thereof) differ between classes? And to what extent is our distance from waste also influenced by other factors like race or gender? In her study about environmental issues as perceived by the middle-class Anantharaman (2015) finds that “sustainable behaviour is directly

enabled by privilege". In other words, involving oneself in sustainable practices is seen as a privileged lifestyle choice made by the upper class, while the poorer classes engage in recycling and related activities as a means of survival. Authors such as McLean (2000), Langenhoven and Dyssel (2007) and Samson (2010) confirm that waste pickers do not enter the market for the environmental benefit their activities may have, but for economic reasons. While the poor tend to have to live with waste or use it as a means for survival, the richest people in society are able to ignore it completely. This is not only due to the fact that poor people tend to not want to waste as a means to save where they can, while the rich can afford to replace things whenever they want to. The rich also tend to live, work and travel in areas that have less visible waste, while the poor have been historically forced to reside alongside it due to poor service delivery and neglect. For example, despite producing the most waste in the country, Gauteng is home to some of the most affluent suburbs nationwide. Meanwhile provinces such as the Eastern Cape (where poverty rates are high) produce considerably less waste (Nkosi et al. 2013). It is therefore clear that there is a link between waste and class, but how is this felt and accounted for in the lived experiences and self-perceptions of middle class people? The two types of waste that are highlighted in this discussion include food waste and plastic waste.

Food Waste

Food waste contributes about 8% toward greenhouse gas emissions that cause climate change (Crippa et al., 2018), and the World Economic Forum says the biggest contributor to global waste is food and green waste. Furthermore, research shows that higher income levels seem to generate less food waste (32%) compared with middle and low-income countries (53%). Overall, it is estimated that about a quarter of consumable food is wasted during the production, sale and consumption process (Graham-Rowe, 2014; Stancu, Haugaard & Lähteenmäki, 2016). Within this process, consumers are the biggest contributors of waste (Aschemann-Witzel et al. 2015). The cost of food waste is said to amount to around R21 billion per year in South Africa (Nhaman et al. 2012: 2152). Furthermore, Ramukhwatho et al. (2017) say that food waste has increased over time, and that "South African households waste an average of 6kg of food per week".

There are several factors to consider in relation to household food waste. One of these is the number of people living in a household. Ramukhwatho et al (2017: 8) finds that the more people sharing a household, the less waste they are likely to produce because it is probable that better planning has gone into the consumption and waste mitigation processes. This is confirmed by Jörissen et al (2015: 2702) and Koivupuro et al (2012). Other reasons cited for household food waste include buying or cooking too much, poor storage, and poor planning. The main reason for food waste however, is making too much food at mealtimes (Ramukhwatho et al 2017: 8).

Despite the reasons for food waste, there again seems to be a correlation between social class and the amount of waste produced, as well as how that waste is managed. In a qualitative ethnographic study, Soma (2017: 3) finds that the way food waste is perceived changes according to the class perceiving it: "as food waste practices are socially and historically constructed as well as naturally subjective, they should not be divorced from class-based analysis". In terms of ridding of food waste, it was interestingly noted that upper classes thought it standard practice to rid their waste to the lower classes, although when gifting food to upper classes, they bought new, fresh produce. In other words, lower classes are seen as deserving of living with waste while upper classes are seen as separate from it, or *better* than it. Furthermore, this act of "ridding" of food waste to the lower classes shows that the upper class has a perception that those who are less fortunate care less about the quality or health aspects of food than those in "better" classes do. It was also found that this act of "ridding" food to the lower classes, alleviates the upper classes sense of food waste guilt (Soma 2017).

The perception of waste as a marker of social identity is therefore hugely important if we are to understand the relationship the middle class has with their own by-product. As stated by Hoffman (2018), the Perception Framework says that people's perceptions are directly moulded by their motives, experience, expectations, and interests. Furthermore, Hamlyn (2017) highlights how this framework considers both internal (attitudes, beliefs, values, and responsibility) as well the external (media, culture, politics, laws) factors that shape our perceptions and subsequent behaviour. Food for example, is therefore perceived as a middle- or upper-class privilege that can be [acceptably] handed down to lower classes when it is no longer of good standard

or no longer wanted. This is indeed perpetuated in politics and the media, where those who are better off are shown donating “simple” or left-over food products to the poor (Soma 2017).

But *who* is producing food waste in the home environment, and who manages it? In their study of waste challenges in the Northern Cape, Viljoen & Schenck & Volschenk & Blaauw & Grobler (2021) found that most of the respondents with the titles “mother” or “wife” were the people who were primarily responsible for household waste management. Since women are still the predominant cooks and cleaners of the South African home, they are more likely to handle food and other waste compared with men (Annecke 2021). Furthermore, women tend to make purchasing decisions more carefully by considering eco-friendly alternatives with less plastic packaging etc (Chirilli & Molino 2022). Such gender roles and the impact this has on consumption and waste, is unpacked further below.

Plastic Waste

It is important to consider that food waste is not just about the food itself, but about the packaging that the food comes in. It is common knowledge that plastic is one of the most hazardous types of waste due to its non-biodegradable nature. Plastic has and continues to overwhelm our rivers and oceans, so much so that an estimated 18 billion pounds enters our shared waters every year (Parker 2018), which is “the equivalent of five grocery bags of plastic trash sitting on every foot of coastline around the world”. It is clearly a global problem that requires collective effort, yet some countries still make it another’s problem. Edmond (2019) says that many first-world countries export their plastic waste to developing countries, making it an even bigger challenge for the global south.

One study found that South Africa is ranked 11th out of 192 countries as one of “the top 20 coastal countries in the world in terms of the volume of mismanaged plastic” (Jambeck 2017). South Africa is said to produce 2.4 million tons of plastic waste per year – “equivalent to 41kg of plastic waste per citizen”, which in 2019 was estimated

to cost the country R885bn (Bega 2021). Despite this, little seems to be shared in mainstream media about the true impact of plastic waste.

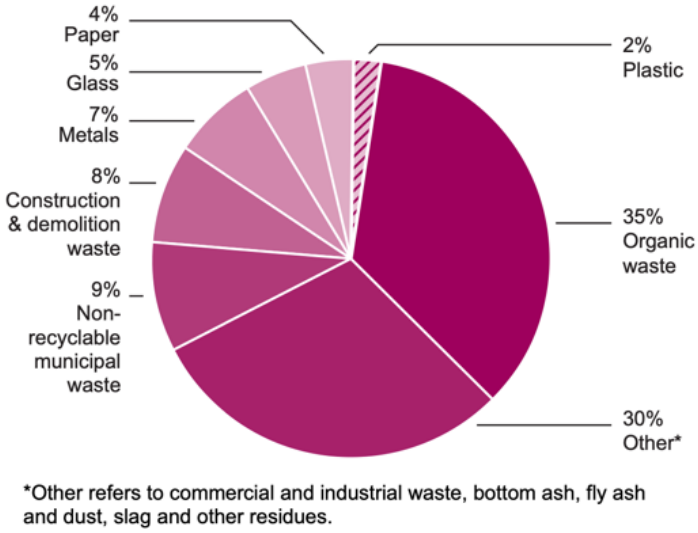


Figure 3: Breakdown of General Waste Generated in South Africa in 2017.

Credit: WWF

Media Reporting on Waste and Other Environmental Issues

The media has an unbalanced relationship with the natural world. It often puts environmental issues such as waste on the "backseat, both in Africa and the West, since it is profit driven and the environment just doesn't sell" (Hansrod 2016). Furthermore, Eco-media has moved from encouraging deep connections between individuals and particular places in nature, to a "sense of global connectedness" (Wallace 2018). This means that nature is often portrayed as "one thing" without any complexity, and without explanation of how this complexity affects each individual in different ways. If we switch on the TV and scroll through the countless reality shows, soapies and series, we will find that the media often underreports on issues of waste, which in turn makes it seem separate from people and society, and therefore, irrelevant to our lives. More importantly, the media tends to focus on environmental-type stories only in Western or developed countries, suggesting that places such as South Africa are further neglected in terms of media awareness and education (Schmidt & Ivanova & Schafer 2018).

One study revealed that “there is a lack of personal engagement with the subject” when referencing the perception of environmental issues among students in South Africa (Benoit n.d. 77). Another study found that South Africans’ understanding of environmental issues is “patchy”, and that climate change for example, does not have any “special relevance to South Africa or the rest of the African continent” (Daniel 2010). This could be compounded by a lack of education and poor media coverage, which the *Green Times* (2019) blames for public unawareness: “59% of South Africans do not know what climate change is”. Even more concerning, is that South Africans consider environmental issues as “rich people problems” – with little understanding of how such can affect their own livelihoods (Daniel 2010).

In their study titled *Environmental Issues in the South African Media: A Case Study of the Natal Witness*, Lawhon and Fincham (2006) agree that environmental issues such as waste are often seen as “elite” issues and are therefore skewed to cater for the interests of a historically wealthier market. It was found that the writers, sources and target audiences in “green” stories were mostly comprised of white men, suggesting that environmental issues are of most interest to this demographic. A study conducted by Boateng and Akosua (1993) confirmed that it is uncommon to see women in environmental stories, which only serves to further entrench the idea that white men are elite and interested in elite problems, and women and people of colour are seen as separate to the environmental conversation. Furthermore, examples of environmental racism are listed by Yusoff (2018) who notes that people of colour experience climate change in a much more obvious way, where post-colonial Black African’s live within environments that have been exploited, mined and left barren by white settlers. Lawhon and Fincham (2006: 115) conclude that if only elite environmental perspectives are shown in the media, that elite problems are framed as important and therefore other environmental issues are seen as less important to the majority of the South African population.

Not only has the media favoured a white male narrative when it comes to environmental issues, but it has also favoured topics that occur in developed areas. According to McDonald (1997: 329), “mainstream media coverage of the environment in South Africa is dominated by conventional green issues. Even less is said or written about environmental problems in the townships so it comes as no surprise that people

who get all of their environmental education from the media would develop similarly narrow perspectives". This was confirmed in a later study, which revealed that the South African media is "still limited by demographic factors which influence the news agenda" (Suliman 2018). It is therefore likely that the majority of South African's who live in poorer areas are led to believe that their environments are less important than those of affluent suburbs. This sense of detachment leads to a further lack of responsibility and deepens environmental racism.

Ruiters (2001) defines environmental racism as "the inequitable distribution of environmental quality, burdens and dis-utilities that impact on members of subordinate groups". Simply put, it suggests that people who can afford to live in a beautiful waste-free environment are less impacted by environmental issues, and are also in a position to look down on environmental issues that exist "elsewhere". Environmental rights are in fact considered "fundamental to de-racialisation and human rights" according to Section 24 of the Bill of Rights, which states that every South African has the right to live in an environment that is not dangerous to their wellbeing or health (South African Human Rights Commission 1999). Unfortunately, this is far from the reality that millions of poor people face where the general perception of being removed from environmental issues is tied to prioritising having to worry about one's survival.

This is especially true in the South African context, where almost half (49.2%) of the adult population lives below the poverty line (StatsSA 2020). It is fair to assume that the main priority of these individuals is to feed, shelter and care for themselves and their families. Without having access to these basic needs, it is difficult for civilians to consider non- survival factors, such as the problem of waste. Furthermore, the country's pressing issues (housing, land, employment, inequality, crime, corruption, service delivery and sexual violence to name a few) tend to take precedence over environmental issues. The difficulty with this is that South African's can be wrongly lead to believe that environmental issues have no relationship to their livelihoods - namely in job creation and health (Death 2014:1227). Interestingly enough, despite the fact that they are most affected by issues of waste, working class and poorer people are said to consume less and produce overall less waste than other classes (because they consume less) – despite the misperception that they are the "dirtiest"

class. For example, it is estimated that “all South Africa’s Black households together consume less than a tenth of household water use in the country” (Ruiters 2001: 99).

Further to this, many people around the world feel helpless in their mitigation of their carbon footprint, since such “requires large scale activities” (Benoit n.d. 77). Important to note is the lack of personal attachment some people have with the environmental issue of waste. Some South Africans for example feel distant from such issues, and the media perpetuates this distance by not reporting on related stories enough or with enough accountability. Noteworthy is that the same study says media may portray environmental issues as unsolvable by average citizens, furthering the notion that they are removed from the problem. Vissers (2010) agrees in her paper titled *Perceptions of Air Pollution and its Impact on Human Health in the South Durban Basin: A community Perspective*, but goes further to say that the media – through the portrayal of risk perception – has the ability to influence people’s behaviour (and thereby encourage citizens to act in a way that is less harmful to the planet). Anderson (1997) on the other hand finds that media reportage on environmental issues seems to only occur when other issues (such as war, economic stability etc.) are shown as stable. This suggests that not only does the media prioritise other issues over environmental ones, but that the public is made to believe that we should only consider “green” issues when we feel secure enough to do so. Furthermore, Lawhon and Fincham (2006: 116) find that environmental issues seem to gain attention or prominence only when they are endorsed by those in positions of power such as officials or celebrities.

It is clear that the media has the power to change this narrative and make South Africans aware of the fact that the environment forms part of our basic survival needs, and is not merely a distant problem that only Western countries concern themselves with. The media is indeed a “key factor in the formation of individual perceptions about the environment” (Kwansah-Aidoo 2001). For this particular study, the media is a relevant factor since research participants were asked to explore their relationship with and reliance on the media, when it comes to environmental information and news.

South African Media: Current Focus and Trends

According to Kemp (2021), 67.6% of South Africa’s population lives in urban centres, and the remaining 32.4% lives in rural areas. There are 38.19 million internet users in

South Africa (as of January 2021) which is an increase of 4.5% from the previous year. There are also over 100 million mobile connections in South Africa (as of January 2021), making it the most common technological device used in the country (Kemp 2021). These statistics show an increase in general media consumption across the country with numbers predicted to grow. It is with this increase that special attention should be given to the type of media South African's are consuming (more specifically, the content covered and what this says about our society and our perception of waste).

But before considering the content covered in local media, it is important to think about who owns the media and what agenda they themselves put forward. As noted by Daniels (2013), the post-apartheid media in South Africa is much more inclusive in that more Black people (and their perspectives) are being represented. Further to this, more women are being given opportunities in this previously male-dominated industry. However, despite greater representation, the male voice and perspective is still the most apparent. This affects the type of stories being reported on.

As said by Ornico (2019), several themes are prevalent in South African media. These themes include politics, power outages, strikes, crime, corruption, and unemployment (issues that have historically held greater significance for Black people and women). More recently, much news coverage has revolved around Eskom and the effects of load-shedding on society and the economy. Furthermore, a casual search on several local news sites (including *News24*, *Times Live* and *Mail & Guardian*) reveals how local media is even concerned with global political issues such as the war in Ukraine or missile testing in Korea. Very little (if any) is reported on environmental matters such as waste, despite the natural world being the source of all our livelihoods. It is therefore no wonder that many people feel distant to issues of over-consumption and waste.

Based on this data, we can assume two things. One: South African society prioritises certain issues over others, and two: the media is partly responsible for this prioritisation, or at least perpetuates it. According to the Agenda Setting theory – which puts forward that society is led to prioritise certain themes or ideas over others because said themes and ideas are focused on by the media – South African's are led to believe that environmental issues such as waste are not in fact "issues" because they are not often reported on (McCombs & Shaw 1968). Conversely, through repetitive advertising, South African's have been led to believe that happiness lies in

consumption (Copello 2021). And although Agenda Setting is difficult to measure, this theory supports the idea that there is a relationship between how we perceive consumption and waste in the media, and how we behave in our own daily lives.

Environmental Issues in South Africa

Despite having a relatively low rate of media coverage on the environment, South Africa has its fair share of waste, carbon, deforestation (specifically the cutting of indigenous trees to use or sell as firewood) and illegal poaching issues. Meanwhile, while China is the first, South Africa is the 13th biggest contributor of carbon emissions in the world (Union of Concerned Scientists 2020). Global Forest Watch (2019) reports that South Africa has lost 36.4kha of natural forest since 2010, while alien invasive species continue to pose a major threat to local flora (Mostert & Gaertner & Holmes & Rebelo & Richardson 2017). However, according to Death (2014: 122) when asked about an environmental issue that is most worrying in South Africa, "20,3% cited unclean water, followed by littering (17,6%), unclean air (16,1%) and the wasting of water (14,1%)". Important to note is that these issues affect different groups differently. As mentioned earlier, despite producing less waste than middle and upper classes, the poorer classes tend to have to deal with the majority of waste issues. How might this change with a growth in the middle class?

The Middle Class

How exactly is the middle-class related to consumption and waste? The World Bank (n.d.) agrees that waste production seems to be directly correlated to income level and status. Kharas (2017) says that the middle-class consume, pollute and waste more than poorer classes. For example, the middle-classes in India have been identified as a "fast-growing, aspirational, high-consuming, large environmental footprint population" (Anantharaman 2015: 1). To add to this, Kharas and Hamel (2018) say that half the world's population could be considered middle class: "some 3.8 billion people, live in households with enough discretionary expenditure to be considered 'middle class'. With a global population of almost 8 billion, and an increase of 18% for those classified as middle class in 2019 alone, it is the "class to watch" in terms of future spending and waste production (Bloomberg 2021). Almost two decades ago, research linked the rising numbers in middle-class citizens (especially from developing

nations) to detrimental effects on the planet. Myers & Kent (2003) for example, argue that the more middle-class citizens there are, the greater the demand for meat products, cars, and other consumer goods that are known to require a great deal of energy and resources for production. Despite this, overpopulation continues to put strain on natural resources, and a growing global middle-class only deepens consumerism in popular culture.

South Africa's middle class is also growing – both in number and in its inclusivity. "Black diamonds", (albeit a marketing construction) is a term used to describe a group of post-apartheid people who can now afford to (and have the freedom to) consume how and when they want to. Chevalier (2015: 119) states that this new multi-racial class is actually recreating a local identify through the act of consumption. In fact, Bennet et al. (2009), Bourdieu (1984), Jaffrelot & Ven der Veer (2008) and Liechty (2003) agree that the middle class is synonymous with a class that consumes. And with a growing middle class who is actively consuming, it is only natural that there is also an increase in waste production. In fact, the middle class in South Africa is said to consume at such a speed, that the average middle class person goes through up to 80% of their monthly salary within 5 days of being paid (Business Tech 2022). Noteworthy to this study is that the middle class in South Africa generates around 2,7 million tonnes of domestic waste a year (Greben & Oelofse 2009). But who is the middle class in South Africa? Although this is an important question to answer for this study, it is seemingly impossible to do so.

According to The World Bank (2018), around 20% of South Africa's population can be considered middle class. However, various organisations and researchers differ in opinion when it comes to defining middle class and what requirements must be met to be a part of this group. As Lopez and Weinstein (2012: 21) say, the middle class is incredibly hard to define because class is in itself an evolving concept that can depend on material wealth, cultural norms, or even individual experiences. Chevalier (2015: 127) mirrors this sentiment when she says that the middle class should be "identified through common practices, in the home as much as in newly shared spaces".

Visage & Posel (2013) on the other hand, argue that the middle class is "typically identified as those individuals who occupy the middle strata of the income distribution".

While in developed countries this definition classifies the middle class as fairly affluent, in developing nations such as South Africa, this could mean that the middle class is actually poor since the median income is so low. Therefore, using such a method of measurement is skewed, since the majority of South African's do not earn very well to begin with. For example, a study that calculated the median income of the middle class in 2008, revealed that said individuals earn between R380-R1140 per month. In stark contrast, Orthofer (2016: 3) states that around 10% of South Africa's population owns more than 90% of all the country's wealth.

Simpson (2016) on the other hand, argues that the middle-class can be defined as those who earn between R22000 and R70000 per month, have a white-collared job and own a car. In fact, much research conducted in South Africa states that the middle class should be calculated based on their "threshold level of affluence". Simply put, this means that a way to define someone's class is by their income level. What is problematic with this definition is that it fails to account for those individuals who do not earn a living, yet many of whom live "middle class lifestyles". Visage & Posel (2013: 151) therefore say that a more common approach to defining the middle class is to consider household wellbeing: "an individual is identified as being middle class if he or she lives in a household in which total household income lies within a certain range". In 2009, StatsSA defined the middle class as people who have formal housing with water and electric facilities, a cooking source and a means of communication (i.e. a cell phone). This definition is much more inclusive, and could therefore include people from vastly different income levels.

On the other hand, Check (2018) says the middle class can be defined or understood according to particular criteria. These are: self-identification; calculating the middle based on income; defining "middle class" based on universal income ranges; considering the occupation of an individual; and determining the vulnerability of that group to fall into poverty. According to Check (2018), self-identification refers to how researchers can simply ask the population how they define themselves (working, middle or upper class). In 2013, a World Values Survey revealed that 54,1% of South Africans feel they are middle class, even though around 24% of these same respondents said that at one time or another, they had gone without food. The problem with self-reporting is that people are subjective, and their definition of "middle class" is

also therefore subjective. In some studies in Soweto (Phadi & Ceruti 2017), it was shown that people often misreport on which class they belong to for several social and psychological reasons.

The second way to work out who the middle class is to consider the income of all South Africans and then work out with the middle or median income is and the group who receives such (as is mirrored by Visage & Posel 2013). The third criteria to measure the size and scope of the South African middle class is to use a universal range or method of measurement. One global company (Credit Suisse) calculated that South Africa's middle class comprised 28.5% of the total population. This study did not consider race or any other demographic factor.

A further study by the African Development Bank rather states that the middle class is those individuals who consume around R24-R240 per day. "By this measure, a rather impressive 43.2% of South Africans were middle class" (Check 2018). The issue with such a measurement is that its umbrella is too broad and includes people who have vastly different earning and consumption potentials.

The next factor to consider when defining the middle class is occupation. Visagie (2018) says the middle class have "typically middle-class occupations, like managers and senior officials". According to this reasoning, around 29.9% of South Africans can be considered middle class. Lastly, it is worthwhile considering how vulnerable a group is to experiencing poverty, when trying to work out if they are middle class or not. The Southern African Labour and Development Research Unit found that the middle class has a certain level of security that lower income or classes do not have. It worked out that only 13.5% of South Africans have a less than 10% risk of falling into poverty, and are therefore middle class.

While it is "easy" to define class based on what they have, another consideration needs to be given to how class is in itself also a verb and not just a noun. A term described by Chipkin (2013) as "middle classing" says that people are required to take some sort of action to belong to a particular class. In South Africa for example, the middle class is seen as those individuals who are rejecting cultural norms and traditions for a more self-centred way of life. As James (2017:2) puts it, "middle classing can entail considerable ambivalence, especially in relation to obligations, relationalities and

dependencies". Furthermore, this concept of middle classing also speaks to how much people own and what *types* of goods they own. Among the middle class it is found that DVD players, washing machines and other goods are the same as each other. In other words, "middle classing" is not so much about standing out as it is about fitting in or keeping up with the Jones' (James 2017:3).

It is clear from the above that defining the middle class – particularly within the South African context – is a complex task. For the sake of this research, the middle class is defined by an abstract social construction of what it "typically means" to be middle class in South Africa using some of the abovementioned criteria. This means that the middle class here, will constitute as those individuals who are aged between 25-45; pay for their own suburban home or living space (either through a bond or rent); have a monthly income of over R15000; have a tertiary education; and live in a South African suburb.

By "ticking off" these criteria (that all participants have an income and education, as well as a reasonable place to live), it is postulated that they can be considered middle-class. Furthermore, by only considering a certain age group who live in a suburb, this study will be more manageable and focused – providing the research with rich, interesting data about a particular number of participants and their mindset.

The Middle-class Mindset and Waste

The middle class now constitutes around 3 billion people on the planet, and is "growing more rapidly than at any other time in history" (Kharas 2017). While there are many benefits to a growing middle class (namely that more people will have opportunities they may have been previously denied), Wiemann (2015: 6) says that "the imitation of the lifestyles of the old middle classes in developed countries based on excessive consumption of raw materials and energy by hundreds of millions of Chinese, Indians, Indonesians, Mexicans, Brazilians and South Africans will take the global ecosystem to its limits – and perhaps even beyond". Anantharaman (2015: 4) says that it is therefore not only important to study the middle class in terms of their high consumption and waste rates, but to also study them as a warning that their lifestyle is often seen as the "ideal" life by the poorer classes. This *encouragement* to consume will inevitably result in greater waste: "An increase in middle class citizens have

increased the rate, complexity of waste flow and the amount of waste generated (Muzenda & Ntuli & Pilusa, 2012). This is especially true given research that suggests most South Africans are only moderately concerned with environmentally conscious consumer behaviour, and are unlikely to exert pressure on others to be more environmentally friendly (Mkhize & Vigar-Ellis 2016). Furthermore, South Africa is ranked as one of the most price-conscious nations in the world (Nielsen 2021) suggesting that affordability is valued ahead of sustainability. Mr Price, PEP, Ackermans, Checkers and other are just some examples of local brands who have marketed themselves as being competitively priced. With so many affordable options, South Africans are likely to continue consuming to excess.

As part of this constant desire for "more", one positive trait that is often seen in the middle classes, is the need to educate oneself and one's children. According to Wiemann (2015: 2), "the motivation of the middle classes towards education is another positive effect for medium- and long-term economic development". Wiemann (2015:3) adds that "attitude surveys in several developing countries reveal that the middle classes tend towards more moderate and modern views than their poorest compatriots. This applies to the various aspects of democracy and individual freedom, but also to concern for the environment". In other words, the better educated a nation is, the more interested they are in sustainable practices, and the less likely they might be to waste.

Not only could this drive for education encourage a deeper understanding of the effects of consumption and waste (and solutions thereof), but could also lead to better decisions being made from the highest levels in society: "The rising sophistication of middle-class consumers puts pressure on industries to raise the quality standards of their products" (Wiemann 2015: 2). This is already seen in the retail space, with more and more companies claiming to be "eco-friendly" and sustainable in order to attract a better educated (or at least, more environmentally conscious) middle-class customer.

However, with this growing need for industries to adapt to "green" demands, new issues have arisen. For example, it is now considered somewhat trendy to be a green citizen, and those publicly involved in such movements (including Lauren Singer – founder of "Trash is for Tossers") represent a particular demographic that by default

excludes others. Lauren is a white, young attractive female who lives and promotes a waste-free lifestyle in New York (Iqani, 2015: 43). Although aspirational, she has little in common with millions of Black South African's who have several socio-economic factors going against their strives toward sustainability. If we look at big eco-brands in South Africa (such as Faithful to Nature and Wellness Warehouse) we notice a similar trend – that white, middle to upper class people are behind these brands. Most South Africans therefore, have few role models to look to when wanting to adopt sustainable practices. This is but one example of how issues of waste are not merely about the waste itself, but how perceptions of waste can differ between various races, genders and cultures around the world, that therefore impact our individual and collective relationships with it.

In a paper titled *Middle Class Prosperity Can Save the Planet*, Kharas (2017) says that "everyone wants both prosperity for individuals and a healthy planet. But the tools that are used to try achieve these aims often have conflicting effects". For example, it is difficult to coincide the need for economic development (particularly in countries like South Africa) with green policies that are often more expensive than conventional ones. For the average citizen, going green is generally more expensive than buying conventional products. A simple Google search reveals that a pack of 20 bio-degradable nappies for example, cost R189.00 from Faithful to Nature, while a pack of 24 standard nappies from Huggies cost R68.99. This difference of R120 could mean food to feed a low-income family in South Africa for a week. As Iqani (2015: 43) asks "does one need to be white, rich and privileged in order to live a zero-waste lifestyle?"

These conflicting ideologies are causes for concern, since as Iqani (2015: 18) says, the media tend to encourage people to view themselves as "supremely deserving of any and every pleasure", while at the same time we experience this need to restrain our actions for the sake of our community and the planet. Highlighting the latter, Wiemann (2015: 210), says that "to prevent future disasters such as a climate collapse and more extinction of species, all people above the poverty line will have to restrain their material and energy consumption". But to restrict consumption would also mean to limit people's freedom, and to hinder industry and the growth of global economies that rely on the spending habits associated with the middle class.

It is these considerations and the broader question (how to use the media to reconcile a growing middle class with sustainable practices) that must be answered if the middle class is to view issues of consumption and waste as their responsibility.

Gender

Just like there is a correlation between class, consumption and waste, there is also a relationship between gender and the way people live. In order to unpack gender roles in relation to consumption and waste, it is first important to establish a definition of gender – a particularly complicated task given the shift in societal thinking, the call for inclusive language, and heated political debate that has surrounded the term.

The World Health Organisation (2023) defines gender as "the characteristics of women, men, girls and boys that are socially constructed. This includes norms, behaviours and roles associated with being a woman, man, girl or boy, as well as relationships with each other. As a social construct, gender varies between societies and can change over time". This definition goes further to account for the fact that gender has created social and economic inequalities within society, and the term tends to intersect with race, class, age and other factors that give expectations about ones identity. Sex on the other hand, refers to a person's biological and physiological state (for example, being born with a vagina and uterus and therefore being classified as a "female").

As with many labelling words, the term "gender" has become a human rights debate around the world – particularly in the global north, where many movements have shifted to make language more inclusive and the rights of all genders (but particularly women) recognised and protected. This however, is not necessarily the same in the global south. In many parts of the developing world, gender is still seen as binary with a man being both male in sex, and behaving in a stereotypical "manly" way, while a woman expected to be the opposite – but not equal – to her masculine counterpart. Gender issues such as violence, job opportunities and the pay gap, poor access to healthcare and education, child marriage and a lack of representation are still rife in Africa, Asia and Latin America. African countries like Niger, Mauritania, Gambia, Sudan and Morocco are some of the poorest ranking countries in the world, according

to the Gender Inequality Index (United Nations 2020). In fact, gender inequality is listed as “one of the greatest threats to Africa’s future” (Egbetayo 2019). And while South Africa does not rank as poorly as the other African countries on the index above, it is the number one most dangerous country in the world for women, and has the third highest rape rate in the world after Botswana and Lesotho (World Population Review 2023).

Gender Norms in South Africa

While gender roles have evolved over the last few years, South Africa still pres cribes to a traditional patriarchal system that values the power, abilities and interests of men above women. These patriarchal values are prevalent in most parts of the country, and are perpetuated by cultural and religious beliefs, as well as existing political systems. These structures have allowed for men to continue to hold positions of power while their counterparts are still predominantly found in subservient roles, which is evident in many local cultures. As Langa (2012) puts it, “in Zulu culture, as it happens in most African cultures, a husband and a wife do not have equal status”. The Zulu man is an authoritative figure in his house at all times, and everything within that house is his possession. This possession extends to women and children, who have historically been thought of as the property of men who are either their fathers or husbands, and who are able to control women - financially, physically or otherwise.

The theme of control is central to a patriarchal culture, and extends much further out the home environment and into the political sphere. When one thinks of apartheid for example, the first thing that comes to mind is racial injustice, segregation and inequality. But apartheid was also particularly bad for women’s rights, and served to further imbed patriarchal perspectives in South Africa. While men of colour were still able to work, Black and Coloured women were denied the right to seek gainful employment. According to SA History (2019), “Black women faced three forms of oppression in South Africa during apartheid - racial, social and sexual.” This oppression has had lasting effects, and women of colour are still the most marginalised group of people in South Africa today.

While some circumstances have changed and improved (for example, a greater representation of women can be found in South African government, media and in business), much still needs to be done to promote gender equality and challenge traditional gender roles. Not only do these changes need to be addressed on a policy level, but also on a societal and cultural level too – a much more complex task.

Gender Norms in South African Media

As with all parts of South African society, the media has been profoundly influenced by patriarchal belief systems and structures. Women have (and continue to be) regularly portrayed as stereotypical mothers, housewives, caretakers or sexual objects, whose use and attractiveness is often prioritised over their intellectual or physical capabilities. In the media, women are secondary to men – serving to highlight their importance to meet the needs of the main character, which is that of the masculine. More than this, women have historically been underrepresented in South African media (particularly women of colour) while men have held decision-making roles, serving to perpetuate gender stereotypes and agendas in media messages. "Media are argued to act as a key cultural tool through which a particular version of gender achieves, as well as maintains dominance" (Luyt 2011). In 2019, it was found that men still dominate the decision-making process in the media industry, with directors only comprising 15% women (United Nations Women 2019).

While some local media has made strides to better represent women as independent and complex beings, most advertising still perpetuates stereotypical gender roles within the South African household. For example, most detergent advertisements still show women as the "cleaners" of the home, while many child-related products portray women as the caregivers. Holtzhausen (2011: 176) found that women who appear in South African commercials tend to be promoting personal care products above any other category. Second to this is food, then household items. The adverts that featured the least women involved electronics and entertainment, with sport being at the very bottom. This suggests that women are associated with personal care, food, and the household, and that "the proportionality higher frequency with which females are associated with personal care products emphasises the importance placed on their looks and debatably contributes toward their sexualisation" (Luyt 2011). To add to this,

women are still flaunted on men's magazine covers as desirable objects simply here to satisfy men's search for pleasure. It is noteworthy that the media in South Africa is even further behind in representing non-binary or gender non-conforming individuals.

Luyt (2011) also states that men are often portrayed as "dominant" and as characters who hold social authority. On the other hand, women tend to be portrayed as secondary, and feature most in the "socially undervalued private-domestic area". More recent research confirms that gender-based inequality still exists in the media. While women have an increased presence on the news (from 25% in 2015 to 39% in 2019), they are still underrepresented (United Nations Women 2019). The same report reveals that gender stereotyping is still strong – especially in entertainment media: "the study found one third or more of the items monitored to be gender aware and the rest either gender blind or conveying subtle or blatant gender stereotypes". Furthermore, the study found that women on TV are still predominantly associated with entertainment and children's shows, and that the presence of older women on TV is disappearing: "Women in the age group 20 to 35 comprise 66% of subjects. But women aged 35 to 50 dip to just 36% of the total, and women over the age of 50 to just 16% of the total". Another interesting discovery made by this research is that crime and violence account for the most covered topic in South African media (21%) while Gender Based Violence as a topic is only covered in 2% of the news (only 5% of which is about prevention), despite it being so prolific in South Africa.

On the other hand, stories on climate change and sustainable development are covered predominantly by women. What this suggests is that besides being stereotypically associated with child-related or home-based activities, women are also portrayed to be "caring" toward green issues. This is the case in most countries (Hunt 2020). The implication is that men are removed from environmental issues and are therefore encouraged to become less interested in them over time. Another observation is that nature has historically been assigned gender. For example, hurricanes and tropical storms are typically given a woman's name – as well as assigned sexist attributes like being "temperamental" (Little 2017). Flowers and plants (both in their Latin naming and in the act of gifting) are seen as feminine items and gestures too. This further entrenches the idea that environmental matters speak to women rather than men.

Gender Influences on Waste Production

What does gender have to do with waste? While there are stereotypical ideas of how genders behave (for example, that women love shopping for shoes and men love shopping for cars), there are some undeniable differences in how genders consume, and subsequently waste. Martens & Casey (2007) state that a woman's role in consumption is underpinned by "everyday gendered practices" and that class, sexuality and age all contribute to how a woman consumes and wastes. Women for example, use pads, tampons, and other sanitary products which men don't need to consume.

While "shopping" or retail spending is considered a stereotypically feminine activity, in 2017, the South African Department of Statistics stated that "male-headed households spend more on clothing and footwear than female-headed households." Another interesting finding was that average South African households tend to spend more on recreation and culture, than they do on education. Not only does this show South Africa has unique consumption behaviour, but it suggests that in general, South Africans tend to prioritise "fun" over learning.

Several other studies conducted agree that there is strong a correlation between gender and the amount of waste an individual produces. "Although they are more likely to be unemployed and earn less than their male counterparts, research has found that women hold the buying power in most South African households" (IQ Business 2020). A study by Nielsen (2021) reveals that despite earning less than men, women tend to spend more in many categories such as toiletries.

While most research suggests that women hold the buying power, they are also seen as more eco-conscious than men. This is now known as the "eco gender gap". Lecturer in Sustainable Development Rachel Howell says "research suggests that women have higher levels of socialisation to care about others and be socially responsible, which then leads them to care about environmental problems and be willing to adopt environmental behaviours" (Hunt 2020). While it is not clear why so many women are

this way inclined, it seems to be a major factor in what “puts men off” caring and making eco-conscious decisions. This is because they associate this behaviour with femininity, and “one study found that men could be disinclined to carry a reusable shopping bag for fear of being perceived as gay” (Brough & Wilke & Ma & Isaac & Gal 2016). This is supported by other research, which states that environmental activity is gendered. Bloodhart & Swim et al., (2019) for example, argue that environmentalism is synonymous with “caring” for those around us, which is innately a feminine characteristic. Brough and Wilkie (2017) confirm that men are likely less interested in environmental issues, as caring about such things is viewed negatively as “too feminine”. Hunter et al,. (2004) for example, also state that “household behaviours such as recycling or sustainable food purchasing, tend to align with feminine roles,” while out-of-the-home activities such as protesting are seen as “masculine”. More than this, men tend to want to preserve their stereotyped gender identity and will go out of their way to behave in a “masculine way” to prevent being seen as feminine: “men are less likely to purchase green products and more likely to eat meat when they are motivated to counteract appearing feminine” (Brough et al, 2016; Pohlmann 2015). This need to “hold on” to a gender identity is not only seen in men. Rudman and Fairchild (2007) for example, find that women also want to avoid appearing masculine. The research suggests that both men and women behave in a way to avoid seeming as the opposite gender, in order to avoid seeming unattractive, lesbian or gay, and the social stigma that may come from this.

Using an ANOVA test in their quantitative study to see the effects of gender on waste, Al-Khatib & Arafat & Daoud & Shwahneh (2008) found that 41% of women claim to never litter, while only 22% of men claimed the same. Furthermore, the study showed that littering by men was seen less negatively than littering by women, suggesting that women are expected to be cleaner than men in society (or at least in the context of Arab/Muslim culture). The study also found that cigarette butts were the most common item littered by men, while food waste was the most common waste produced by women.

More recent studies have yielded similar results. In a study titled “*Does Gender Matter? Attitude Towards Waste Changing Policy and Pro-environmental Behaviour”*, Wut et al., (2021) highlight that women are more prone to engage in environmentally

friendly behaviour. This is mirrored by Buckingham et al., (2020) who finds that there is a “persistent trend” indicating that women tend to have a greater concern for environmental issues as well as a greater desire to take steps to minimise their negative impact, compared with men. In her study focused on the impact of gender on food waste, Cantaragiu (2019) found that “women also tend to be more concerned about the negative impact of food waste on social equity or the family budget than men”. Interestingly, the study revealed that women can create higher food waste compared with men, because of their prominent involvement in food preparation and tending to cook large amounts to feed several people in a household. It was shown that women also tend to spend more time shopping compared with men and are more likely to buy additional items that were not on their initial shopping list, suggesting that women consume and waste more than men.

Women have however been shown to have a more negative perception of food waste (especially as they age) compared with men and are also likely to feel grater guilt when producing food waste (Cantaragiu 2019). This suggests that women are more emotionally or psychologically affected by waste (Graham-Rowe et al., 2014; Porpino et al., 2015).

Several studies agree that public awareness campaigns on waste production need to be targeted based on gender, as genders seem to waste differently.

The Gendered Household as a Place of Change

In a very interesting study titled *Feminised Concern or Feminist Care? Reclaiming Gender Normoactivities in Zero Waste Living*, de Wilde and Parry (2022) discuss how domestic responsibilities continue to be gendered, and that the modern interest in zero-waste living has unconsciously become the duty of the woman, since she maintains the home environment. Cleaning, grocery shopping, and cooking still largely remain tasks assigned to women. The study looked at 10 influential zero-waste blogs, and how these are all created and run by women who give advice, tips and insights into living a consumer-conscious life. It explores “zero waste living as both a *feminised* concern and as *feminist* care to illuminate the relationships and solidarities instantiated when environmental responsibilities are practised” (de Wilde & Parry 2022).

The above suggests that as issues of waste become more important, a woman's role or "duty" will be placed under the spotlight: "If environmentalism is increasingly seen as household behaviour, then it is women's lives that come under the most intense scrutiny as the new private ecological morality comes into focus" (Sandilands 1993). This is further ingrained by media and society which continues to perpetuate gender norms and expectations.

Waste and Gender Inequality

When people think of waste, on the surface it appears to be a general human issue – one that we have collectively been contributing to since the dawn of time. While this is true, the matter of waste (how waste is created and treated) is much more nuanced in terms of the individual, their class, race, culture, and specifically their gender.

For centuries, women have suffered inequalities brought about by the patriarchal society that are still prevalent in most parts of the world today. Women have been denied many of the opportunities given to their counterparts and have therefore experienced life very differently. The same can be said for their experience of waste. According to the Organisation for Economic Cooperation and Development (OECD), several inequalities have caused women to dispose of waste differently to men. For example, women have historically been expected to be the primary caregivers in the home, and to cook, clean and care for the home and those living in the home environment. This means that women are likely to be more aware of the type and amount of waste created in a home as they are likely engaging with it on a daily basis.

Historically, women have tended to be unemployed while men have worked and brought home an income. This suggests that men tend to have higher purchasing power over women and are therefore a more prominent figure in terms of how much consumption takes place in the home. Not only are men less aware of waste, but they are also likely to be the bigger contributors to waste (given this purchasing power).

This also suggests that men and women likely prioritise differently. For example, while men might look to consume items for personal enjoyment, women might look to

consume items that are useful for the home, last long, and serve the health, wellbeing or enjoyment of others in the home environment. Studies also show that women tend to prefer convenience and time-saving options, as their schedules tend to be busier with more multi-tasking activities.

The OECD (2022) also finds that men tend to be more involved in higher level policy-making decisions and are therefore more likely to influence the way consumption and waste management takes place – both at the household and national/regional levels. This suggests that despite women being more hands-on with waste in the home, they are not given a voice or ability to influence solutions or change.

Women also tend to hold fewer higher-paying jobs in the waste management sector and are less likely to be given the same opportunities as men (United Nations 2023). Further to this, women who work with waste (particularly in the informal sector) are more exposed to health and safety hazards compared with men. This is even more prevalent in the global south, where informal waste management is commonplace. A study focused on the correlation between gender and waste in Ghana found that "women solid-waste workers are denied access to training programmes or the use of tricycles (as a method of carrying waste) on the basis that it requires physical strength" (Amoah & Britwum & Essaw 2019). This suggests that women within an African context are denied certain waste-related opportunities as they are perceived as weaker than men.

There are also dangers in the waste management sector that are only relevant to women. For example, women are more exposed to intimidation, violence and rape when working in unsafe areas. Ogando et al., (2017) says that "women, particularly in the African cities, are dealing with institutionalised and economic forms of gender-based harassment and violence in their interactions with city officials, middlemen and male waste pickers."



Figure 4: Gender as an Influence on Waste.

Credit: Carina Mason

Theoretical Framework

As seen in the literature above, consumption and waste are complex matters that are directly influenced by a persons' race, class and gender. It is therefore necessary that the theoretical framework for this study is able to consider societal complexities and the way these intersect each other.

Feminist Theory

Feminist theory provides a critical framework for researchers to unpack the power imbalances between women and men, and attempts to question and challenge the way in which women live and are treated in society. Furthermore, feminist theory addresses the oppression that women have experienced throughout history and the way in which inequalities continue to be perpetuated. This extends to women's ability to make decisions, and even how she is expected to consume and waste.

Feminist theorists argue that "gender" is not a natural definition or concrete identifying factor. Rather, it is a socially constructed definition that has the ability to adapt and change as society adapts and changes. There have been several notable theorists

throughout history, who have each argued a different aspect of gender identity. Simone de Beauvoir for example, argued that the term “woman” is created in society, rather than being an innate factor that one is born with. In her historical work *The Second Sex* (1949), Beauvoir says that the concept of “women” has been created by men, who view women as “the other” so as to separate and subject women to an experience of life that is *less than*. As she states, “one is not born, but rather becomes a woman” (Beauvoir 1949). Similarly, Judith Butler recognises how gender is interrelated to other factors, and has played a key role in exploring the social and cultural construction of sexuality and gender.

Another theorist puts forward that society creates and maintains an environment where women are given roles but are dissatisfied with these roles. In her book *The Feminine Mystique (1963)* Betty Friedan urges women to challenge existing gender roles and seek out individual meaning and fulfilment. Throughout history, this has looked differently for women of different races and cultural backgrounds. bell hooks importantly puts forward that gender is very closely tied to race and class and that different classes and races experience gender discrimination differently. For example, a Black working-class woman will experience life differently to a white upper class woman. Kimberle Crenshaw agrees that different forms of oppression (be it gender, sexuality or race) intersect and reinforce each other. As she puts it, “intersectionality is just a metaphor for understanding the ways that multiple forms of inequality or disadvantage sometimes compound themselves” (Crenshaw 2017).

In the case of this study, this is to say that Black women respondents will have differing answers from white women respondents, as the two have had very different experiences as women. As seen in earlier literature, Black people experience waste differently to white people. Since white people have historically had power, they have had benefits (such as service delivery) not afforded to people of colour. The same can be said of gender. Since women have been historically undervalued in society, and Black people have experienced the same, it can be said that Black women have experienced “double marginalisation” (Settles et al. 2008).

With regard to how Black women and white women are portrayed in media, research also notes that white women are perceived as desirable, and as “nurturing”,

“dependent”, “submissive” and “emotional” (Baker 2005; Coltranee & Meessineo 2000). On the other hand, Black women are often portrayed not as “true women” but rather as “animalistic and hyper-sexed” (Collins 2000; West 2004).

Feminist theory is an important framework to use when considering how media represents gender and how these representations are used to exert power and reinforce patriarchal structures. The above suggests that Black women have been at the bottom of the “societal hierarchy” for decades. This has been perpetuated in the media by showing Black women commonly as tribal members, slaves and servants. While movies such as *Imitation of Life* (1959) and *The Help* (2011) have prominent women actors and familiar “female narratives”, viewers get a clear message that life is very different for Black women and white women.

As mentioned by Baker 2005; Coltrane & Messineo (2000), white women are often portrayed as figures of purity or sexual desire. The theory of the male gaze for example, says that media is constructed in such a way as to represent the perspectives and desires of the white heterosexual man (Mulvey 1975). Under this theory, we see that in much of the media, women are sexualised and depicted as passive and submissive to men. Dines (1995) goes further and says that not only are women submissive, but are typically portrayed as secondary characters to male protagonists.

When considering how the middle class in South Africa consumes and wastes, it is important to also take into account each person’s gender, race and other defining characteristics that have moulded their individual experience. It is also important to look for the social, cultural and media messages that may uphold and perpetuate gender norms and expectations. As has been clear thus far, South African society tends toward upholding the woman as a caring, loving individual, whose place first and foremost is in the home tending to her husband and children.

Through this gender role expectation, it is also interesting to consider how individuals are made to feel. For example, since women are expected to look after the home and make good decisions for all those who live in the home, they are likely to feel like they are letting people down if they do not make environmentally conscious decisions.

Furthermore, they are also subject to outside judgment for not fulfilling this role adequately.

As seen above, consumption and waste are incredibly complex topics, that are made even more complex by the intersection of gender, class and race.

Reasons For Choosing Feminist Theory

This research uses feminist theory as a theoretical framework in order to explore how consumption and waste are seen differently by men and women, and how the act of consuming and wasting are gendered activities. The framework helps to examine how gender roles influence people's behaviour, attitudes, values and beliefs within a particular context, and how these change between people who may appear to share similarities.

Important considerations which will help answer the research questions are:

- The way that South African societal cultures and beliefs shape gender roles.
- How historical/political factors have contributed to these gender roles in South Africa.
- How race and class intersect with gender, and how these factors contribute to differing experiences of consumption and waste.

The school of feminist thought that is particularly relevant to this research, is intersectional feminism which is part of the third wave of feminism. Intersectional feminism considers how women experience discrimination differently. First conceptualised by Kimberle Crenshaw (1989), intersectional feminism argues that Black women experience greater social challenges compared with white women. More so, Black women who are of lower social class and are not heteronormative, will experience even more discrimination. A Muslim Black, working-class gay woman will therefore experience discrimination on four fronts (religiously, racially, socio-economically, and because of her sexual preference).

The reason feminist theory, and particularly intersectional feminism was used for this study, is because South Africa is an incredibly diverse and complex landscape, where issues of race, gender and culture have been cornerstone to our history. Since intersectional feminism accepts that no one experiences life in isolation to one of their characteristics (for example, race), it is a fitting theory with which to unpack issues of consumption and waste through the lens of gender. Furthermore, as a woman myself, I approach topics of consumption and waste through my own gendered lens. I am also cognisant that more needs to be done to give women a voice through research – particularly women of marginalised communities for whom I have a great deal of respect and empathy.

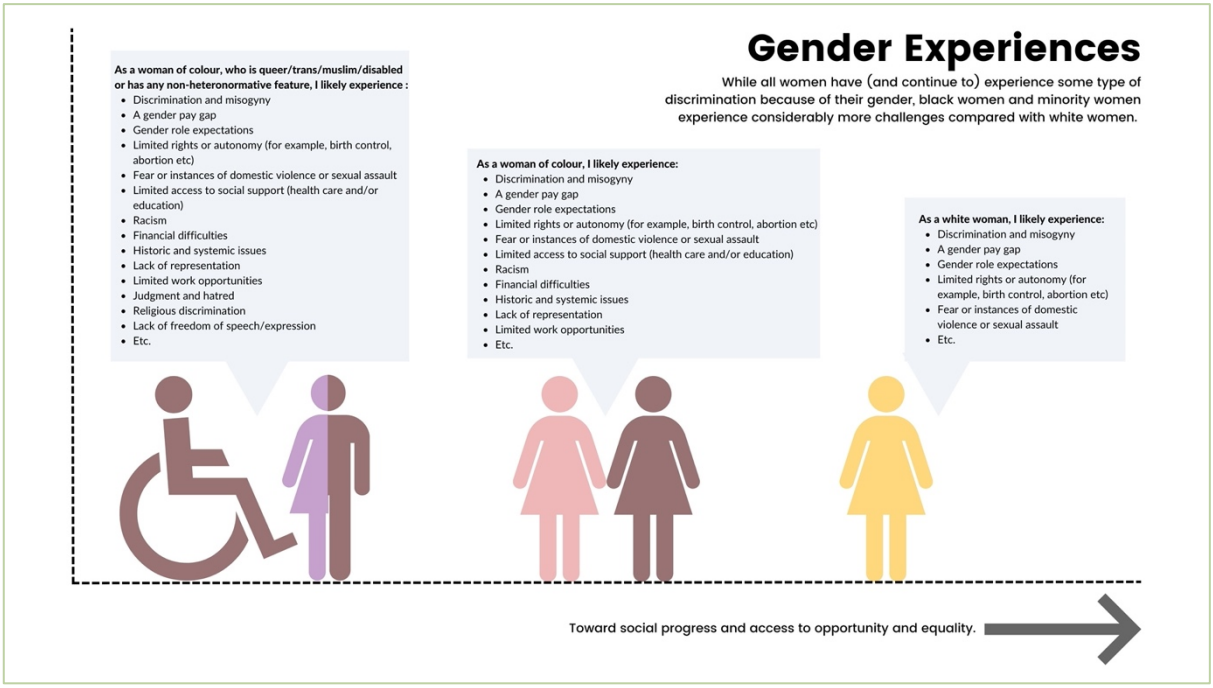


Figure 5: How Different Women Experience Life Differently.

This figure is based on all readings conducted by the researcher. Credit: Carina Mason

For ease of reference, the research questions are repeated below:

Primary Research Question

- *How do middle class women and men in South Africa, perceive waste and waste responsibility in relation to their own consumption?*

Secondary Research Question

- *How does race, gender and class affect the perception the South African middle class has on consumption, waste, and waste responsibility?*

Methodology

The first step in considering methodology is to agree on a philosophical position or paradigm. The philosophies or paradigms considered in qualitative research are ontology and epistemology (Moon & Blackman 2017). Ontology is concerned with what is (reality and what is possible to know about that reality) while epistemology is to do with the way we try to make sense of the world around us and understand said "reality" (Al-Saadi 2014).

The job of the researcher is to simply find this reality or truth (by means of observation) and expose it (Ritchie & Lewis 2003). Therefore, interpretivism and constructivism must be considered as possible realities. "Interpretivism and constructionism approaches argue that knowledge is produced by exploring and understanding (not discovering) the social world of the people being studied" (Al-Saadi 2014: 4). According to Tuli (2010: 100), "an interpretivist perspective […] sees the world as constructed, interpreted, and experienced by people in their interactions with each other and with wider social systems". Al-Saadi (2014: 4) reinforces this and accepts that the researcher is not separate from her research, but is rather able to further enrich it with subjective perspectives.

This study therefore uses the interpretivist paradigm, since the main purpose of this research is to understand the perception that a select number of research participants have on consumption, waste, class and gender. Under this paradigm, it is also recommended to build a relationship with respondents since it may encourage them to share deeper and more meaningful insight into a particular phenomenon (Al-Saadi 2014: 5). By using this paradigm, this study is therefore inductive in nature, since it aims to develop theory instead of relying solely on existing frameworks.

Due to the nature of this research (which seeks to explore and understand some aspects of the mind-set of South Africa's middle-class in relation to consumption and waste), and under an interpretivist-constructivist perspective, a qualitative research design is most appropriate. As Sutton (2014) says, qualitative research is context

specific, and seeks to understand the reasons behind certain behaviours or experiences in society in order to offer a rich and holistic view of particular phenomenon. Lune & Berg (2017: 12) agree that qualitative research tends toward asking 'why' and 'how'. In this study, it is imperative to understand the social and cultural nuances among the middle class, in order to better understand their perception of consumption and waste, and *why and how* they make the decisions they do.

Data Collection Methods and Techniques

For this study, the data collection process was broken into four phases. Phase 1 is where I conducted an initial semi-structured purposive interview with 16 South African citizens who possess the following key characteristics of middle class lifestyle as gleaned from the literature review: those individuals who are aged between 25-45; pay for their own suburban home or living space (either through a bond or rent); have a monthly income of over R15000; have a tertiary education; and live in a South African suburb. All participants were aged between 25-45 and are therefore adults (for ethical clearance purposes), and also because this age group represents the second largest age group in the country (after children).

These individuals were found via LinkedIn – the professional social media site that connects business people with one another. I posted an advertisement on my personal LinkedIn account, where I am currently connected to over 2000 individuals (of varying genders and races) from differing backgrounds and industries all over South Africa. LinkedIn was a viable platform since educated and working individuals use the platform, and were therefore relevant to this study. Furthermore, the research took the diversity of South Africa's population into account. As such, I tried to use representative amounts of participants from each of the four race categories. However, this was not the case. In the end, the participants comprised:

- 7 Black Africans.
- 2 Coloured or mixed race participants.
- 7 white participants.

Of these 16 participants, 10 identify as women and 6 identify as men (to account for the rich data that occurs from gendered perspectives).

Phase 2 of the data collection process entailed asking the research participants to keep a 24-48 hour waste diary. A WhatsApp conversation was created between myself and each participant where the participant recorded all the waste they produced within a 24 hour to 48 hour period. This was shared via text as well as through photos (for two participants). This type of data collection technique produced rich results, since it followed a “real life” lived experience of a middle class South African person and their consumption and waste. Waste diaries have been successfully used in several previous studies conducted by Langley et al (2010), Silvennoinen et al (2014), Hubsch & Adlwarch (2017), and Richter & Bokelmann (2017). In these studies, it was however found that several biases occurred. These include participants being made more aware of the waste they produce, and therefore producing less (behavioural reactivity), and participants not reporting on waste accurately (measurement or selection bias). Furthermore, it is important to note that the selected 16 participants for my study may not have successfully portrayed a broad picture of what middle class South Africans consume and waste (Quested et al 2020). Despite these issues, researchers agree that waste diaries are hugely beneficial due to their ability to produce rich data.

The third phase of the data collection involved conducting a secondary interview. In this interview, the same 16 participants were asked in-depth questions about their experiences with their own consumption and waste and their experience with keeping a waste diary.

The fourth and final phase of the data collection process involved sending out a short 10-question survey to the 16 participants. This step of the data collection process was not part of the original research plan, but was deemed necessary in order to get further information about how the participants specifically view gender roles in relation to consumption and waste within their home. The 10 survey questions were multiple choice, and asked participants, among other things, to state if women or men or both are responsible for consumption/waste in their own cultures. This survey took approximately 1 minute to complete.

Below is a summary of the four phases of data collection that this study followed.



Figure 6: The Four Phases of Data Collection.

Credit: Carina Mason.

Interview Setting & Time Considerations

Phase 1 interviews took place over Zoom. This platform was selected for several reasons:

- Most people know how to use Zoom due to lockdown adaptations.
- Zoom allows the participant to be comfortable in an environment of their choosing, which could encourage them to give honest answers.
- Zoom has a recording feature, which lets the researcher go back and re-watch recordings during the data analysis stage. This allows for better reliability and prevents bias.
- Zoom offers a limited free 40-minute session, which makes it an affordable option.

The phase 1 interviews were restricted to 40 minutes each. This was enough time to gain meaningful initial data, while still respecting the time and budget of the respondents. During phase 1, the participants were asked general questions about their lifestyles, consumption habits, class identity, and perceptions of how other classes/races/genders consume and waste.

Semi-structured in-depth interviews were therefore chosen as one of the methods for data collection due to their ability to provide in-depth and detailed information regarding the participants thoughts and perspectives. As the interviewer, I made use of open-ended questions to simulate a more dynamic conversation. The instrumentation used in the interview included a protocol that identified the instructions to be followed for each interview, providing consistency across the multiple interviews. An interview guide was also created, was no more than one page in length, and contained the questions and issues required for exploration. A consent form was sent to each participant, signed prior to commencement of the interview, and returned for record-keeping purposes.

Phase 1: A Preliminary Interview

The preliminary interview questions were as follows (but were adapted slightly during some of the interviews):

1. What South African suburb do you live in?
2. What makes you associate with being “middle class”?
3. Do you think class, race and gender are relevant factors in terms of how much an individual consumes and wastes? Why?
4. Do you think different classes consume and waste differently? How?
5. In your opinion, which class do you think can be associated with producing the most waste and why?
6. Tell me about your consumption habits. How much do you think you consume per day? In other words, how many items of food, clothing, technological gadgets, books, or other products do you buy per day on average?
7. How much do you think you waste per day?
8. What type of waste do you think you produce most of?
9. What does the media tell you about issues of consumption and waste?
10. What other influences do you think affect your perception of consumption and waste? (cultural, religious, historical factors for example).
11. Who do you think is responsible for issues of waste and waste management?

Phase 2: A Waste Diary

A WhatsApp conversation was created between each research participant and myself, and remained active until the study was concluded. The purpose of the WhatsApp group was to give the participant an easy and affordable way to record their waste over a limited time period (24-48 hours). For me, this meant that all the data was easily accessible since WhatsApp is an online and free platform. The data was somewhat diverse since text, pictures and voice notes were shared. The waste diary was kept during the middle of the month toward the end of the year, which inherently affected the type and amount of waste produced.

Phase 3: Secondary Interview

Phase 3 interviews were also capped at 40 minutes each via Zoom. Here, a second set of in-depth questions were asked, and were specifically focused on waste and consumption in relation to the diary the participant kept. Some of these interviews were done via voice note on WhatsApp, as many of the respondents were busy and seemed much more open to the convenience of being sent the questions and answering these through voice recordings. Others still took place on Zoom.

Both the transcripts from the preliminary interview and the transcripts from the secondary interview were transcribed using a software platform called Rev.com. While this software proved over 95% accurate, I still went through all the transcripts again and made minor corrections where pronunciation or noise interferences had caused errors.

The concluding questions were as follows (although these were adapted slightly during some of the interviews):

1. Did it surprise you to learn how much waste you did or did not produce during the research process? Why?
2. Did you become more aware of waste around you while keeping a waste diary, and did you feel more or less affected by it? How has your perception changed through this process (if at all)?
3. What have you learned about your own consumption during this process?
4. How would you feel about picking up waste that does not “belong” to you?

5. How important do you think matters of waste are compared with other issues in South Africa?
6. What do you think the solution to overconsumption and waste is?
7. What do you think your relationship with consumption and waste will be going forward following your experience with keeping a waste diary?

Recruitment Strategies

Lune & Berg (2017: 28) differentiate between two main sampling or recruitment techniques. These are probability sampling/recruitment and non-probability sampling/recruitment. Non-probability sampling says that the people or units of analysis are not random and that some participants have 0% chance of being selected. A sub-category of non-probability sampling is purposive sampling, which as the name suggests, requires the researcher to choose participants purposefully. This type of sampling is used when the researcher has a set of criteria that she wants the respondents to meet. For this study, purposive sampling was used to recruit 16 participants.

Population and Recruitment Method

Flom (n.d.) states that there are several advantages and disadvantages to purposive recruitment. The main advantage is that the researcher is able to select participants who meet certain criteria, and therefore ensure that the sample is specific. The data is then likely to be extremely relevant to the area of study. Since the participants have several criteria in common, this type of recruitment also increases the opportunity for trends or themes to be identified. This helped me in meeting the research objectives.

The main disadvantage of recruiting in this way, is that the data is difficult to apply to the larger population. Since the sample is carefully selected, it is likely very specific and therefore not easy to generalise to a larger number of participants, nor is the study straightforward to reproduce. A second disadvantage to this type of data collection is that it is open to researcher bias. This is because the researcher is entrusted to decide who the participants are and why. One way to limit this bias is to clearly outline (and adhere to) participant selection criteria. Researchers are also encouraged to make sure to approach all participants in the same way by allocating them the same

interview time and asking the same set of questions in the same way (as much as possible).

This particular study is specifically concerned with middle class South African's and their gendered perception of consumption and waste. It therefore follows that despite its disadvantages, purposive recruitment was a suitable data collection technique for this study.

Participant Group Size

Coming up with a correct figure for the amount of participants needed in qualitative research is a difficult task since it is dependent on many variables. Vasileiou et al., (2018) say that qualitative research can comfortably use less participants than quantitative studies, since it generally gains in-depth and detailed data that makes up for quantity in its richness. Moreover, qualitative samples are often purposive, which means that the researcher actively selects participants for interviews who will likely provide the most detailed, interesting or relevant data. In fact, Morse (1995) puts forward that the more potentially data-rich the participants are, the less participants are needed for a qualitative interview-based study. According to her, interview questions go a long way in determining the quality of data, and therefore also the amount of participants needed for the study. In other words, the better the quality of interview questions, the less number of participants need to be interviewed.

When it comes to specific numbers of participants who need to be interviewed, Green & Thorogood (2004) state that new findings are unlikely to occur after 20 qualitative purposive interviews are conducted. However, many researchers agree that saturation should be the guiding point in determining the number of participants interviewed. In other words, once no new data is gathered, a point of saturation has been reached and the researcher need not interview more participants.

Saturation also depends on whether a study is homogenous or heterogenous. For this particular study, a diverse group of middle-class South Africans aged between 25-45 were considered, making it a heterogenous study. However, since all participants are educated, have a monthly income, pay for their own living arrangements, and live within a South African suburb, this study could also be viewed as somewhat

homogenous. In a homogenous sampling technique followed by Guest, Bunce & Johnson (2006), the researchers found that saturation was met after only 12 interviews. However, Creswell (2002) states that for a heterogenous study, a qualitative interview can include 15-20 participants so that rich data can be produced. Several other studies have yielded similar saturation points. This demonstrates that reaching a point of saturation is much more likely if the population is homogenous (or shares the same qualities or criteria).

Based on the above, I initially planned to recruit around 20 South African citizens aged between 25-45 to attain rich, meaningful data. These individuals were purposively chosen beforehand based on them meeting certain criteria as outlined above.

After conducting several interviews, it was found that similar themes started to emerge. For example, most of the participants cited that they think education is the solution to issues of waste in South Africa. This and other patterns started to present after only speaking with 5 or 6 participants. Therefore, I decided that saturation had been reached at 16 participants, since no new ideas or patterns were emerging. By that time, I had also interviewed a diverse group of participants from varying cultures, races and genders.

Phase 4: Survey

It was not part of the original research plan to include a fourth phase to the data collection process. However, once the data from phases 1-3 was collected and analysed, I decided that it would be good for the research to gain further insight into how the participants experienced gender roles within their own culture/ upbringings and home environment. Therefore, a 10-question multiple choice survey was created on Survey Monkey and sent to participants in March 2023. Questions 1-5 of the survey dealt with demographics, while question 6-10 asked participants about their experience of gender roles in relation to consumption and waste practices within the home. It took several days to get responses from all the participants, but the data yielded interesting results. The survey questions were as follows:

1. I am (Asian, Black, Coloured, Indian, White)
2. I identify as (A Woman, a Man, Gender Fluid)

3. My sexual preference is (Heterosexual, Homosexual, Bisexual, Asexual Pansexual)
4. My belief system is (Agnostic, Atheist, Buddhist, Christian, Hindu, Jewish, Muslim, Other)
5. My culture is (Afrikaans, English/European, Indian, Khoi, Pedi, Shangaan, Sotho, Swazi, Tsonga, Tswana, Ndebele, Xhosa, Venda, Zulu, Other)
6. In my culture/upbringing, it was custom for … to do the grocery shopping for the home (Women, Men, Both Equally)
7. In my culture/upbringing, it was custom for … to cook and clean (Women, Men, Both Equally)
8. In my culture/upbringing, it was custom for … to dispose of the waste in the home (Women, Men, Both Equally)
9. In my culture/upbringing, it was custom for … to care more about consuming responsibly, recycling and/or proper waste management (Women, Men, Both Equally)
10. I associate environmentally-friendly behaviour such as recycling or caring about waste with being a traditionally … role (Feminine, Masculine, Gender Neutral)

Data Analysis Techniques

The semi-structured interviews consisted of a set of open-ended questions that were created beforehand. These served as a guide, since the interviews themselves followed a conversation-style approach, giving respondents the opportunity to answer naturally. I also attempted to be friendly and open-minded, in order to further encourage honesty. These research questions were not shared with participants beforehand, and therefore encouraged reflection during the interview process.

Availability of Data

This research took approximately four months in late 2022 to complete (two months to interview and transcribe both the transcripts and WhatsApp information, and two months to analyse and contextualise). After this time (in early 2023), an online survey was sent to the participants who took a few days to complete it. This survey specifically expanded on gender roles in relation to consumption and waste, and was deemed necessary to fill a gap in data.

The data collection process therefore depended on the willingness of 16 participants to take part in interviews and a waste diary in 2022; a survey in early 2023; as well as their social, cultural and gendered perspectives on consumption and waste during that timeframe.

The below diagram summaries the methodological choices made for this study.

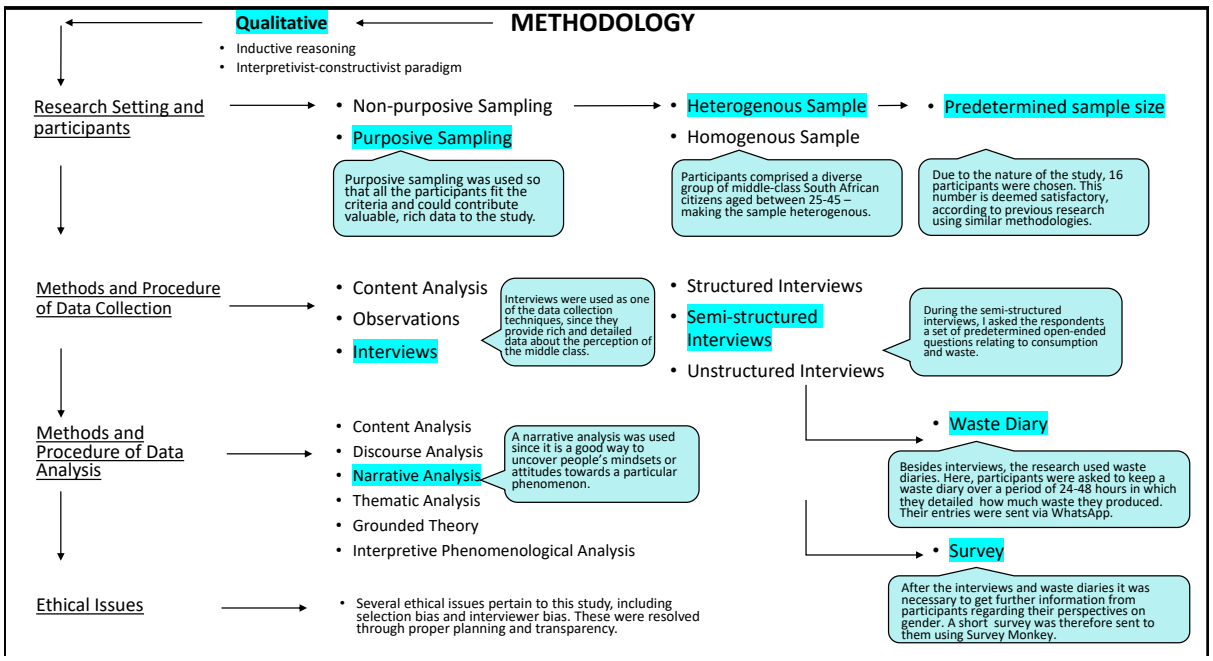


Figure 7: Summary of the Methodological Choices Made.

Credit: Carina Mason.

Ethical Considerations

When conducting research, it is imperative to remember that participants are human beings with legal and personal rights. The research findings may intrude on these rights and it is therefore the responsibility of the researcher to avoid such as much as possible. This is achieved through the implementation of proper research ethics. Several researchers agree on certain ethical elements that must be incorporated throughout the research process. These include respect, beneficence, and justice (Mauthner & Birch 2002). These three should be applied to all types of research, but additional considerations need to be made during qualitative research.

According to Sanjari et al (2014), "some important ethical concerns that should be taken into account while carrying out qualitative research are: anonymity,

confidentiality and informed consent". Anonymity refers to the choice or right of a research participant to remain anonymous or unidentified. In the case of this study, this is difficult for several reasons. The first reason is that very few participants are required for this study, and their demographics (and other criteria as stated above) must be made public in order for them to be considered for the study in the first place. Secondly, the interviews were recorded, which makes anonymity difficult. Furthermore, it was important to consider each participants demographics in order to understand their gendered perspective on consumption and waste. Such personal information was deemed crucial to answer the research questions.

The second ethical element to consider is confidentiality, which is concerned with the sharing of participants' private information. As mentioned above, this study sought to understand the gendered perception that the South African middle class has toward consumption and waste. This study only made use of deidentified and coded data to ensure that no personal details were divulged publicly. Furthermore, coded deidentified transcripts of interviews can be made available to protect the privacy of respondents. Additionally, data has been stored on an encrypted drive and only I have access to any raw data. No external editing was undertaken by a third party.

Thirdly, the ethical issue of informed consent deals with how accurately and fairly a participant was informed about the study and their participation therein. To avoid issues here, I briefed each participant about the nature of this study and the type of information that will be shared about them and with whom. As part of informed consent, Sanjari et al (2014) say that respondents need to be made aware of "the nature of the study, the participants' potential role, the identity of the researcher and the financing body, the objective of the research, and how the results will be published and used." After being made aware of this information, the respondents were given the choice to participate in the study or not. By choosing to participate, they were required to sign a consent form, giving me the permission to use and publish their information and answers anonymously. Participants were also given the right to withdraw from the study at any time. Last in the ethical planning process was to gain approval or ethical clearance from the University of the Witwatersrand. This followed a detailed application and approval process, but was cleared on the 10th of June 2022.

Other ethical issues included researcher bias. “In research, bias occurs when systematic error is introduced into sampling or testing by selecting or encouraging one outcome or answer over others” (Pannucci & Wilkins 2010). There are namely two types of bias – cognitive bias and statistical bias. A cognitive bias refers to the way in which the research views or thinks about people or events. Statistical bias refers to biases that affect numerical values or outcomes. For qualitative research, cognitive biases are most common and can be avoided by proper preparation, conduct, and analysis & reporting (before, during and after the interview process).

For this particular study, purposive sampling was utilised, which poses several ethical issues where bias is concerned. The selection bias in this type of sampling means that all South Africans who are not middle class and do not meet the criteria as outlined in the literature review, are automatically disqualified. It also means that the research is not easily applied to the greater public (statistically speaking) as is usually the case with qualitative research.

Reflexivity

As a 35-year-old white middle-class woman living in South Africa, I understand that I brought with me a list of subjective experiences, assumptions and beliefs to this research. Firstly, I admit to being an eco-conscious individual who resents over-consumption and waste production in the first place. This negative stance may have posed a risk during this research, in terms of me not being totally open-minded to others who enjoy conspicuous consumption and care little for waste and its consequences.

I also accept that as a white person, I have been afforded certain privileges that millions of people of colour were denied. From a good education, to the freedom to take environmental issues very personally (without having to worry about meeting other needs first), my life has afforded me the opportunity to see green issues as fundamental to my own “self-actualisation”. Furthermore, having grown up in a nature-loving environment with parents who love animals and the outdoors, environmental matters are very close to my heart and this therefore may have created some cultural bias (I am likely self-motivated to prove how bad consumption and waste is to the research participants and readers). As Wahlberg (2020) notes, this bias may have

come through in the way I asked interview questions, which would be in such a way as to encourage answers that are in line with my own values and that confirm my hypotheses. In order to avoid this, I accepted that not everyone values the same things as I do, and that this does not make them wrong. More importantly, I realised that through this research, I learned a great deal and expanded my own perspectives.

As far as my own prejudices are concerned, I also admit that I initially assumed that South African's are not interested in matters of waste, since more "pressing" issues likely take precedence (such as crime, equality, corruption etc). This, in my experience, is obvious through the lack of environmental discussions I overhear or am a part of in normal day-to-day life (I am much more likely to hear about Eskom issues during conversation, than matters of consumption and waste). While this was proven to be the case, many of the participants partake in environmentally-friendly behaviour and report to care about these matters. This was an uplifting discovery.

Furthermore, in my own experiences, young South African's tend to want to emulate American culture (I have noticed this through the fashion, car and music choices made by some young Black students aged 18 and older, who I taught for two years). Most of these students wore or aspired to wear designer labels; drive expensive cars (such as Mercedes and Bentley); and listened to Hip Hop music by famous American artists such as Drake and Kanye West. To be "American" also means to aspire to the American dream, which is to have money and the freedom to consume whatever is desired. Needless to say, I am personally against this way of living and I do not see myself as a materialistic individual. However, I was encouraged to remember that my upbringing and values have – to a large extent – allowed me the freedom to *choose* to not aspire to materialism. In other words, I have not ever been denied any "luxuries" such as a house or car, and therefore, my perception of wanting these things is skewed.

Religious and cultural affiliations should also be mentioned here, and as a catholic Portuguese person, I was brought up to believe that "money is the root of all evil". Again, this was an "easy" message to believe since we never starved growing up.

While my belief that many South Africans do not care about consumption and waste issues was proven somewhat true during the research process, I was surprised to

learn how many respondents (of all races and genders) do care about these issues. It was particularly positive to learn that most of the participants said they felt more aware of issues of waste after keeping a waste diary, and that they were likely to be more conscious going forward.

It is also worth mentioning that I consider myself a liberal and ethical person who is genuinely interested in learning, which I believe supported the participants by making them feel like their cultural beliefs and individual values were of interest and relevance to this study. As a woman who has experienced instances of abuse and discrimination, I also feel that I was more open to female or “minority” perspectives, which were crucial to add more depth and richness to this complex study. In reflection, it is also noteworthy to mention that this research has grown me as a person, and I feel even more aware of the plight of Black women and minority groups in society. More than this, my empathy for these people has grown immensely, and I feel it has been a privilege to contribute to this field of research by using feminist theory as a theoretical framework.

Findings and Analysis

Introduction

During a period of three months (between September and November 2022), 16 middle-class South African citizens were interviewed to try and understand what their perception of consumption and waste is. These same participants were asked to unpack their perceptions of gender roles, and how these might impact how a person consumes and wastes. After the interviews, the participants were asked to keep a 24–48-hour waste diary in which they recorded all the items they threw away within that period. Following this, I held a secondary interview to understand what their experience with keeping a diary was like. While the data gathering process was only meant to initially have three phases, I decided it was important to get a deeper understanding of how the participants were raised in terms of their ideas of gender roles within the home. I therefore concluded the research by sending a brief 10-question multiple choice survey to the 16 participants.

For this research, middle class participants were defined as those who:

- Are South Africans aged between 27-42 (millennials).
- Live in a South African suburban area.
- Earn R15 000 or more per month.
- Pay for their own home (either rent or a bond).
- Have a tertiary qualification or be currently enrolled in one.

Initially, I set out to interview 20 participants, but saturation was reached, and patterns started to emerge after just several participants. According to Saunders et al (2018), saturation is reached when responses begin to repeat ideas and no new insights are being shared. Responses began to repeat after only a few interviews (around five), but I continued in case new data emerged.

Following these interviews, the participants were asked to keep a waste diary, which was shared via WhatsApp in the form of text messages and/or pictures. Once complete, the respondents were asked to answer several follow up questions on whether their initial perception of consumption and waste had changed.

The 16 participants that were involved in this study comprised of six men and 10 women. Two were Coloured, seven were Black, and seven were white.

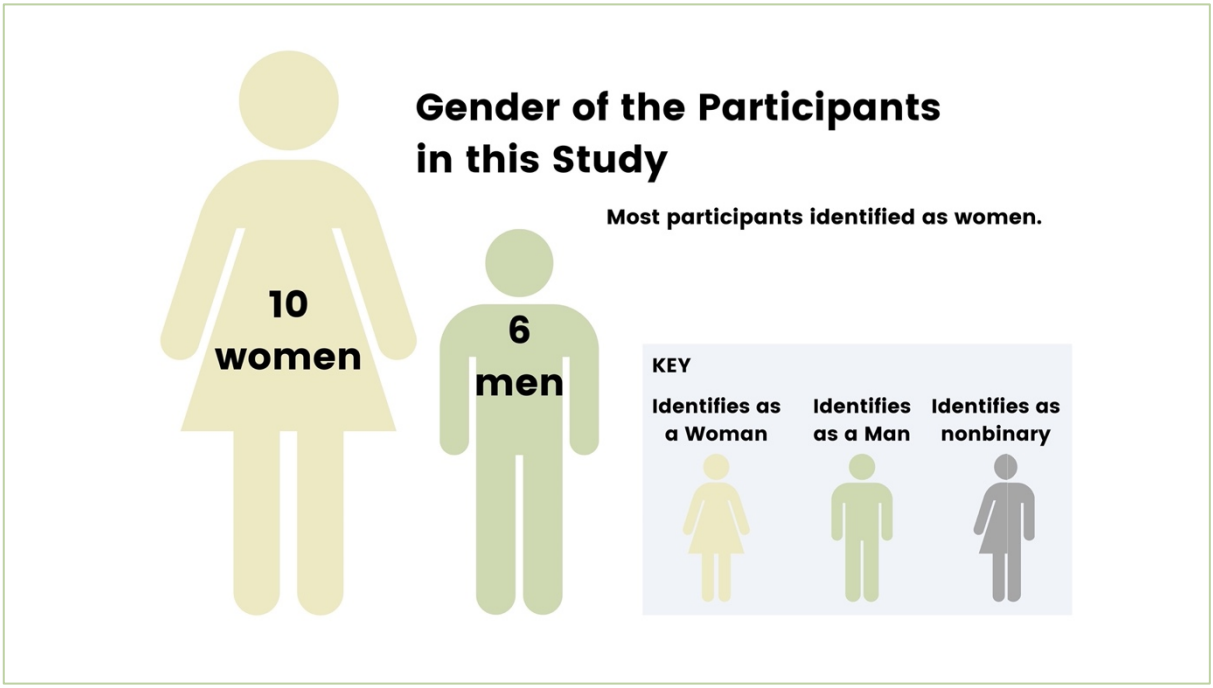


Figure 8: Gender of the Research Participants.

Credit: Carina Mason

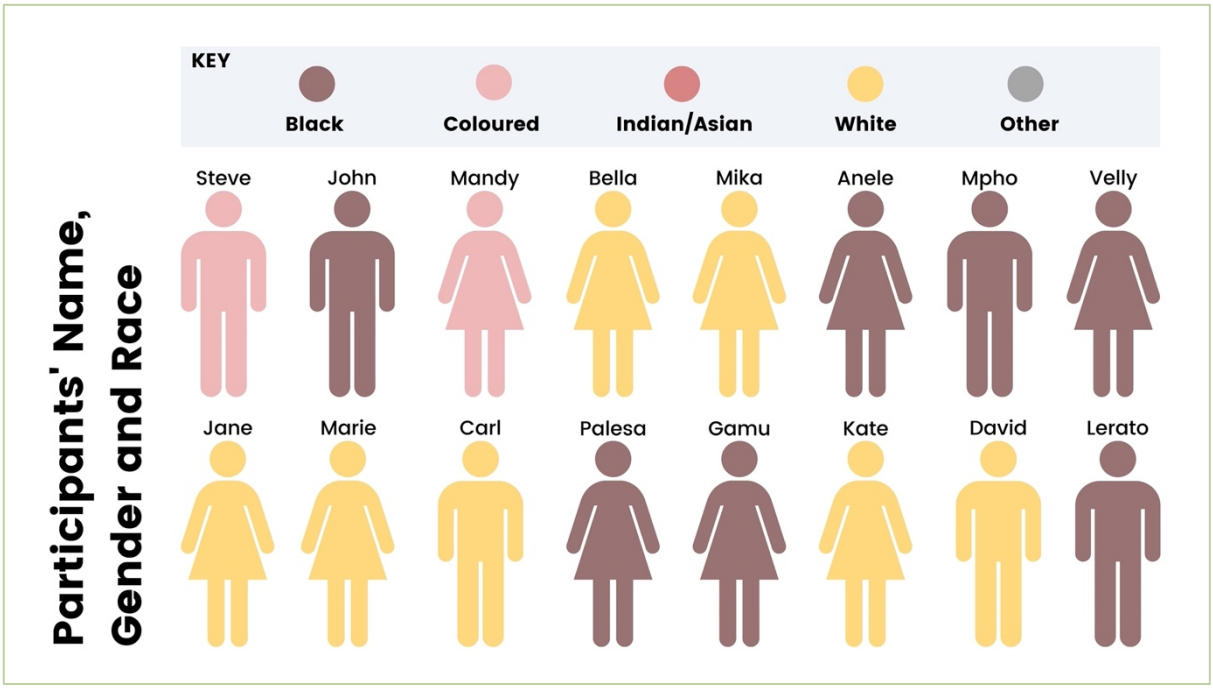


Figure 9: Name and Race of the Participants.

Credit: Carina Mason

The above names are pseudonyms that were assigned to each participant. They are displayed in the order in which they were interviewed (from left to right).

The participants were all South African and lived across the country in suburban areas of Johannesburg, Pretoria, Durban, Port Elizabeth, Cape Town, and Paarl, with the majority coming from the Johannesburg area.

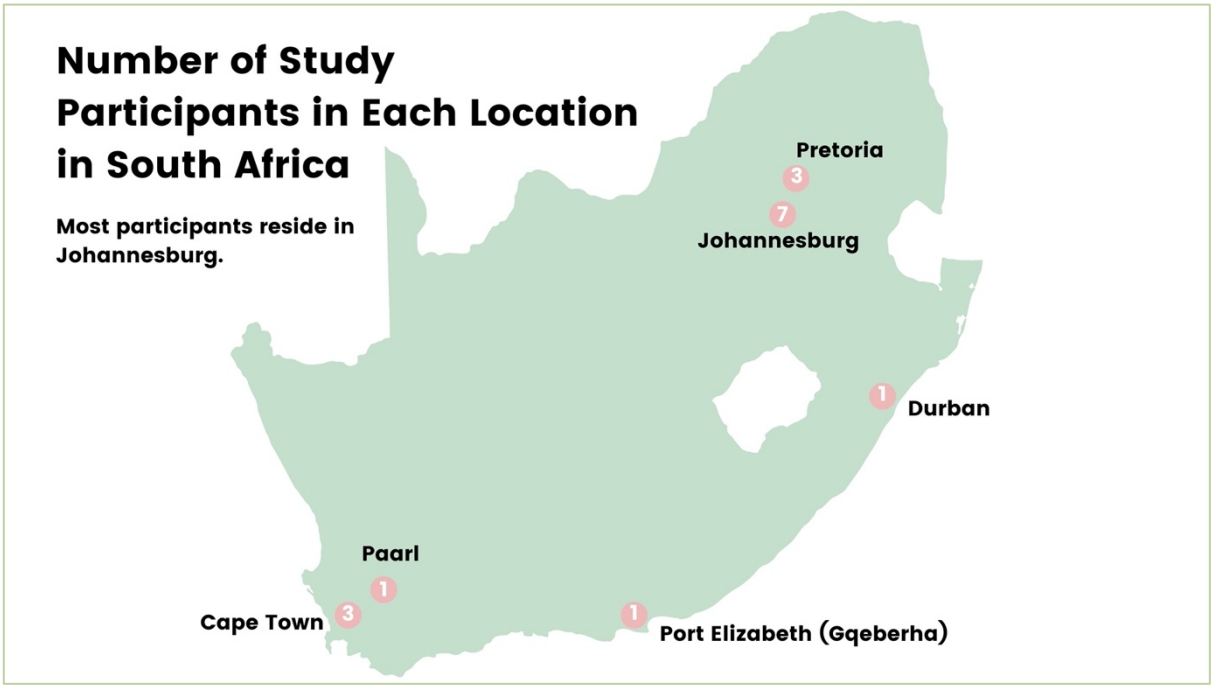


Figure 10: Geography of Research Participants.

Credit: Carina Mason

Participant Profiles

As mentioned above, the 16 participants who participated in this research were given pseudonyms. This was done for two reasons. One, it was important to still mention each participant in the findings below and "name" them out of respect. They are individual and complex human beings who deserve to be portrayed as such within the confines of ethical research. Two, a pseudonym helps to protect the identity of each participant and helps to preserve their confidentiality. A brief bio was also created for each participant, along with a visual display of their living arrangements, since the literature clearly shows that waste production is influenced by the amount of people living within a particular household and the roles of the people within that household. The participant profiles are attached as an Appendix B.

How to Read the Findings

The discussion follows a thematic approach, where three main overarching themes were identified, and are unpacked in that order below. These themes are as follows:

1. **Theme 1: Self-reflection** (How the Middle Class Perceives Consumption and Waste in Their Own Lives);
2. **Theme 2: External Perception** (How the Middle Class Perceives Consumption and Waste in the World Around Them); and
3. **Theme 3: Responsibility and Future Behaviour** (How the Middle Class Feels About Consumption and Waste After this Study).

As illustrated below, the themes are broken down into several sub themes or topics of discussion.

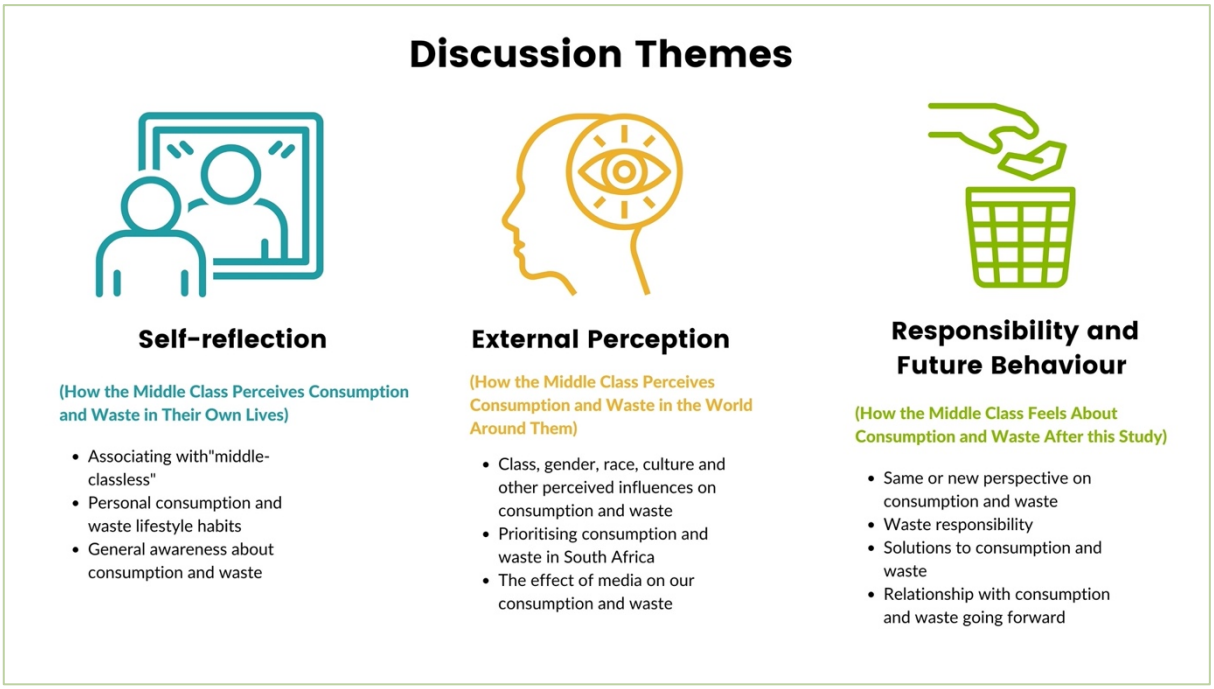


Figure 11: Discussion Themes in Research Findings.

Credit: Carina Mason

Research Findings

Self-reflection (How the Middle Class Perceives Consumption and Waste in Their Own Lives)

As seen in the literature review, defining "middle class" – particularly within a South African context was a challenge. Not only do the parameters change according to who you ask, but many people who do not necessarily meet the widely accepted criteria, identify themselves as middle class. Therefore, "middle classness" is a unique and subjective experience covering a broad scope of criteria. Noteworthy is that the difficulty in defining middle class was recognised by some of the participants. One of the interviewees for example, said that the middle class are the people between the poverty line and the [top] 1% of the population. According to Statista (2022), around 18 000 000 people in South Africa live on the poverty line. Meanwhile a report published in 2021 states that around 32 000 people in South Africa are multi-millionaires (Business Tech 2022). If these figures are correct, then approximately 41 968 000 people in South Africa (of the 60 million) can be considered middle class – making the middle class an extremely broad and diverse group of individuals.

The first question that was asked to all participants therefore, was "*what makes you associate with being middle class?*". The purpose of this question was to understand what South Africans perceive to be middle class. To this, the respondents' answers varied, but a common theme occurred. Almost all the respondents mentioned money and having the financial means to afford certain amenities as a reason for being middle class. For example, Anele cited that middle class was a "feeling" based on financial status: "I don't feel well off enough to feel upper class" (but not quite poor enough to be working class). Bella said "mostly salary income" while another said "definitely" when asked if she associates middle class with income. In fact, 14 of the 16 respondents cited income and affordability as defining factors of whether or not someone is middle class.

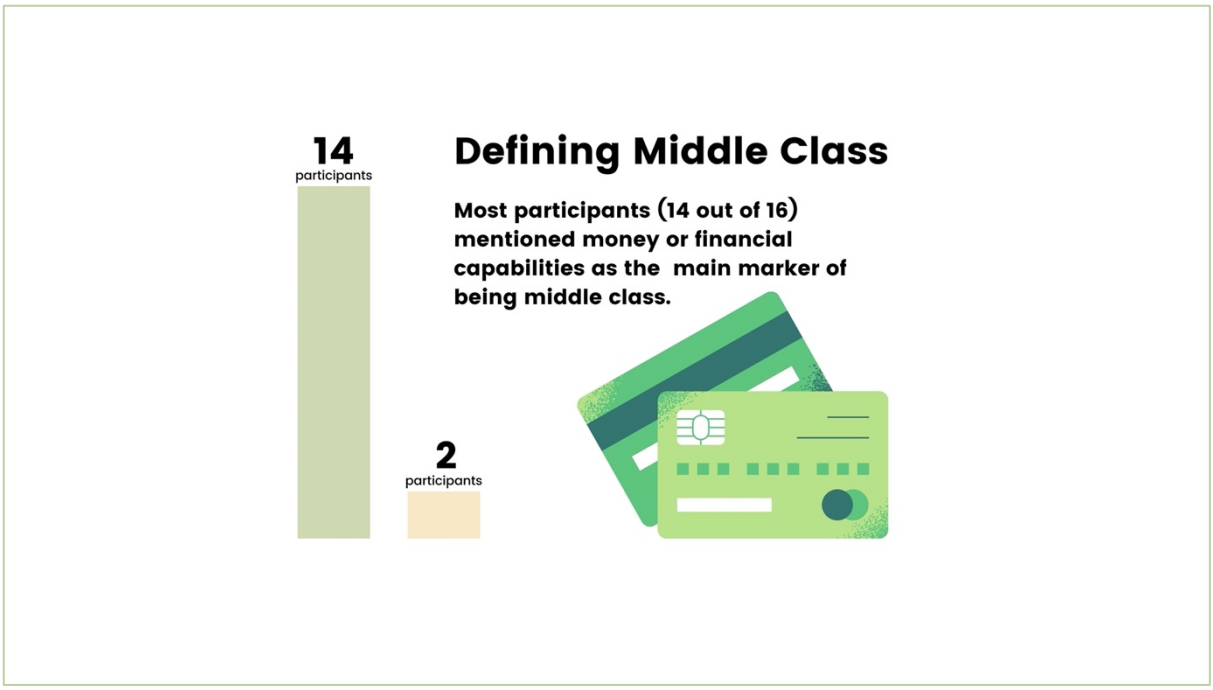


Figure 12: Defining the Middle Class.

Credit: Carina Mason

One outlier (Velly) however, argued that the middle class is impossible to define – especially based on income - since people earning R10 000 per month cannot possibly be in the same category as those earning R80 000 per month since their lifestyles are very different. Velly went on to state that the middle-class label is merely a political tool used by the government in South Africa to gain favour with millions of people who would otherwise be considered working class:

> "I don't know if I associate with being middle class. It's a theoretical academic state […] I am middle class in a normal economy, but because of the legal classification that they've (the government) put, I'm not middle class because they are making those up in order to win votes".

In other words, the government tells poorer people that they are middle class to "empower" them and make them feel like they are above poverty. Velly showed insight into how impossible the middle class is to define. She spoke in depth about how class is not as clear cut in South Africa as it may be in other countries due to our systemic issues. Regardless of this unique perspective, the consensus was that money is the major consideration for South Africans, when asked about their class. Other criteria

mentioned by participants was education, access to medical aid and other basic amenities.

The next question asked to participants was "*tell me about your own lifestyle – how much do you think you consume and waste?*"

Before unpacking this interview question, it would be useful to share the findings of the survey, which spoke to the way in which each participant was raised regarding gender norms, consumption and waste within the home environment. Questions 1-5 of the survey asked each participant to select their gender, race, religion, culture, and sexual orientation. Questions 6-10 asked the participants to unpack their experiences in their own cultures/upbringings. The latter is of special importance here, since it adds depth to each participants' experience of consumption and waste.

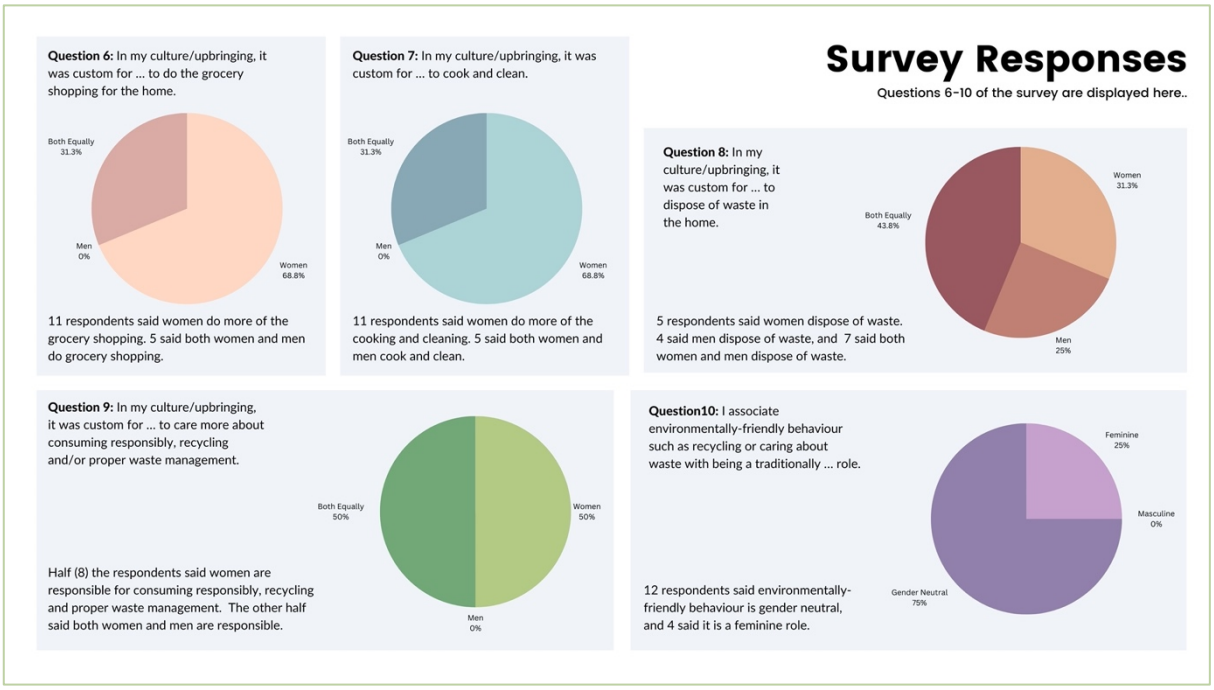


Figure 13: Survey Responses.

Credit: Carina Mason

As seen in the illustration above, the research participants have grown up in such a way that most of them viewed/ view certain tasks as gendered. It was found that:

- 11 respondents said women were responsible for grocery shopping in their home environment, while only 5 said both women and men were equally responsible.
- 11 respondents said women were responsible for cooking and cleaning in their home environment, while only 5 said both women and men were equally responsible.
- 5 respondents said women were responsible for waste disposal in their home environment, while 4 said men would, and 7 said both women and men were equally responsible.
- 8 respondents said women were responsible for consuming responsibly/recycling/proper waste management in their home environment, while 8 said both women and men were equally responsible.
- 12 respondents said environmentally friendly behaviour is gender neutral while 4 respondents said it was seen as "feminine" behaviour.

The above information gives each participant a foundation from which their current consumption and waste behaviours have likely been shaped. Interestingly, most participants agree that women were responsible for grocery shopping, cooking and cleaning in their home environment while growing up. And while participants mostly agreed that environmentally friendly behaviour is a "gender neutral" behaviour, not one of them said it was a "masculine" behaviour, while 4 said it was "feminine". This reinforces the idea that people tend to associate cleaning practices with women.

While the above gives insight into how participants were raised, the below further unpacks each participants' self-reflection.

The purpose of the question "*tell me about your own lifestyle – how much do you think you consume and waste?*" was to spotlight what they perceive of themselves in terms of consumption and waste. As explained to the participants, I did not intend to get an exact figure of how much they consume and waste, but rather an understanding of how they see themselves in relation to these issues. As people who identify as middle class and who meet the "middle class criteria" for this study, it was interesting to see how middle-class individuals perceive their own behaviour.

Interestingly, three of the 16 respondents work or study within the environmental industry – which could be one of the reasons they were drawn to participate in this study in the first place. All three of these participants (Steve, Mandy and Bella) said they felt aware of how much they consume and waste. All three also said they consciously try engaging in environmentally friendly behaviours such as separating at source, buying less plastic, and composting at home (Mandy said she engages in all three of these behaviours). When asked why he takes part in such activities, Steve said:

> I would like to practice what I preach. So basically, doing my due diligence as a student, but also as a person who has the knowledge now of the waste industry in terms of how I can make it easier for people to access these recyclables.

Mandy answered by saying:

> I think I was always [interested], I guess raised like that and thought like that. And I can't remember the exact turning point, but there was something in my studies where it just dawned on this whole there's no way or what happens after you throw things away and where does it go? And I think then I really suddenly started to get interested in it more, probably also because everyone's not really interested in it, which also piqued that interest of wait, but nobody's really realising this, but this is a huge issue.

These participants show how people who are naturally more drawn to, or curious about environmental topics, are more inclined to be aware of issues of consumption and waste and to live more consciously. Of the other participants (non-environmental workers/students), many still showed an awareness of how much they consume and waste, by listing some of the most common items they purchase. However, some of the participants openly said they are not conscious:

> I wouldn't say that I am conscious in terms of what goes into the product that I buy. I think I'm conscious of price. So, I definitely compare, check the price per kilo look for specials. And also, I buy my fruit and vegetables that are street market because it's cheaper – Anele.

The above response demonstrates how many South Africans are more likely to consider price above other factors when making purchasing decisions. This can simply be due to the high unemployment and poverty rate in the country, which forces millions to be more money conscious. However, this also implies that environmental issues related to consumption and waste do not take priority within a South African context. As discussed in the literature review, South Africans tend to prioritise other issues such as corruption, unemployment, and load shedding above green issues (such as consumption and waste). The effect of this is that little or no attention is paid to the latter, which only perpetuates the problem.

The next question asked to participants was "*what type of waste do you think you produce most of?*" The purpose of this question was to understand what waste the middle class in South Africa tends to produce. Of the 16 participants, eight said they waste food more than any other product and eight said plastic/packaging was the biggest waste culprit in their homes. These were "guesses" or estimates provided by the participants in the preliminary interview. Interestingly, most of the participants said that they did not think they waste a lot.

While it is easy for one to estimate how much waste they make, it is another to ask them to physically record such. The above question is therefore discussed further below, in relation to a question asked in the concluding interview, which was "*did it surprise you to learn how much you did or did not waste?*". This question was asked after the respondents kept a waste diary in which they recorded every item they threw away within a 24–48-hour period. It is important to note that waste diary findings are not 100% reliable or necessarily accurate. However, it can be even more interesting to unpack what was declared in the waste diaries, and how these were recorded. In other words, given that waste is an invasive topic that can be difficult to talk about, it is interesting to see which participants revealed what, and *how* they reveal this.

Waste Diary Findings

The waste diaries were kept on the participants mobile phones and sent to me via WhatsApp. They were given the choice to send their waste entries each time they

disposed of something, or the full list at the end of the 24/48-hour period. Most of the participants sent their diary entries in the form of text, while only two chose to send accompanying photographs (Palesa and Steve). It should be noted that the diaries were recorded during the middle of the month, which impacts the type and amount of waste that was produced.

The diary items were analysed in such a way that every single piece counted as one item. For example, one portion of vegetable scraps, one tissue, one wrapper and so on. This was done so that it was easier to get a general understanding of the *amount* of waste (in number of items) produced by each participant. This method of data capturing did not account for the size or weight of the waste produced. It is also important to note that the waste was not defined in terms of how many people are in the participants particular household. The waste diary was kept individually by the participant, but the waste produced could have been because of multiple people consuming products/food/items within the same household.

After counting the items recorded for each participant, it was found that a total of 336 items were discarded by 16 participants over a 48-hour period. For interests' sake, if we were to average this amount out, each participant would have produced 21 items of waste over 48 hours (or 10.5 items over 24 hours). In a year, this would equate to each participant producing 3 833 items of waste.

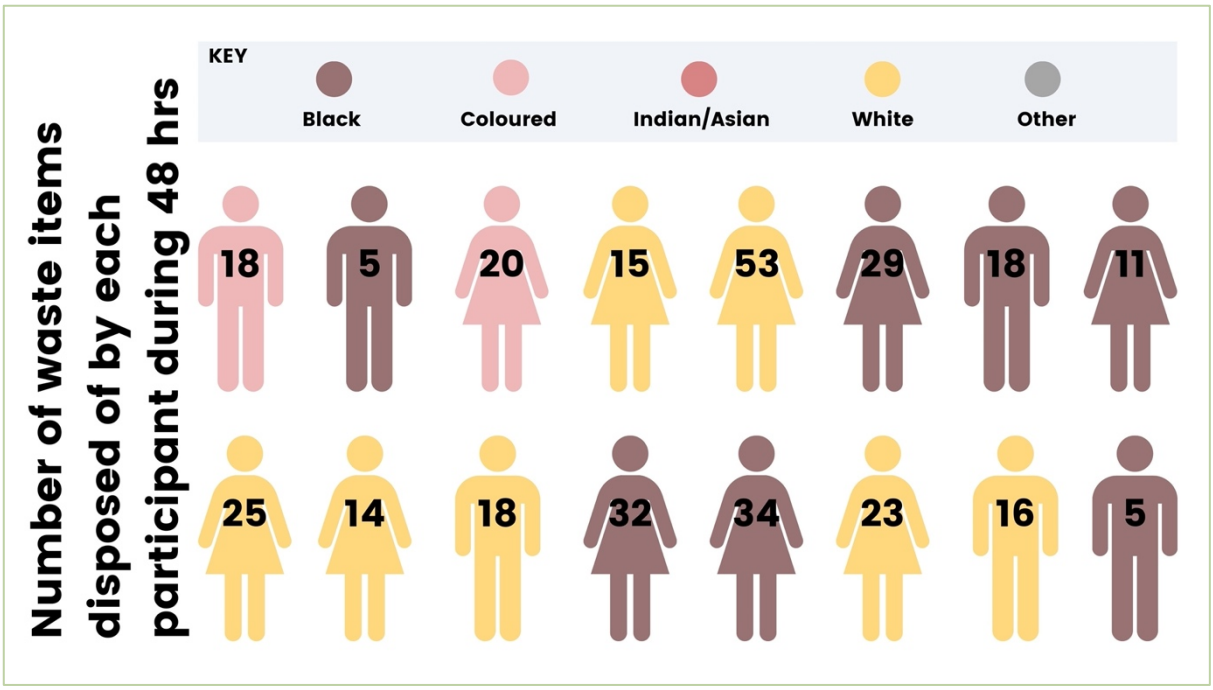


Figure 14: Amount of Waste Produced by Participants.

Credit: Carina Mason

In terms of the type of waste produced by the participants, 56 items were food scraps/items, and 168 were plastic items (including cigarette butts, which some do not realise is plastic). The remaining 112 items comprised of toilet paper, tissue, tins, egg cartons, newspapers, and other biodegradable or recyclable materials. Therefore, most of the waste produced comprised of plastic and plastic packaging.

The importance of these findings is that these middle-class South Africans seem to be producing most of the type of waste that is not biodegradable and is harmful for the planet. This type of waste is omnipresent in all walks of life – from medicine containers and medical equipment to food and beauty products – plastic packaging is everywhere.

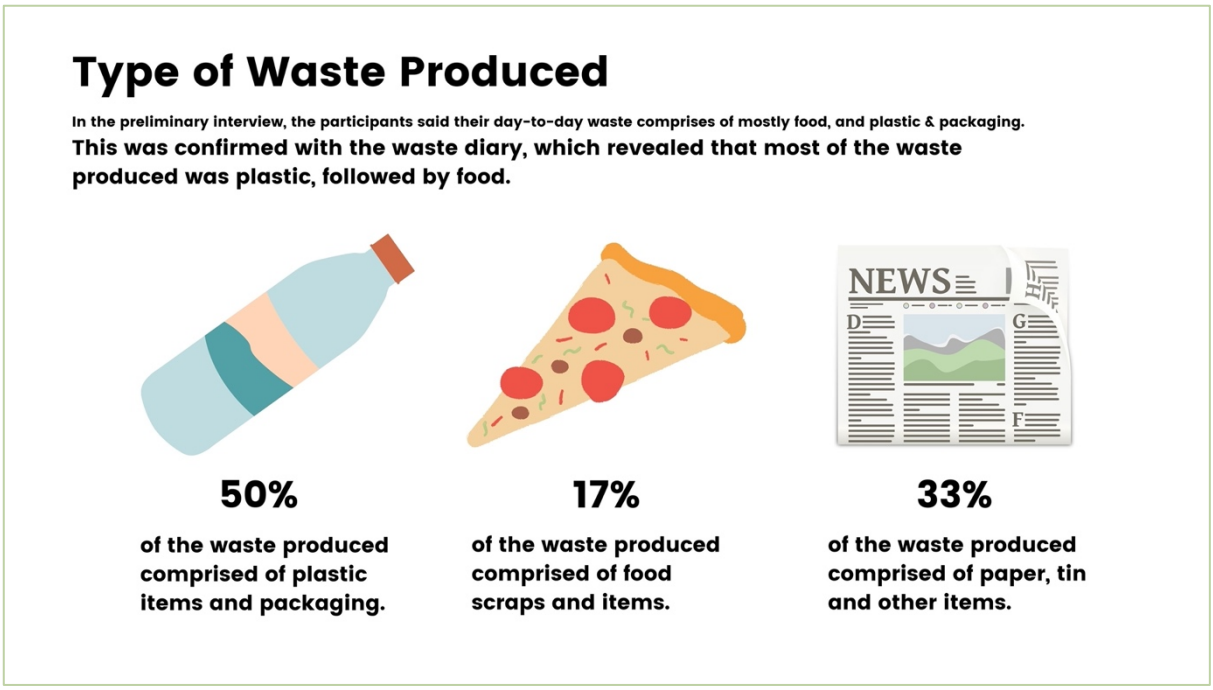


Figure 15: Type of Waste Produced by Participants.

Credit: Carina Mason

Link to Literature

The main findings in the above theme of "self-reflection" were that:

- Most participants equated being middle class to earning a decent amount of money and being able to pay for food, education, and medical care among other basic necessities.
- Most participants experienced consumption and waste practices to be gendered practices, with women doing most of the shopping, cooking, cleaning, and "caring" about green issues.
- When buying/consuming, some participants considered the price of items over the item being eco-conscious.
- Most participants said they do not think they waste a lot, but that they probably waste food and packaging the most. This was confirmed in the waste diary results, which revealed that participants threw plastic/packaging items away the most, followed by food items.

The above findings correlate to the literature in that while being difficult to define, the middle class tends to be thought of as the class who works and has some disposable

income at the end of each month. More than this, the middle class is seen as a high-consuming class (Bennet et al. (2009); Bourdieu (1984); Liechty (2003); and Jaffrelot & Ven der Veer (2008). The literature estimates that the average middle class South African goes through almost all of their monthly salary within 5 days of being paid (Business Tech 2022). It is also said that South Africans tend to only be moderately concerned with environmentally conscious consumer behaviour (Mkhize & Vigar-Ellis 2016) while also being one of the most price-conscious nations in the world (Nielsen 2022). This suggests that the middle class is an extremely active group of consumers. Furthermore, the middle class generates around 2,7 million tonnes of domestic waste each year, making them notable proponents to the consumption-waste cycle (Greben & Oelofse 2009).

The literature finds that the biggest contributor to global waste is food waste (World Economic Forum 2022) with average South Africans wasting around 6kg of food per week (Ramukhwatho et al. 2017). This correlates to the above findings that revealed the participants wasted plastic packaging (including food packaging) and food the most, compared with all other types of waste. While food waste was the second highest type of waste recorded, it is important to note the household situation of each participant is different and affects overall waste production. Ramukhwatho et al (2017: 8) for example, suggests that households with more people are likely to waste less food, since better meal planning has likely been done and more people are around to eat the food. This was also noted in the findings, where participants who share a living space did not make substantially more waste compared with others in the participant group (for example, Steve did not make significantly more waste than others).

The literature also points to the prevalence of gender roles and expectations in South African homes (Annecke 2021; Chirilli & Molino 2022) and how women are still expected to perform most of the household waste-management duties (Viljoen & Schenck & Volschenk & Blaauw & Grobler 2021). This was confirmed in the survey results which revealed that most participants experienced gender role norms in their culture and upbringing. Most participants cited that women had been responsible for most of the grocery shopping, cooking, cleaning and “green behaviour” in their home environments.

Application of Theory

As mentioned above, waste production is impacted by the household – not just what the house is able to afford, but also the amount of people in the house and who is responsible for consuming and wasting what. de Wilde and Parry (2022) speak about the South African household being a place where gender norms and expectations are still prevalent. This means that in most South African cultures, women are still expected to cook, clean, and look after others – regardless of whether or not they hold a job outside of the home environment. To explore feminist theory here, I unpack what a few respondents reported to throw away in their waste diaries.

Below are the diaries of Steve and Anele. These were chosen to compare to one another since Steve has the largest household by number of people, and Anele has the smallest (she lives alone). While Velly and Gamu also live alone, Velly reports to entertaining friends and family often, while Gamu has a pet cat which increases waste.

During the 24–48-hour waste diary period, Steve, who is a Coloured man that lives with three other adults, one child and a dog, reported to throw away:

1. Food scraps
2. 3 milk cartons
3. 2 bottles of champagne
4. 1 chicken polystyrene container
5. 2 tomato paste sachets
6. 1 plastic appetizer bottle
7. 1 plastic oil bottle
8. 1 yogurt container
9. 1 piece of cardboard
10. 1 empty pepper refill packet
11. 2 egg shells
12. 1 polystyrene food container and plastic wrap
13. Potato peels

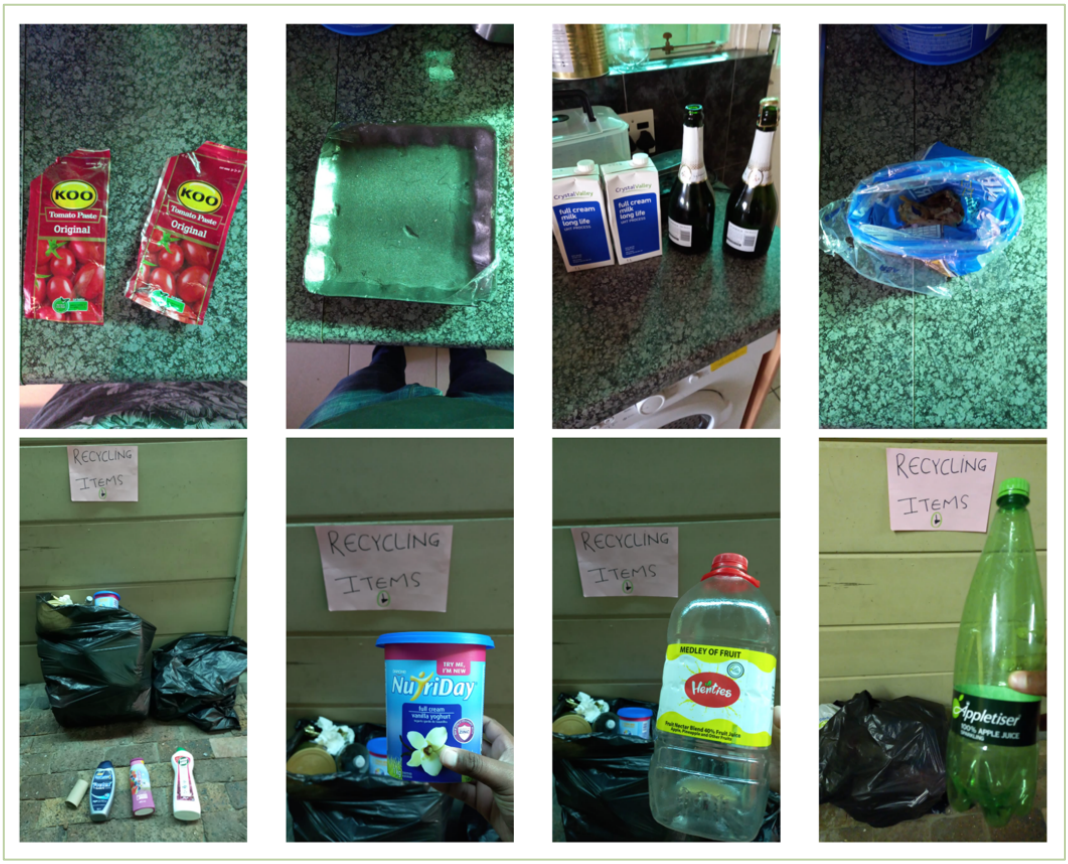


Photo credits: Participant “Steve”

Above are some of the photographs submitted by Steve. During the same amount of time, Anele who is a Black woman that lives alone, reported to throw away:

1. 3 sanitary towels
2. 6 baby wipes
3. Half avocado peel and 1x seed
4. 1 milk carton
5. 2 earbuds
6. 1 KFC cardboard food box
7. 1 KFC paper bag
8. 2 tampons
9. 2 pantyliners
10. 1 plastic pain pill container
11. 1 pill tray
12. 2 beef bones
13. 6 cigarette butts

Counting the above items, Steve (who lives with several others) produced 18 pieces of waste, while Anele produced 29. While on the surface it seems as though Anele produced more waste than Steve – despite her living alone, it is important to also analyse the *type* of waste produced. Anele produced less food or food related waste compared with Steve, which is in line with her living alone and only having to cook for and feed one person. However, Anele produced more personal care waste. These personal care products (pads, tampons, wipes, pain pill containers) are associated with a menstrual cycle, which is something experienced only by females. Anele's waste is therefore gendered.

Anele also admitted to separating her waste into recyclables and non-recyclables, which suggests that she engages in some environmentally friendly behaviour. This, according to Griffin (2021) is in line with the idea that women care more about eco-friendly practices. Steve however, works in the waste management sector. He therefore reports to also separate waste at source and recycle whenever possible. As seen from the photos above, Steve marks his recyclables too, so that collectors know which bags to sift through. While this is positive as it suggests that women and men can both be interested in better waste practices, it is important to recall the literature that states men tend to hold more senior positions in the waste-management sector – giving them more control over the waste narrative (United Nations 2022). This further excludes women from the waste-management conversation. Since Steve works in the waste management sector, he could be compelled to follow best waste practice, but is also in a better position to influence the industry compared with Anele.

Comparing the waste diary of two mothers was also an important consideration – particularly in relation to gender roles within the home. For this, the diary of Marie (a white Afrikaans woman and mother of two) was compared with Palesa's diary (a Black woman and mother of three). Both Marie and Palesa work full time jobs.

Marie is divorced and lives with her two children aged 5 and 6. She reported to waste these items over a 24–48-hour period:

1. 4 pads
2. 1 toothpaste tube

3. 1 soap packet
4. 1 Ricoffee tin
5. Toilet paper
6. Rotten apples
7. Rotten bananas
8. Rotten naartjies
9. 1 sparkling water bottle
10. 2 Steri stump plastic containers

Palesa reported to waste the below items over a 24–48-hour period:

1. 1 muffin wrapper
2. 2 Mcflurry plastic containers
3. 2 McDonalds drink cups
4. 2 plastic straws
5. 1 empty plastic sugar refill
6. 1 maize meal packet
7. 1 beef soup packaging
8. 1 McDonalds packet
9. 2 McDonalds fries containers
10. 1 McDonalds drink holder
11. 1 Handy Andy
12. 2 beer cans
13. 1 Jik bottle
14. 1 Maynard's sweets packet
15. 1 soap wrapper
16. 4 noodle packets and spices
17. 1 Doritos chip packet
18. 1 beer outer plastic packaging for 6 pack
19. 1 ice bag plastic
20. 1 empty medicine bottle
21. 4 old mascaras

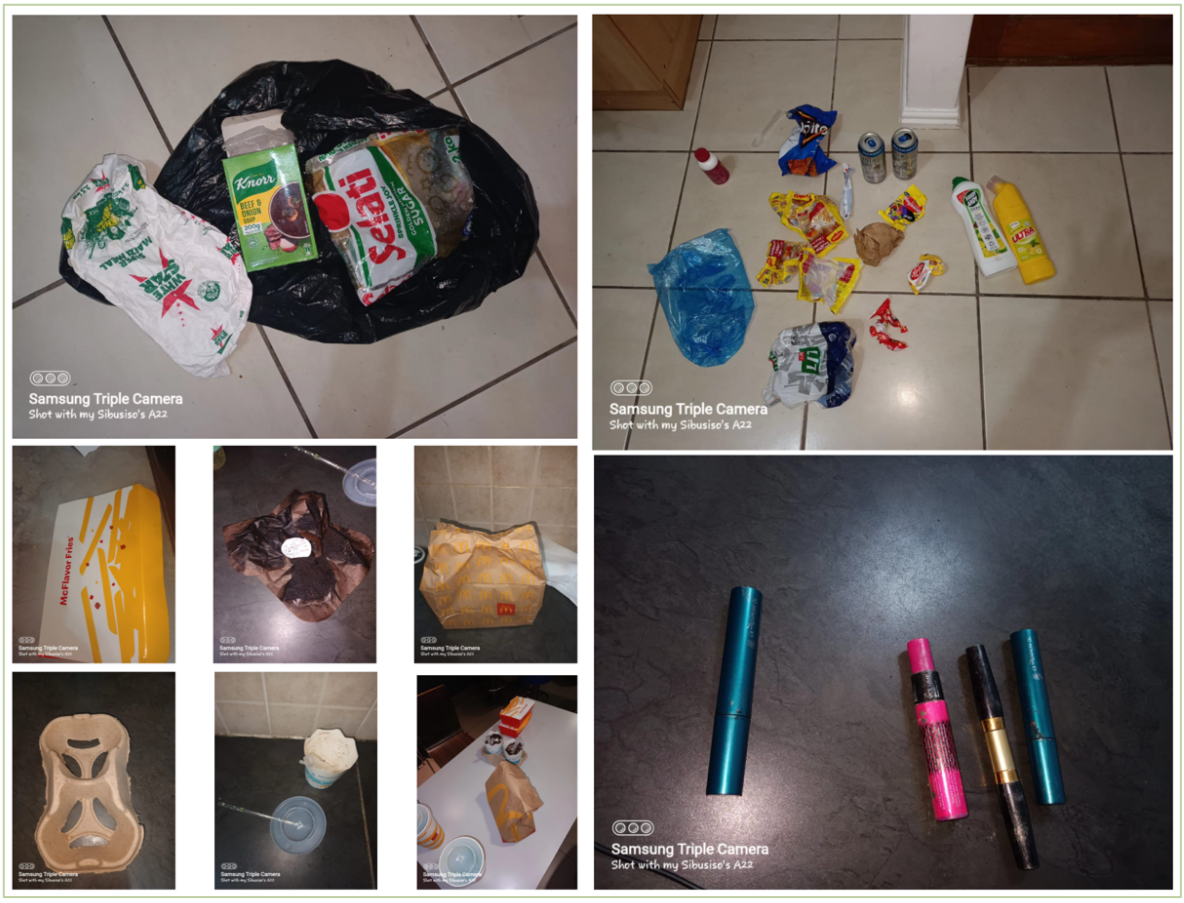


Photo credits: Participant "Palesa"

Palesa produced more than double the items of waste produced by Marie but has three children (not just two like Marie) and lives with her husband. While Marie recorded gendered waste (pads), Palesa did too by reporting throwing away four old mascaras. While both women and men wear make-up, this is generally gendered toward women.

The above suggests that women can produce more waste than men, but that this waste tends to be gendered and dependent on gender roles within the home. It was interesting to see that both mothers produced a high amount of food or food related waste. This could support the idea that women in the home have the responsibility of feeding their families and of disposing of their family's waste (de Wilde & Parry 2022).

Despite both producing comparatively high amounts of waste, both Marie and Palesa spoke in a way to suggest that they are more aware or worried about environmental issues because they are mothers. Marie for example, said:

> “Especially people our age, if they have children, they tend to be more environmentally conscious and then use products that are better for the environment. So instead of disposable nappies for your baby, you use cloth nappies instead of disposable pads, you use a menstrual cup, things like that. So people have started, I think shifted, started shifting towards your more sustainable products.”

Palesa mirrored this when she said:

> Everything starts at home. How you teach your children and how they come up as adults and how they go around being around the community or being around people or at school or everything else […] You have to teach children from a very small age how to look after the environment.

The above shows how women are not only tasked with being caregivers, cooks, and cleaners, but also educators and “environmental examples” in the home – an idea that has been perpetuated for some time (Sandilands 1993). Literature also points to women being encouraged to “feel guilty” when not doing what they can to make the best decisions for the home (de Wilde & Parry 2022; Sandilands 1993). This was made evident in the findings when Velly (a Black woman) displayed fear of judgement for not caring about environmental issues, while Lerato (a Black man) who also does not care about environmental issues, expressed no such remorse:

> “I'm not an eco-friendly. I know, ok, please don't break up with me. I'm just not an eco-friendly person. Sorry.” – Velly.

> “The simple answer for me is that it seems like a quite boring topic, even though it affects us. But for me it seems like a very boring topic.” – Lerato

Feminist theory argues that women are expected to be the nurturers and caretakers of society (even the Earth, which looks after every person on it, is referred to as “mother earth”). The theory puts forward that women are socialised to behave in these ways, and that not doing so can lead to feelings of guilt. Women who come from

marginalised communities are prone to feeling even more guilt, since they experience more cultural and societal pressure, compared with white middle class women. Making environmental issues the responsibility of women also takes away the responsibility of male-dominated corporates who create products that they push us to consume.

Not only does feminist theory suggest that women are responsible for making environmentally friendly decisions but suggests that women are made to feel bad about not doing their part for the environment. A study by Aarntzen (2022) reveals that women (especially working mothers) tend to feel higher levels of guilt because they have internalised their gender roles more than their male counterparts.

The above literature and research findings therefore suggest that gender norms are still prevalent in South African households, and that consumption and waste practices are gendered activities. Furthermore, women are encouraged to feel guilt when they do not consider environmental practices relating to consumption and waste. This sense of guilt can be used over women to keep them subservient to men within the system of patriarchy.

Research Findings

External Perception: How the Middle Class Perceives Consumption and Waste in the World Around Them

The second theme unpacked in the research findings deals with how the respondents perceive the "other". The participants were asked "*do you think class, race and gender are relevant factors in terms of how much an individual consumes and wastes?*" The purpose of this question was to understand if there is indeed a perceived link between class and gender, and how much a person consumes and wastes. This question is unpacked below in two stages: first the class aspect, then gender.

When it came to choosing which class they felt consume and waste more, the respondents tended to choose more than one of the three categories (working, middle and upper classes). For example, most participants said that the middle *and* upper classes consume more and therefore produce more waste than the working class. The most common reason given for this, was that these classes can more readily afford to buy new products and replace existing products. Therefore, throwing something away is not seen as noteworthy – since it is easily replaceable. A term mentioned by a few of the participants was "purchasing power" – the ability of the middle and upper classes to spend money more freely than those in the working class. This sense of freedom extends into peoples' ability to buy environmentally friendly products/packaging over traditional ones, which could mean that middle- and upper-class individuals have more opportunity to make positive change:

> They (the upper class) consume […] more of quality. So if they wanted to buy something that is environmentally friendly or non-environmentally friendly, it's up to them. Whereas for the lower class is limited to what it can afford. It's a bit more limited and dictated. So what we buy, we don't control that because of our purchasing power, and the upper class have more control of that. – Mpho.

Gamu agreed that the middle and upper classes tend to consume and waste more, but spoke of this as a cultural experience, and from a Black perspective:

> I think we do consume waste differently as different classes. It's just the idea for me of greed that I just started to think about as well, that upper middle classes I'm seeing that we consume a lot more things unnecessarily. So you'll find that especially as a Black person, a lot of the upper middle class Black men and women that I find myself engaging with are overweight. It's because of a lifestyle sort of thing. It's an over consumption of drink. It's an over consumption of food. It's an over consumption of all sorts of things, even clothing items. So it's a consistent buying and buying and buying and always wanting to top last week's outfit, or yesterday's outfit and all of that – Gamu.

The above insight shows how culture and race cannot necessarily be isolated from class, and that some cultures or races may tend to behave a way to be perceived by others in a particular way. Gamu suggested that for Black middle-class culture, it may be expected to publicly demonstrate how much material goods one has, in order to create a persona or to "keep up with the Jones'".

Gamu agreed that the middle and upper classes consume and waste more than the working class, and that this usually translates to apathy or a lack of interest for the consequences of consumerism and waste. Here, she said, middle- and upper-class individuals tend to live for the "now" – satisfying immediate wants or needs rather than choosing a path of restraint:

> We are producing the most waste just because of consumerism. If there's load shedding, you can go past McDonald's. If you don't feel like that, then you have one bite and then you throw it away because you've got so much more money access to stuff. You don't actually think about what you're consuming. Almost every day you come home with takeaways, but tomorrow you go and get another takeaway. You forget about what you had yesterday and you never get around to eating what's left over in the fridge, because you're always out. And if we end up throwing it out, it's the clothing that you're always buying, whether you're buying the low-cost clothing but you have the ability of being able to buy clothes almost every month or every week as it were. Then if you're thinking about people that can afford your Louis Vuitton and all of that, they can afford to go shopping every day, which is wasteful. No one actually needs to have a closet the size of a house. So it's the idea of access to the menu, the access to

> the money to buy the stuff that would probably result in people middle to upper classes of society wasting more – Gamu.

Gamu spoke to how people with purchasing power (middle and upper classes in this case) oftentimes consume without a need or a reason to. As mentioned previously, it was identified that certain people or groups behave in certain ways to be perceived in a good light by others, or to keep up appearances. Consumerism is therefore not only a result of class, but a visual statement of class to others.

In contrast to the middle and upper classes being described as wasteful, the working class was mostly described by participants as a class who tends to be more money conscious, and therefore more likely to look after and hold on to belongings. Gamu agreed that over-consumption is a prevalent theme especially amongst the middle and upper classes, said that the working class tends to save more:

> In the lower income and the lower-class brackets, you'll find that waste is different in that perhaps because there has to be more that is stretched out, you'll find that there's probably less waste and more thought behind what people are buying. Just a loaf of bread will go much further in a lower income house than it will in upper to middle class house.

While the middle and upper classes are portrayed as having the “freedom” to waste, the working class is described as being without this freedom. Mpho mirrored the above but mentioned access and the value allotted to objects, and how this differs between classes:

> It's got to do with access, because if you think about access to basic social services and basic amenities and basic foods, the lower classes, just working-class people, unemployed people, don't actually have access to drinking water. […] don't often have access to three square meals a day, and so are more likely to stretch a meal out or more likely to find more creative ways so that food doesn't go to waste – Mpho.

While the middle and upper classes are perceived to be careless with consumption and waste in this research, the working class is seen as more aware of consumption

and waste and less likely to produce too much of it (waste). Carl spoke directly to the waste produced by the working class, in relation to the upper class:

> A person who's extremely poor would create less waste than somebody who is middle class because somebody who's middle class would be able to purchase more items. So let's say the person who is middle class just has access to three meals a day that create waste, that's X amount of waste times three. Let's say somebody who's completely broke only has one meal a day that means that they're producing way less just in one single item. And I think that then just becomes worse and worse when you look at how much more somebody buys in a middle-class position versus very poor. And then I think it would change again at the very highest echelon of wealth compared to middle or compared to the bottom again, because at that level of wealth, I think the way that somebody buys is potentially waste effective – Carl.

Carl made an interesting observation in that he said both the working and upper classes tend to waste less – albeit for different reasons. While the working class wastes less because they cannot afford to waste (or do not have the financial freedom to do so) – the upper class wastes less because they have the means to avoid waste (for example, they can buy environmentally friendly options or buy in bulk). This suggests that the upper class has the freedom to make better decisions.

What Carl described can be understood on a bell curve, where the lower and upper classes are perceived to produce less waste, while the middle class “peaks” or produces the most of all classes. According to Carl, this is directly tied to the freedom an individual must make decisions. While the working class does not have this flexibility, the upper classes can afford to (both financially and with access to education) – make freer decisions regarding consumption and waste.

In contrast to the above, where participants mention how the working class needs to hold on to food or possessions for longer because they can’t afford to replace items, Bella mentioned the financial opportunity that waste provides to the working class, which is not typically something considered by the middle or upper classes:

> In most cases in those rural settings, they kind of depend on waste as a source of income. So that's quite interesting to see how they perceive waste a bit different. I mean, they could potentially even see it as a source of income, whereas us from middle class, we wouldn't even think about it at all – Bella.

The above observation is interesting in that it shows the working class to be somewhat savvy by making money from waste-related opportunities that other classes do not have or want. The working class were seen by most of the participants as more aware of consumption and waste because they are limited by choice, while also being inventive with ways they can use waste to their benefit or survival. In fact, only three of the 16 participants felt that the working class is the class that consumes the most and produces the most waste. Interestingly, these participants specifically mention visible waste or litter as a marker of waste production. However, many rural areas and townships (which is where many working-class people tend to live) do not have access to basic services including waste collection. Jane acknowledged this:

> I don't think the lower classes have the opportunity to have recycling centres close to them and recycle. South Africa has now started getting recycled bags in my area, so we can actually put all our recycling waste in one bag and it goes to be separated somewhere else. – Jane.

Meanwhile, five of the 16 participants said that class was not a relevant factor in terms of understanding how much a person consumes and wastes. Most of these participants cited that it “depends on the individual”. In other words, income has nothing to do with how much a person consumes and wastes, as this is always a subjective choice and experience.

Overall, three of respondents said the working class consumes and wastes more than other classes; eight said the middle class consumes and wastes more than other classes; just less than half said the upper class consumes and wastes more than other classes; and five said class is not a relevant factor when trying to understand how much an individual consumes and wastes.

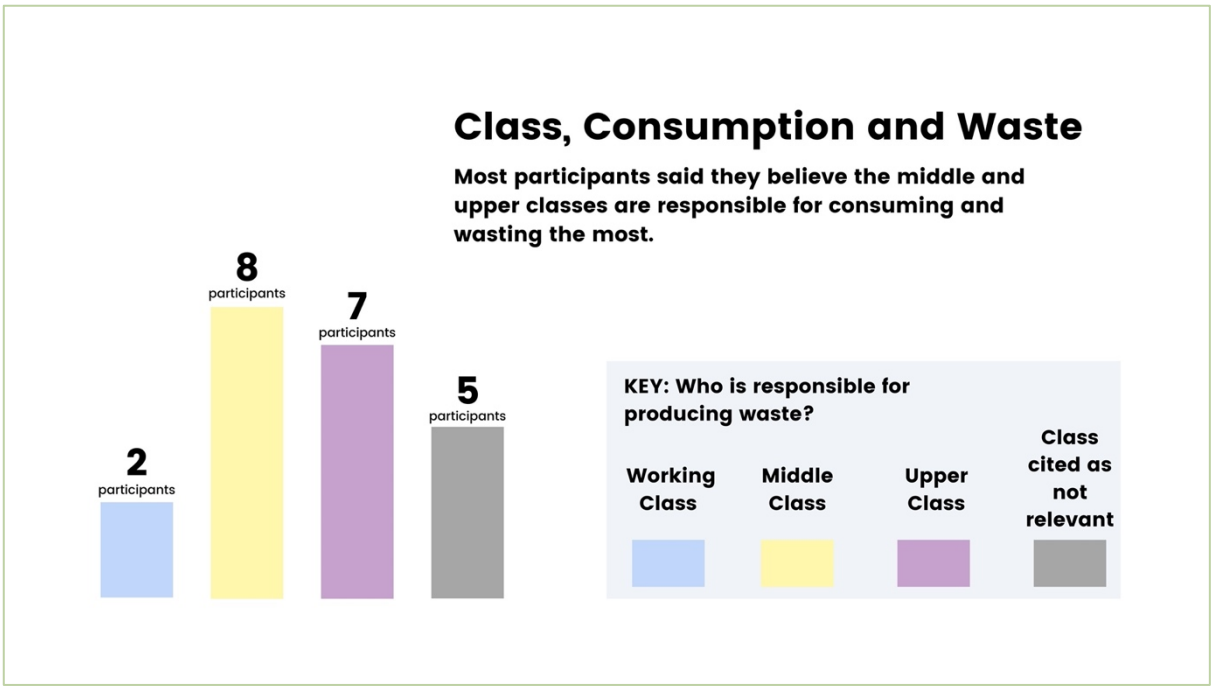


Figure 16: Which Class Consumes and Wastes the Most.

Credit: Carina Mason

The next factor that was covered in the interviews is gender, and how a person's gender might relate to how much they consume and waste.

Of the participants who did acknowledge a correlation, most of them openly said gender does play a role, and that one gender is more likely to engage in irresponsible consumption and waste compared with other genders. However, most of the 16 participants did not directly address race as a relevant factor.

Of the 16 participants, six said that men tend to consume and waste more compared with women. Four said that women consume and waste more compared with men, and six said they did not think there was a correlation between gender and consumption and waste.

John (Black man), Mika (white woman), Velly (Black woman), Jane (white woman), Marie (white woman) and Lerato (Black man) were the six that said men consume and waste more, compared with women. This suggests that this perception of men is shared across gender and race. On the other hand, Mandy (Coloured woman), Bella

(white woman), Gamu (Black woman) and David (white man) think that women tend to consume and waste more because of gender roles and household expectations.

The respondents gave several reasons why gender does or does not apply when considering how much an individual consumes and wastes. Steve said it is a subjective matter and that consumption and waste is “up to the individual”. Two participants – Bella and Mandy (both women) who said that women waste more than men, said this is mainly due to the unique consumption and disposal of menstrual products each month.

Meanwhile, six of the respondents (John, Mika, Velly, Jane, Marie and Lerato) stated that one of the reasons that women waste less, is likely due to gender-specific characteristics they are commonly assigned, such as being more “caring”, “conscious”, “aware” or “alert” compared with men. What is noteworthy, is that these adjectives were used by several participants when describing women’s attitude toward consumption and waste habits, suggesting that this idea of woman being more caring is shared by participants across gender and race. Lerato (who identifies as a Black man) stated that women tend to look after things more, which means they do not replace items as often as men might:

Lerato: Certain things would last longer. They (women) would know when they’re lost […] they take more care with certain things. Whereas as a male, I don't really take care most of the time of certain things. So I do think it does play a factor.

Researcher: If I'm correct, what you're saying is that men in your experience tend to not treat their belongings with as much care perhaps as women do, and so they might go through things more frequently?

Lerato: Yes, yes, that's true. Yes, that's what I'm saying. Yeah.

Interestingly, Velly agreed that men waste more and reaffirmed this difference in consumption and waste to the historical gender roles that are still prevalent in South Africa:

> South Africa is a hundred percent patriarchal. Men are earning so much more than women. They can afford so much more than women […] They've got more buying power […] But then consume it on all the wrong things. So women will invest more in the home, they'll invest more in feeding kids, in making the house work, or even if they're single and whatever they'll invest more in their personal home and environment. Men will invest more in the good times with the boys and whatever – Velly.

Velly, who identifies as a Black woman, suggested that men tend to be careless with money or goods compared with women. Her use of words in "they consume it on all the wrong things" suggests that men tend to be perceived as the gender that is negligent, and therefore more wasteful. David (who identifies as a white man) mirrored this sentiment when saying:

> I think it's inherent in a lot of our cultures in South Africa […] but that's only by virtue of the role that they (women) take on and the responsibilities within their sort of core family that they take on to themselves or are placed on them by external factors – David.

Interestingly, the above perspective was provided by a white man, with the preceding perspective being from a Black woman. This suggests that an ill perception of men and their consumption and waste, is not one-sided, or only shared by women or one particular race. In fact, this negative perception towards men and their waste was shared by a few participants of differing genders and races.

Despite this mention of gender roles and inequality, generally, women were well regarded by participants. For example, Bella and Mandy (who both identify as women) said that women produce more waste compared with men, but agreed that women still tend to be more aware of waste and related issues:

> They (women) might have a waste stream that the other gender won't have. But then in the same breath I also think women might sometimes be a bit more conscious about reusing or being a bit more mindful – Mandy.

Mandy referred to menstrual products specifically when saying women waste more, but balanced this “negative” review of women by suggesting that women are more caring toward others:

> “I think it’s the inherent mother gene, whether you have kids or not”.

This was one of the most significant findings: that participants tended toward thinking negatively about men in relation to their consumption and waste, and favourably upon women in the same regard. Furthermore, women tended to be assigned with certain characteristics, such as being “caring” which participants seemed to think added to them wasting less than men. The reason for being favourable toward women was their perceived “innate” tendency to care, shop for, or think of others above themselves – whether in reality or merely perceived through stereotype and historic gender roles.

Overall, the findings show that respondents tend to think that either gender is not a factor in consumption and waste, or that men likely consume and waste more than women. Furthermore, many respondents believe that women are more caring about issues of waste compared with men.

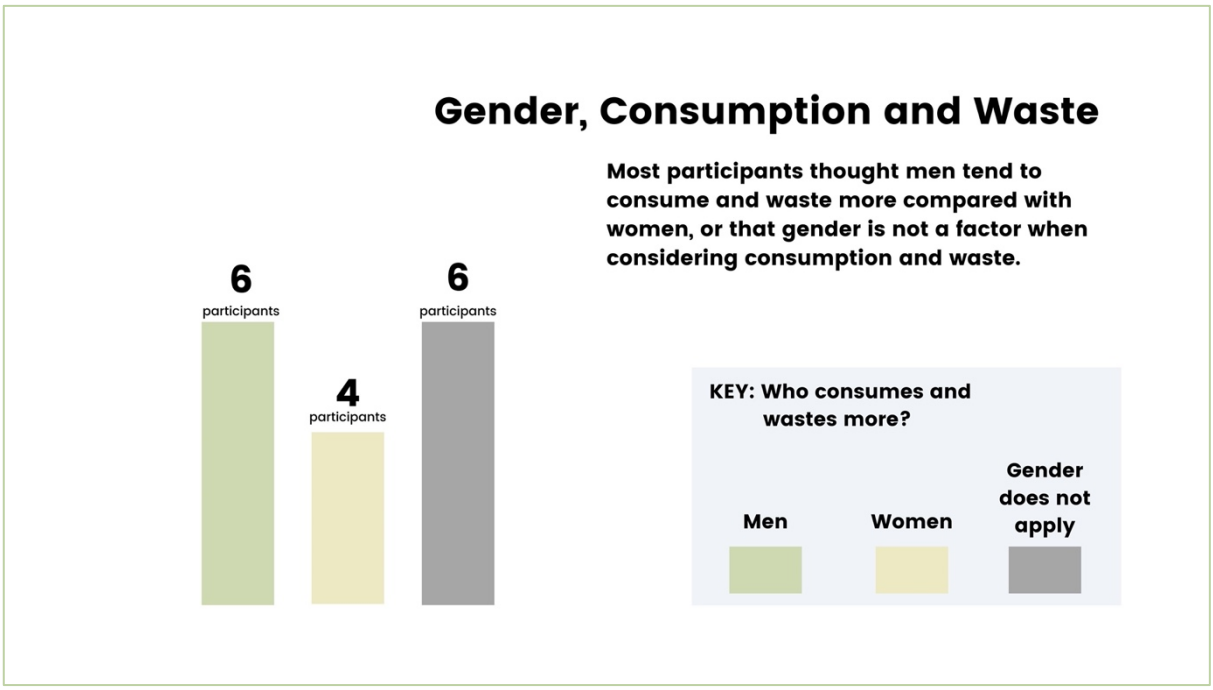


Figure 17: Gender, Consumption and Waste.

Credit: Carina Mason

Waste Diary Findings

In contrast to the above perception that men produce more waste than women, the waste diaries revealed that of the 16 participants, the men collectively produced 80 pieces of waste, and the women collectively produced 256 pieces of waste.



Figure 18: Gender and Waste Production.

Credit: Carina Mason

Unpacking the discussion on whether race is a factor, was slightly more challenging. Of the 16 participants, two overtly said that they think Black people waste more compared with other races; four *implied* that Black people waste more compared with other races - but due to external circumstances or culture; and nine said race was not a factor in terms of how much a person consumes and wastes.

Researcher Note on Question Pertaining to Race and Waste

While asking this question, I had the feeling that some of the respondents were holding back information or opinions in an attempt to be politically correct. This was seen in the hesitation to answer, the pauses, and the use of language. This comes as no surprise, given the historically sensitive nature of race in the country, but was a consideration when analysing the findings.

For example, when asked how race relates to consumption and waste, Jane (white woman) answered with “this is contentious” and “I’m opening up a can of worms”, while Anele (Black woman) said, “this is a difficult question”.

The perceived consequence to their answers may have prevented participants from being openly opinionated, however, rich data arose regardless.

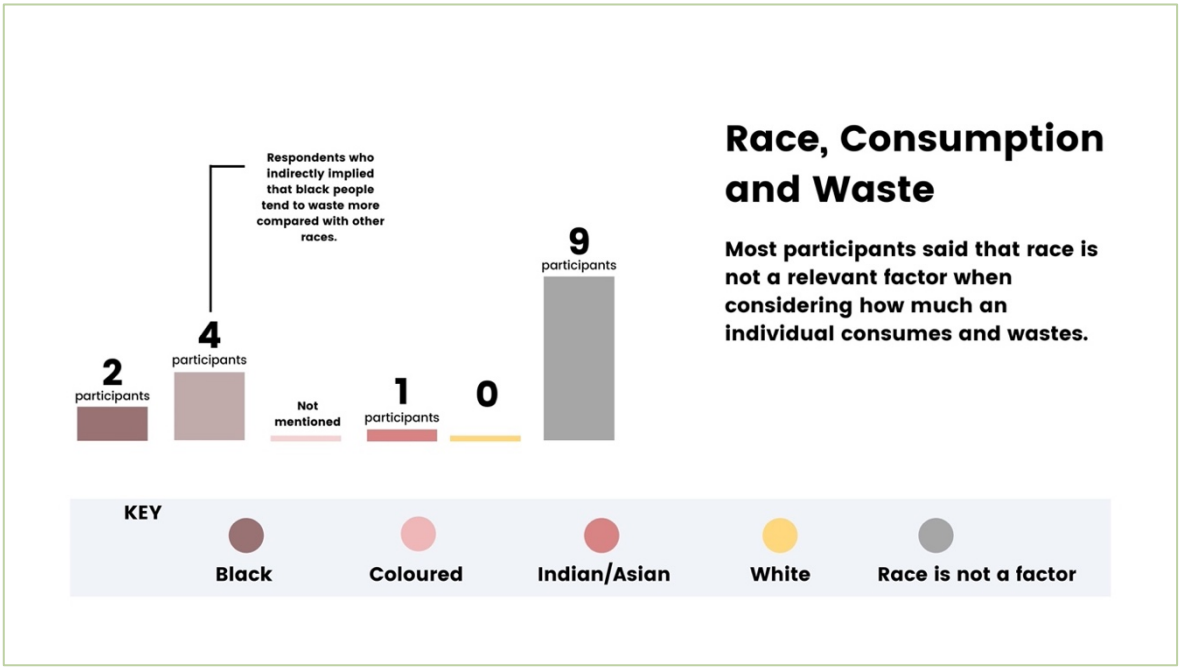


Figure 19: Race, Consumption and Waste.

Credit: Carina Mason

John who identifies as a Black man, and who overtly stated that he thinks Black people waste more, said:

> I would say we as Black people are more wasteful because […] I give an example with the townships, it's very rare to get white people in townships. And then what I've noticed is, if they (white people) consume something they're unlikely to just throw it anywhere - they'd rather hold onto it. And if I'm being honest, I do that as well. But mostly because I learned from school and from a couple of white people that I've spent time with – John.

The above perception seems to be purely based on an observation of waste (or litter rather) in the environment, more than how much waste an individual or group actually creates. This definition of waste was identified as a challenge in reading the data, as a few of the participants tended to think that “waste” and “litter” can be used interchangeably. However, what is interesting here is that the above Black participant spoke favourably of whites in their relationship with waste.

Bella – who also did not explicitly say that Black people may waste more – again referred to the visible waste found in townships, compared to suburban areas. This participant (white woman) said that this is likely due to poor service delivery:

> Just looking at an area that is predominated by certain race groups, I think you will see a difference in terms of trash and recycling […] So yes, I think if you have to look at race in South Africa specifically, it would be the lower income areas that are full of trash. But again, it's infrastructure and availability […] But from what I've noticed in South Africa at least, the majority of people are Black and the majority of people don't recycle – Bella.

Bella was hesitant to explicitly say she thinks Black people waste more, however, this was implied. Velly (who identifies as a Black woman) agreed with the idea that Black people (and Indian people) waste more by saying:

> From an African point of view, I think we waste a lot of food because we have a very, ‘I must feed everybody’ culture. There's so much food all the time and […] there's only so much people can need afterwards. So there's a lot of wastage. Another culture, which I would say does that a lot would be I would say Indian culture because I have a lot of Indian friends who go through this lot. They're also feeders, but I don't know what they do with their food afterwards. So with us, I know that I personally, in my house, a lot of it goes to waste. I throw it away because what will I do with it? – Velly.

Velly seemed to link race and culture together – as if being Black is a culture unto itself. This was a reminder of how complex the issue of consumption and waste is – particularly within a diverse South African context. Interestingly, she also spoke to Indian culture, saying she observed similarities across these two cultures. What this

suggests is that culture is very much linked to race, but elements can also be shared across races.

Several other participants were hesitant to answer this question and said race was not a consideration in terms of how much an individual consumes and wastes. However, some participants *suggested* that Black people waste more compared with other races, but to no fault of their own – rather because of external factors:

> In South Africa it's quite known that people from specific races tend to have specific salary classes or be in different financial positions more so than others. So I think it (waste) is not necessarily to do with race in itself, but more salary as a result of race – Bella.

Bella (who identifies as a white woman) related "salary" or income to a person's ability to live in certain areas where there is service delivery, and where there are educational opportunities that could potentially shape how a person views and deals with consumption and waste. In other words, people living in suburban or affluent areas (historically white people) have service delivery and are more likely to afford education and consequently change waste behaviour. Anele agreed with this, and said:

> I've seen sometimes how if someone has come from let's say a poor background, that (wasting) is a way of overcompensating, they will be wasteful with food or perishables or consumables so to speak, as a symbol of having overcome... – Anele.

Although Anele did not explicitly say that Black people might waste more, she acknowledged the role of history in shaping a person's perception of consumption and waste. As discussed in the literature review, the Izikhothane culture is one such example of young Black people who destroy money and material items as a response to apartheid and as a sign that they have overcome oppression. So while waste in this situation might not be tied to class, it is certainly tied to shared history between a particular race.

Waste Diary Findings

In contrast to the above, the waste diary findings revealed that Coloured participants collectively produced 38 pieces of waste; Black participants produced 134 pieces of waste; and white participants produced 164 pieces of waste over a 48-hour period.



Figure 20: Which Race Produced the Most Waste.

Credit: Carina Mason

This contrasts with the findings from the initial interview, where most participants thought Black people (specifically Black men) produce more waste compared with other races and genders. Paradoxically, two of the three participants who identify as Black men (John and Lerato) produced the least amount of waste of all the 16 participants. Further to this, the participant who produced the most amount of waste identifies as a white woman (Mika).

The above findings suggest that there is a negative perception of Black people (particularly men) in terms of how much they consume and waste, while there tends to be a positive perception of white people in the same regard. Furthermore, women are generally seen as more waste conscious. However, these perceptions are not necessarily based on reality, since the waste diaries revealed that Black men wasted the least and white women wasted the most over the 48-hour period.

Many of the other participants agreed that external factors were more relevant than a person's race. For example, a lack of basic services (mostly in rural areas or townships where Black people have been historically forced to live in) affects a person's ability to dispose of waste responsibly. Meanwhile, unemployment and a lack of income also affects how an individual can consume, and subsequently waste (and even understand the consequences of waste). Several other participants also mentioned a persons' upbringing, and how those factors contribute to shaping the perception that a person has of consumption and waste.

Because race and gender are inextricably linked to so many other factors, it was important to understand how other influences can impact a person's consumption and waste behaviour. The next question, therefore, asked "*what other influences do you think affect your perception of consumption and waste?"* In contrast to the above questions relating to gender and race where many of the participants felt divided or *uneasy*, most of the participants said that culture and/or history <u>does</u> play a role in terms of how much an individual consumes and wastes.

Mandy for example, spoke to the historical inequalities in South Africa, and how this still affects Black people in terms of how they consume and waste. This was not spoken of as purely a matter of race, but rather as one of many factors that affect races uniquely:

> Black people still are the ones who are the most uneducated, illiterate, so they struggle more. Even with affirmative action and all of that, I think that they still are the ones that live in poverty the most and under the breadline. So I feel that that has definitely impacted the way that they live compared to how we (white people) live and use things on a daily basis. And whether it's necessities or luxuries, I think it's a big difference – Mandy.

Here Mandy mentioned education as a factor that will influence how an individual consumes and wastes. The above was a white woman's perspective, but was mirrored by what some of the Black participants said:

> There's the historical factor of the way that my parents were also brought up. I think my mom grew up in a home where there wasn't much to go around, so they were very careful with what they used – Gamu.

The above two examples show how most South Africans seem to be aware of historical inequalities and how these translate into over or underconsumption, and the perception and management of waste. For example, Gamu speaks of poverty [as a systemic issue] as one reason why Black people have historically been unable to consume too much, compared with white people.

Meanwhile, Kate offered insight into how she perceives the Indian culture, for example, to consume in a unique way based on their cultural beliefs. She mentioned the holiday of Diwali, which she said is known to encourage the use of fireworks to symbolise light over darkness:

> They don't see it as waste where it is a hundred percent waste in my opinion. So yeah, definitely [culture] can play an effect in terms of being more wasteful or less wasteful – Kate.

Interesting, is that in the above examples, Kate and Mandy make observations about *other* cultures (cultures they themselves do not belong to) rather than making comments about their own. The implication is that when asked what factors (such as culture and history) affect a person's tendency toward consumption and waste, participants tended to consider the *other* – possibly as a means of deflecting responsibility. The Black participant however (Gamu), spoke to her own experience and the historic factors that have shaped Black culture. This suggests that white participants may tend to blame more, while Black participants may tend to take more responsibility.

Meanwhile, Lerato mentioned how upbringing shapes how an individual consumes. For example, having been taught that rice is a staple, Lerato still consumes this food group in adulthood. While this may seem obscure, it suggests that people will continue to buy specific products/brands in a manner and quantity that they are accustomed to:

> There are certain things that I'm used to eating growing up because that's what we were fed. For example, I'll eat rice and it's supposed to be cooked a certain way or meat and it's supposed to be bread a certain way. And all I know that's what I've enjoyed and that's how I'm going to consume my goods – Lerato.

This also suggests for example, that if a person is brought up in such a way to consider the packaging that food and objects come in, then they will likely carry this approach into adulthood and their own lives. However, if a person is taught to consume as much as possible and to pay little regard for the waste produced, they may continue to live like this and carry forward this messaging to their own children.

Marie mirrored this sentiment by suggesting that the way adults behave in relation to consumption and waste has a lot to do with the way they were brought up to think about these concepts within the home environment:

> I remember as a young kid, we had the Zibi ostrich. So it was an Afrikaans thing where they said and if you didn't clean up, then Zibi would appear out of nowhere if you litter or something like that, and Zibi would step on your toes […] So that was ingrained in the Africans culture. So […] we don't tend to litter because from a young age it was ingrained you shouldn't litter, it's bad manners to litter. Whereas other cultures don't see it that way. And they don't mind just throwing a bag of McDonald's out of the window while they're driving or whatever – Marie.

Marie mentioned her own specific culture (Afrikaans) and portrayed Afrikaans culture as waste-conscious and “polite”, compared with other unnamed cultures. While Marie (in contrast to the above) spoke to her own culture, she did so in a positive light at the expense of other cultures. Again, suggesting that participants tended toward shirking responsibility onto the *other*. Later in the conversation, she also mentioned how some people in Afrikaans culture make their own produce, which generally produces less waste:

> “You're still consuming, but you're not buying the product. And I think […] there's a lot less waste because the leftovers are used in something else.”

This reaffirmed that Marie tended to see her own culture favourably when it comes to matters of consumption and specifically, waste.

David also represented a perspective that white culture tends to be more waste conscious. He stated that in considering consumption and waste, one can also think of religion and religious teaching as a factor:

> White kind of middle-class Christian culture – quite conservative in many respects. Within my family, there was definitely a focus on reducing waste as well as a keen focus on let's save the environment and the impact that we can have on that. We were probably a bit capitalist and consumerist as well. So we did have a lot of stuff, but there was always a balance with how much stuff we had and how we would, let's say, treat it. And then how we would certainly dispose of waste that resulted from all that purchasing. So yeah, I think that was ingrained in me from my parents. And then the type of schooling I went to, the type of friend group I had they all reinforced all the notions that we should care on about how we dispose of things. We should care about our waste. And we can't just close our eyes to it – David.

Two of the participants (David and Gamu) who specifically spoke to religion as a factor said that their religion encourages an attitude of appreciation or of looking after what you have instead of constantly buying new:

> Religion was just a part of the way that I think about waste. So what you get is a gift […] And so even the food that you're given is to have an attitude of being grateful for it and trying to consume it what you are given and not waste. So don't eat too much, don't be greedy. Because I think greed is also another aspect of waste as well that we don't think about. Because if you eat more or consume more than you actually need, you're actually being wasteful – Gamu.

The above shows how white participants tend to look favourably on white culture, while poorly on other cultures with regards to consumption and waste. In correlation to this, Velly spoke negatively about her experience with her own African culture in relation to consumption and waste:

> I think the modern African city dwellers are […] wasteful. For example, I was at a friend's house and they had a braai and there was cheese, water and the steak, chicken and lamb […] And then the friend told me they threw everything away because they don't eat leftovers. And that was almost a grand worth of meat that they just chucked out because they don't eat leftovers – Velly.

Gamu said that while she grew up in an environment that discouraged waste, her current lifestyle is somewhat wasteful:

> I grew up in a home where we were taught really that we can't throw food away because there's people that don't have food, although I'll admit that because I live alone, I tend to find that if I buy too much of a thing, […] and then I'll forget about it. And then three, four months later, I have to throw it away – Gamu.

The above revealed that most of the participants thought that Black people tend to waste more than white people. The above white Afrikaans and English participants describe a behaviour of saving and being litter conscious, while the above African participants describe behaviour of wastefulness within their own culture.

As part of culture, Carl also identified age as a factor, and spoke to the younger generation, who he says has the propensity to consume and waste more than other ages:

> If you look at just general youth culture today, there is this really heightened focus on the aesthetic and on how you look and what you wear and what car you drive and the status symbols that I think are very appealing to those kinds of individuals – Carl.

While only Carl mentioned age as a factor, it is interesting to note that younger people are perceived as more wasteful than older, perhaps more traditional generations. Albeit unmentioned, age and generation does tie in with leadership and how leadership has changed to represent new ideals over time. Other participants for example, thought that consumption and waste has more to do with leadership than with the way an individual was raised or with a specific culture, religion or age. For

example, the messaging that is shared by governments or people of authority can influence the way the youth views issues in their own world:

> If I have to look at the way the government runs South Africa, the focus is not on renewable energy ever, or recycling. It seems to be like recycling is focused in little groups, but there is big talk about coal mines. So to me it starts with the leadership. For example let's take a country like Germany that recycles everything. They actually make it a point to put recycling bins in people's houses for different pieces of recycling. And there's a certain day that they come and fetch that recycling. So it all starts with leadership to me. And there's many different cultures in Germany. So I think it's the leadership of the country that people stay in that really influence how people perceive it – Jane.

Jane spoke to the authority in South Africa *in relation to* a European country, suggesting that Europe is the benchmark for which South Africa must be measured, or that Germany is an example we could follow. This also implies that white leadership is seen to care more about matters of consumption and waste compared with African leadership, or perhaps that such topics are of less interest within an African context.

John agreed that the government and leadership in South Africa plays an important part in disseminating messages about consumption and waste, but has to date, not done so effectively:

> It's very few of them [leaders] that touch on this subject, mostly the ones that will touch on the subject are maybe involved in the environmental departments. And then again it goes back to education […] I don't think they [the leaders] would've had that education growing up in terms of how they should deal with consumption and all that. So if it's not something that's close to your heart, you find it can take a back seat when we deal with other issues, this one is not really important – John.

What is interesting about the above observation is that even people in positions of power are seen to be influenced by their upbringing and own cultures. If they personally do not find issues of consumption and waste important or relevant, they are unlikely to push these types of messages to the public – regardless of the impact on

the public whom they serve. This suggests that no matter a person's position in society, their interest in green issues is determined by their culture and personal upbringing.

Participants therefore agree that several factors influence how an individual consumes and wastes, including their race, gender, culture, religious affiliation, age and leadership. While some of these was thought to have a greater influence over others, it was interesting that most participants (regardless of their own culture or race) looked favourably upon white race/culture and/or negatively on the Black race/culture – in terms of how much these groups consume and waste.

The participants were then asked, "*How important do you think matters of waste are compared with other issues in South Africa?*" The purpose of this question was to see if South Africans tend to perceive other issues as more important than waste. As outlined in the literature review, South Africans tend to prioritise specific issues including corruption, unemployment, poverty, racism, power outages and other topics above issues of waste. This is for several reasons, one being that waste does not seem to pose an immediate threat to a person's life or livelihood.

The findings agree with this. Of the 16 participants, only 3 said issues of waste are incredibly important in South Africa. However, one of these participants (Mpho) said that it is not always perceived this way by the public:

> I think it is as important as all the other issues that we face in the country, such as poverty, racism, and everything else, unemployment. But I think the reason why this feels almost as if it's less important or it's not talked about as much as all the other issues is because of the immediate repercussions all those other issues have. I mean, when we talk about the issues of poverty and racism, there's almost an immediate repercussions of with those issues where people are going hungry, where people are experiencing racial abuse, where people are unemployed. So it creates an immediate need for a solution. Whereas I feel the issue of waste management is an issue where we only see the repercussions of waste over a period of time. If you look at 50 years from now 50 years ago, to where we are now, there certainly has been some major

> implications with the waste management, but it's not something that people perceive to be an issue that needs to be resolved now because it doesn't compare as much as the issues of being hungry. So I think it's really about changing the perception of what we perceive this issue as. But in terms of importance, I think it is just as important as going hungry because we're talking about our livelihood. We're talking about the planet that we are occupying, and if we don't look after it, there's not going to be us anymore. So I think it's really just changing that perception and making people realize that it's not something that we should be ignoring – Mpho.

The above insightful observation describes a scenario where South Africans are in "survival mode" – only allowing themselves to worry about their immediate future or wellbeing and not about the perceived future threat of waste. This was mirrored by Carl who said:

> Just because the immediate impact is less onerous, it doesn't mean that it's (not important). It's not going to be less impactful to life. I mean, I've gone, let's say, two weeks without my garbage and waste being collected and it's devastating the impact that just two weeks can have. So yeah, I really think it's on a par with all these other critical services – Carl.

Carl used the word "devastating" to describe a lack of waste management services. However, his observation suggests that issues of waste only become important once they are visible by the individual.

Other issues such as poverty, racism, power outages and unemployment are indeed much more visible in South Africa. Most of the respondents agreed that these other issues take priority in the country:

> I think that for me personally, I would say that tackling unemployment, tackling access to higher education is important as well as tackling corruption. I think those are the top three priorities and then I think waste would sort of follow somewhere down the list – Anele.

Anele who identifies as a Black woman, answered by saying “for me personally”. This could suggest that South Africans can perceive waste as an important or not important issue, based on their own personal race, gender, culture and upbringing. For example, Black people might prioritise issues of racism and unemployment over waste. Interesting to note is that two of the three participants who said waste is incredibly important, identify as white. This idea of experiencing issues differently was conveyed by Anele, who said waste is an elitist thing that some people “have time to think about”. Marie who identifies as a white woman spoke about gender-based violence, and how this should take priority over waste issues in South Africa:

> We also have gender-based violence, which is absolutely ridiculous and needs to be sorted out. So I think there's so much occupying our minds that waste management is the least most important thing – Marie.

This again suggests that South Africans tend to prioritise issues differently according to their own experience and identity. In general, most of the participants agreed that issues of waste are not important within a South African context, compared with other issues.



Figure 21: Topics that South African's Care About.

Credit: Carina Mason

Media as an Influence on Consumption and Waste

Media is arguably one of the biggest influences in all our lives. Regardless of platform (radio, newspapers, Facebook, Instagram etc), the media can reach billions of people at the same time – making it a powerful tool of telling society what it should or should not focus on. Given its magnitude, it was crucial to understand how the media plays a role in communicating messages of consumption and waste. The next question, therefore, was "*what does the media tell you about issues of consumption and waste?*"

The purpose of this question was to understand *if* each participant is even exposed to messages on consumption and waste through the media; if this messaging is positive or negative; and what effects this messaging has on the individual. Two predominant themes were identified in the data. These are discussed below.

In contrast to the above findings, where answers differed**,** all the 16 participants recognised a correlation between the media, and how much individuals consume and waste. It was noted that participants are driven to consume by the media, which in turn forces us to produce more waste and over time, and become less aware of it:

> I've grown up in a consumer driven society, whereas if I had grown up on a farm, whether or not I was a worker or the farmer, I think I might notice things more because you are producing – Marie.

Many of the participants described the effect of the media as if they are helpless in the dissemination process. In other words, the push to consume is seen as a force beyond the control of the individual. It was recognised that consumerism and materialism is perpetuated by advertising and the media – not necessarily for our own wellbeing, but more for our need to fit in (Stewart 2022).

> You see on TV these people who are, let's say, new rich and they've just come into to money. And for them maybe it's like a status symbol or maybe it's a certain culture's way of showing that they've made it, that they then want to buy to an extreme excess and not care about the repercussions from a waste perspective at all. That would be something that they would say, let's say maybe a low cost should care about or not their problem. – Carl

Carl touched on the way the media can be aspirational – showing us what we need or *should* have to be successful or happy. The media can also tell us who we should find responsible for waste.

Theme 1: Not Enough Coverage or Effective Coverage

The first theme identified was that almost all the participants said the media does not adequately cover stories about the negative effects of consumption and waste:

> "I don't think it's covered enough. I think that there has been a change, but I don't think it's covered enough." – Kate

This lack of coverage was spoken of in a general sense. In other words, the participants felt that there is a lack of content regarding consumption and waste across all media platforms. Lerato for example, mentioned the limited coverage that does exist, tends to promote consumption as this is positive for the economy:

> There is not much information out there about waste. It's mostly about consumption […] about the state of the economy, how people are doing in the country what people can afford […] So I wouldn't know much in terms of waste and consumption – Lerato.

Mpho mentioned how the limited content that does exist, serves as a sort of marketing campaign to promote "environmentally friendly" brands and ultimately to promote consumption:

> I don't think I see much other than maybe the issue of paper straws versus plastic straws […] and I'd say that's almost like a marketing function from each of the restaurants to try save the planet in some kind of small way. But otherwise, waste in and of itself, I'm not sure you see a lot of climate change stuff – Mpho.

Furthermore, it was identified by several participants that the messaging that does currently exist, is not effective. Lerato said this is because it is outdated and does not speak to the responsibility of every individual in managing consumption and waste:

> When they show the reduce, reuse, recycle ads and that, I think it has become quite monotonous because people don't really take it into account, and they feel like it's someone else's responsibility to sort that out – Lerato.

The boredom or apathy with the messaging as described above, shows how some South Africans may feel complacent about green issues – purely because these issues are not new or stimulating in the media. Given this, it can be assumed that if messages about consumption and waste were made more exciting or topical, that more people would be engaged and interested with the subject. This feeling of disinterest was reinforced by Lerato who described issues of waste as “boring”:

> It seems like a quite boring topic, even though it affects us. But for me it seems like a very boring to topic. And usually when you're consuming radio and television, you're looking for entertainment of some sort – Lerato.

Lerato went on to say that he would actively avoid waste-related content if it appeared on the media platforms he uses:

> I wouldn't want to read a newspaper that talks about waste and things like that. But on Facebook or on your Twitter and whatever, I think that would be the best way to showcase the information […] But if it were to come up on a radio or on television, I'll probably switch the channel […] I believe that the radio is really about trying to get people to listen, and I don't know I don't want to think for other people, but I wouldn't want to listen to the radio and hear them talk about waste – Lerato.

This reinforces the notion that certain people are not interested in green issues – no matter how these issues can affect them. And no amount of media can potentially change this mindset.

John identified a specific gap in South African media coverage on issues of consumption and waste. He said that most of the content he is exposed to on these topics, is foreign, which suggests a lack of local interest on the topic, or that South Africa has differing priorities:

> I would say 85% of the time if not more, when I read about something that has to do with the environment, chances are that article is never a South African article, you'll get one or two, but it's never directly related to South Africa/Africa. […] I feel like our media wait for something major to happen regarding the waste environment before they cover it – John.

Further, John expressed how this lack of coverage translates to a lack of reach and awareness in South Africa, compared with "European counterparts". The effects of this, as stated in the literature review, are that South Africans tend to prioritise other issues, such as corruption, poverty, and unemployment over issues of waste. While it is arguable that say poverty is more important that waste, it has been clear throughout this research that one cannot separate consumption and waste from any other aspect of human life, since we are intrinsically tied to our need to consume to survive, and our propensity to create waste.

Mandy identified the underlying power that the voices in the media hold. For example, if certain powers push narratives of a product being launched in a new colour, then suddenly the perception is that this is new and better, and one must have it:

> I'm thinking of clover's blue bottle issues. Clover milk have this blue bottle thing that's still on the shelves, but it's been quite a thing because it's causing an issue from a recyclability point of view. The white or clear bottle would be more recyclable, and they've changed to blue for whatever reason, but they might be panting how amazing or for whatever reason the blue bottle is so great – Mandy.

Besides clever marketing techniques that convince people to buy certain products over others (despite mostly being the same), a trend known as greenwashing has become commonplace where companies are claiming to be environmentally aware or supportive. This was discussed Mandy, who said greenwashing is causing more confusion for consumers, than providing solutions:

> We're now inundated with biodegradable, compostable, recyclable, a hundred percent this recycling content in this, you don't know what is going on […] I don't think there's any standards or anything. So people can put whatever on their

> product as well. So they can say, oh this is environmentally friendly" [compared with other brands that in reality may be more environmental – Mandy.

Interestingly, Mandy identified how impacted most consumers are by packaging. She mentioned that people are less inclined to read or educate themselves thoroughly on a subject and would much sooner rely on a label that claims to be "100% biodegradable" when making eco-wise decisions. This suggests that even if people want to make better consumption decisions, they are being prevented from doing this because of misleading media.

Social Media is King for Green Issues

When asked which platforms they are most likely to find stories of consumption and waste, many of the respondents mentioned social media above other platforms:

> I think if there's any platform that you would definitely find it on, it would be Facebook, perhaps even WhatsApp if you have the right friend group […] but you don't often see newspaper adverts or newspaper articles about things like that. Even on the radio, it's not discussed to the extent that it should be. – Bella

Noteworthy, is that Bella said she thinks the media avoids stories on waste because they (the media) do not want to show us that it is a problem, but "we know it definitely is". This suggestion puts forward many other questions, including *why would the media prevent us from seeing stories on consumption and waste?* One answer could be that the media uses advertising as a revenue stream, and advertising relies on consumption for its survival.

Other participants mentioned Instagram as a source of eco-related stories but said that it requires following specific people or groups to be exposed to these types of stories. For example, two participants mentioned following Green Peace – an environmental organisation with strong messaging about the effects of pollution on the ocean and natural environment. However, it was mentioned that unless an individual follows a particular cause or organisation, they are unlikely to be exposed to stories of consumption and waste:

> You don't get exposed to a lot more than that. It's not on the tv, it's not Netflix that you livestream has advert saying, do this or rather use glass not plastic, so on the radio or anything like that. So I think that exposure might be limited with regards to media – Mandy

Marie also mentioned watching Netflix, which has one of the draw factors of being an advert-free platform. While this is appealing to viewers, it decreases the reach that environmental adverts may have within households:

> I hardly see it (stories on consumption and waste) on TV because I watch Netflix. I see maybe once or twice on YouTube fashion brands like H&M who have come up with a method to recycle textiles. So all old clothing that goes to H&M, you get vouchers for now. In terms of other products, I do notice some talk about foods and vegan foods and all of that, but it seems very niche and very, very little is made on recycling – Marie.

Since social media is a comparatively 'modern' platform (compared with print newspapers, television, and radio), it can be assumed that issues of consumption and waste (environmental-type issues) are of more interest to a younger generation, since these are the people using social media the most.

Theme 2: The Push for Consumption

More than underreporting on stories of waste, several of the respondents agreed that the media tends to push for consumption:

> "Eat more. Buy more. More, more, more […] Just eat more. Buy more, more. That's the message. Get more of the stuff" – Gamu.

This comment demonstrates how many of the other participants felt – that they are encouraged to consume regardless of the cost to society. Despite being aware of this environmental cost, one participant said she was likely to only see messages to consume on her social media pages:

> I follow the Green Peace and these other nature conservation people, and I hear a lot about them telling me about plastic waste in the oceans and plastic waste in the forests and things like that. But on TV and on Instagram and YouTube, it's all about just consume, consume, consume. – Jane

The above shows how an individual can also receive conflicting messages. For example, while the Jane is interested in green issues, she is still told to buy more goods. The effect of these conflicting ideals is confusion, which is why many South Africans still do not purport to know about the true effects of the waste they produce.

This lack of awareness is in part due to a lack of media stories relating to the effects of waste – not just on the natural environment, but on communities and people in every part of the world. It seems that many still view waste as a foreign issue – one that does not involve them or impact them directly. As discussed in the literature review, many people tend to want to rid themselves of waste as soon as possible, without any consideration as to where that waste goes. When contemplating this, Carl mentioned:

> I don't think the story the media is telling us touches on waste at all. If anything, I think the story the media would either encourage consumerism and purchasing with almost no consideration for the waste, or just be completely silent on anything related […] So the media is really not a good advocate for waste in my opinion at all. And there's not a lot of focus placed on it either from an educational standpoint – Carl.

Lerato mentioned the push to consume, but spoke about how this positively affects the economy and country:

> They (the media) push for consumption. The more consumption the better. Because it's a basic rule of supply and demand. The more consumption happens, the better for the economy. Cause it means that things are growing, and people are getting jobs. I would think that the media will always want you to consume – Lerato.

Again, Lerato showed no insight into waste and where waste lands up, but instead viewed consumption positively as it could address a *more pressing* issue in South Africa: unemployment.

Another interesting observation was made in that not only does the media push us to consume, but to *over* consume and buy things we do not necessarily need:

> I think the media definitely promotes over consumption. If you think of your influences, be it fashion be it food, travel I think that we are part of a generation where upward social mobility is very important and the messaging that we get about upward social mobility is to over consume. I have not seen many ads or promotions about reducing waste in the mainstream. – Anele

As was touched on earlier, the need to over-consume seems to be intrinsically tied to South African history, and the need for certain cultural groups to be a part of a movement that acts to defy apartheid. The media, therefore, can be said to be a huge proponent of cultural messaging, which drives human behaviour – especially in the promotion of consumption.

Marie felt that the reason one is driven to consume, is to fit in with a cultural group or with society at large:

> I think the media, especially a platform like TikTok, is fuelling consumption. Because people are watching these other people living their best lives. I have to have a new deal bag every damn week. I have to have 17 pallets of Urban Decay makeup. I have to have this, that, because this person. And then you look at these guys that get famous on TikTok, if you have 10,000 followers or whatever. And then each of those guys bring out their own damn brand of makeup and clothing and hats and handbags and perfume and the list goes on the market, yes, the market can sustain it. There are people who are always going to want to buy. And if you're a fan you want to support them and you're going to buy their stuff, but the earth cannot sustain it. That model needs to stop. People need to stop being so consumer driven, consumption driven. It's going to kill our planet, it's going to kill us – Marie.

The above answer was interesting in that Marie identified a push (particularly from social media) for people to consume to fit in or be a part of the social norm. However, her choice of words “have to” when describing this action to consume suggests that she feels helpless in the act of consumption, and that the responsibility is on the people who are pushing consumption, rather than those acting it out. This sense of helplessness suggests that the media has control over our lives and our decisions, and therefore on the amount of waste we produce.

While the above suggests a collective mentality (that the media has a particular effect over society as a whole), other participants mentioned that although the media does have power over us, consumption and waste is still up to the individual (their preferences, likes, and who they follow on social media):

> I guess it depends on who you associate yourself with. If you're a Dan Bilzerian follower, everything is about big cars, guns, helicopter rides, boobs, consumption - Marie.

Marie went further to say that unless a person is interested in environmental issues, they are unlikely to encounter such stories because of the way social media is designed to tailor to the individual:

> Your feeds are curated to what you like […] because I'm interested in green (issues), I wouldn't say Green Peace, but greener alternatives, greener issues, the greener side of life - my sponsored ads are more catered towards those type of things – Marie.

The above suggests that the media merely caters to the individual and can therefore not be held responsible for issues of consumption and waste. In other words, the media gives us what we ask for.

While some respondents stated that the media does not report on issues of consumption and waste enough, others spoke about their own ignorance toward the topics – regardless on what’s available in the media:

> I'm very clueless to what the media talks about. I just know that we are killing the planet because of our consumption and because of our waste with plastics and straws. But that's about as little as I know. I'm very clueless and I'm very let me rather say ignorant to that because I don't read about it much. I don't pay attention to it much. I just know that I should consume less and I shouldn't be buying a lot of plastic bags when I go to the shops. – Mpho

This sort of ambivalence was expressed by more than one participant. When asked about the "killing of the planet", Mpho said that these types of stories tend to "pop up" on his social media accounts such as Facebook, and that he does not actively look for this content.

Velly described herself as "not eco-friendly" and followed by saying: "please don't break up with me" in the interview. With these words it was implied that although she did not feel any interest in seeking out environmental-type stories on consumption and waste, she did feel some fear of judgement in not doing so. This reaffirms the above findings that while not much media coverage exists on such issues, South Africans are aware that they are important issues, and that people (perhaps more specifically women) *should* care about them – or at least be perceived to care.

Although Velly was an outlier, it did highlight an important finding, which was that almost all participants feel that consumption and waste are important issues and should be communicated by the media.

Similar to the above, Lerato described a lack of interest in waste issues because of how unappealing the subject is:

> It's not glamorous, it's not pretty - something you can post on Instagram. 'Oh look, today I went to landfill and I looked for all the old computer parts that can't be recycled or that can be recycled, that can't break down in nature'. It's not glamorous, it's not pretty and it's not safe. Not in South Africa. You cannot go to landfall on your own. If you are a woman, you will get attacked – Lerato.

The above demonstrates how most people tend to move towards stories of beauty and aspiration, and away from stories of destruction. According to Gold (2021), people

tend to avoid negative environmental stories as these can seem overwhelming. Using the term “climate denial” in her research, Gold describes people as “not ready to face issues” that affect us all, and that appear too great to tackle. In other words, this suggests that people avoid waste stories as much as possible so that they can go about their daily lives without a sense of impending doom.

Following on from this idea that people avoid negative stories because they feel uneasy, Palesa identified how she believes that people tend to be selfish in general:

> “People only care for themselves. They don't care for the next person. So how will they care about nature?”

The above suggests that even if the media covered more stories on consumption and waste, people would not likely be interested in these stories since we are all driven by our own wants and needs, and not the wellbeing of the collective. Despite this, Palesa recognised the importance of symbiosis in saying that environmental issues are everybody’s issues:

> The media reaches places that are very far, and the media has the power to plant such things into people's brains. Because when you see that advert often it ends up sticking to you […] So why would they not be an advert about nature? That teaches how to look after nature. And it must also highlight that when you don't look after nature, nature will not look after you. Cause we all need each other – Palesa.

Kate suggested that even though the media does not currently offer enough coverage, if people were to demand waste-related stories from the media, the media would likely provide these:

> “Definitely the media is not angled to a zero waste or waste approach but if you switch them onto that, they may […] give you that information.”

Kate believes that every individual in society has the power to influence the media and the way we as a collective view and tackle issues of consumption and waste.

The two major themes identified were that the media does not adequately provide the public with stories on consumption and waste; and that the media tends to promote consumption. Several other themes were also identified, as illustrated below.

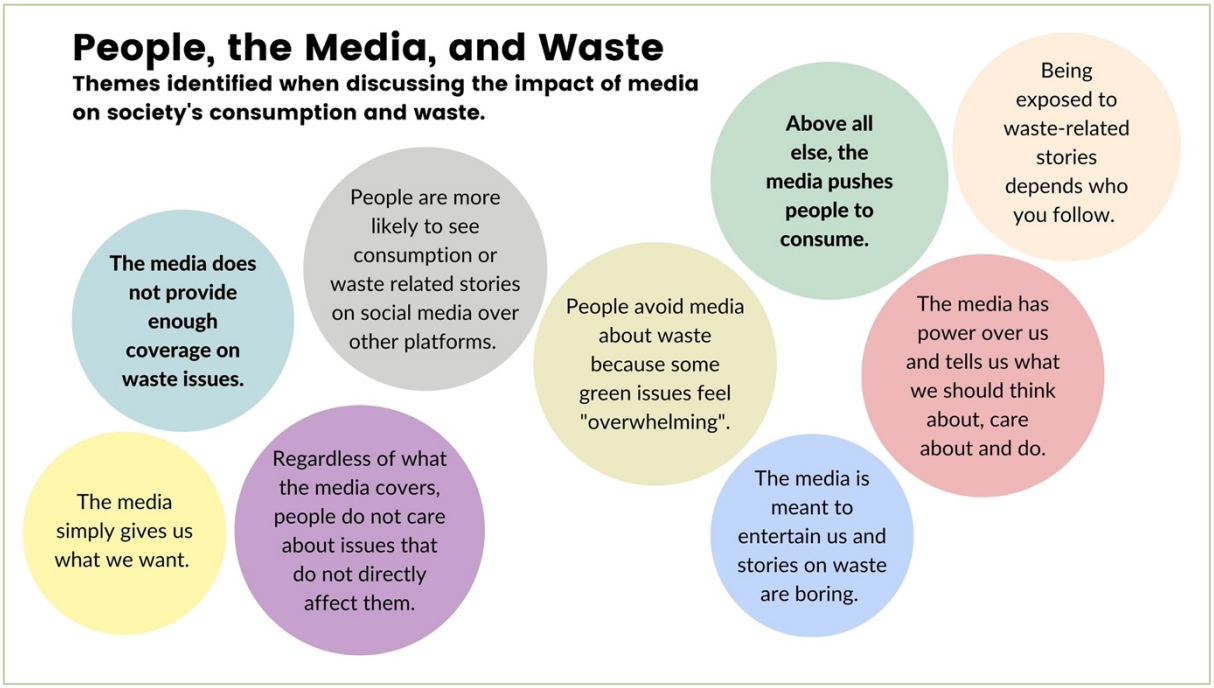


Figure 22: The Media's Influence on Consumption and Waste.

Credit: Carina Mason

In conclusion, it was found that six of the 16 participants feel that not enough is being reported about waste by the media. Four of the 16 said that people are exposed to issues of consumption and waste *if* they follow those types of influencers, organisations, or stories. Nine of the 16 participants mentioned that the media pushes us to consume more, and one participant said the current messaging is boring and ineffective. Therefore, most participants felt that the media mostly pushes us to consume – above reporting on issues of waste.



Figure 23: Media Messages on Consumption and Waste.

Credit: Carina Mason

Link to Literature

To link the above to the literature, it is important to first summarise the main findings in this section:

- Participants tended toward looking negatively toward men and their consumption and waste habits.
- Participants either thought that men tend to produce more waste than women, or that gender is not a factor for measuring waste production.
- Participants tended to think that women are more “caring” of consumption and waste related issues.
- Participants tended to think that Black people waste more than other races.
- The waste diaries revealed that white participants wasted more than other groups, and that a white woman produced the most waste of all the participants (contradicting the perceptions above).
- While participants were divided on whether gender and race play a role, they all agreed that history and culture are relevant factors.
- Some white participants spoke favourably about their own culture while speaking negatively about other cultures.

- Some Black participants looked negatively at their own race and culture in terms of consumption and waste practices and looked favourably at white culture.
- Almost all the participants agreed that South Africa has more important issues to worry about compared with waste. These include corruption, unemployment, poverty, racism, sexual assault, crime etc.
- Most of the participants said that media does influence the way we consume and waste.
- Most agreed that there is not enough media coverage on issues of consumption and waste.
- Most agreed that the media pushes us to consume.

As was seen in the literature, consumption is a complex human behaviour that is influenced by a person's survival needs, as well as their psychological and social needs to fit in and be seen (Pappas 2012; Norberg et al. 2019). Consumption is also limited to how much a person can afford to buy and is therefore a freedom that is not granted to every South African equally (Franc Bayat 2009; Ndlovu 2020). Given the complex history of the country, it is therefore clear that Black people have not been able to consume in the same way that white people have. Most Black South Africans today are still poor (comprising 64% of the Black population), while poor white people only constitute 1% (Nqola 2021). This was reflected in the research findings, which revealed that the participants are aware of historical issues in South Africa (i.e. apartheid) and agree that this continues to cause inequalities between races by affecting how one can consume and waste.

Other research points to the fact that some subcultures within the Black community are now indulging in over-consumption, and a destruction of material objects, as a message that they have overcome oppression (Howell & Vincent 2014; Mnisi 2015; van der Westhuizen et al., 2019; Oosthuizen 2020). Interestingly, many of the participants thought that Black people (specifically Black men) consume and waste more compared with other races and genders. This also correlates with Southall (2020: 174) and James (2017: 1) who say that Black people are now spending more than other races as a means to "demonstrate their [new found] success". This

however, is not limited to South Africa. The literature reveals that poor countries around the world (including India) tend to conspicuously consume as a form of escape or as a declaration of freedom (Charoenrook & Thankor 2008). Furthermore, the literature highlights that poorer, historically Black areas in South Africa have been underserviced when it comes to waste management (Mohee and Bundhoo 2015; Simelane 2015; Maina 2019). This lack of service delivery (which leads to visible waste) could be one factor why some of the participants associated high waste rates with Black people. Three of the participants (John, Bella and Jane) spoke directly to visible litter in Black communities, and all three either explicitly stated or implied that they think Black people waste more than white people.

But despite the participants perceiving Black men to consume and waste more compared with any other race or gender, the waste diaries revealed that after 48 hours, white participants had created the most waste, with a white woman (Mika) having created the most items of waste compared with all other participants. The two participants who created the least waste during the same period (John and Lerato) are Black men.

Gender as an influencing factor also yielded interesting results. According to the literature, women are portrayed by the media as stereotypical mothers, wives and caretakers who tend to buy the groceries for the home, and spend money on make-up and other products to retain their feminine character in society (Luyt 2003; Hunt 2020; United Nations Women 2019). Griffin (2021) also argues that from a very young age, girls and women are taught to consume more than boys. Whether its fashion and accessories, to cosmetics and then to menstrual products – women are told that they need more “stuff”. This is supported by a study that says women hold the purchasing power in most South African households (IQ Business 2020) and that they spend more than men in many categories (Nielsen 2021).

Women are however, also portrayed and perceived as the gender who care more about environmental issues and consuming sustainably. This is because these *innate* “caring” characteristics fit into existing gender role stereotypes for women, which encourage women to be selfless, nurturing and loving (Hunt 2020). Most notable is that some research points to the fact that men tend to be “put-off” from environmental

activities as these are seen as “feminine” and they want to retain their perceived masculinity (Brough & Wilke & Ma & Isaac & Gal 2016; Bloodhart & Swim et al., 2019; Buckingham et al., 2020). This literature was overtly mirrored by one participant (Lerato) who openly said he has no interest in consumption and waste stories, and that “women tend to look after things more and waste less compared with men”.

The other participants all showed some interest in consumption and waste issues, but to varying degree. More noteworthy, was that the participants mirrored the stereotypes about women that was prevalent in the literature - specifically how women are perceived to not litter as much as men (Al-Khatib & Arafat & Daoud & Shwahneh 2008); women are more likely to be more caring and eco conscious (Brough & Wilke & Ma & Isaac & Gal 2016; Bloodhart & Swim et al., 2019; Buckingham et al., 2020); women are more likely to recycle (Griffin 2021), and women are more psychologically affected by waste (Graham-Rowe et al., 2021; Porpino et al., 2015).

The findings in the survey also revealed that many of the participants grew up in such a way as to reinforce the above ideals about women. For example, most participants saw women as the primary shoppers, cooks and cleaners of the home environment, and some of the participants think environmentally friendly behaviour is “feminine”, while none of the participants thought this behaviour is masculine.

Besides gender, the participants also spoke to other factors (such as culture, history and media) as having an impact on how an individual consumes and wastes. The literature covered this extensively – particularly how apartheid has played a major role in South Africa in determining how people of colour can consume, and what access to waste education and infrastructure they have (Oduniyi 2013: 89; Ruiters 2015: 98; Mpofu-Walsh 2021). It was found that the legacy of the apartheid system continues to perpetuate racial and gender-based inequalities (Business Tech 2022). This is done in many ways, such as by portraying consumption as a mark of freedom in the media – encouraging Black people to consume to attain liberty, while also white people to maintain power. The media also portrays women as the gender that “cares for” and “looks after” others. This public portrayal encourages women in society to live up to these ideals, and tells men that they should find these qualities desirable – further entrenching gender norms and expectations.

Through a lack of reporting on environmental stories, the media also tells South Africans that other issues are more "newsworthy" (Anderson 1997; Kwansah-Aidoo 2001; Vissers 2010; Lawhon & Fincham 2006; Ornico 2019). Issues of consumption and waste are therefore marked as not important by society – which correlates with the research findings.

The research revealed that most of the participants find matters of consumption and waste as not important, compared with other more pressing themes in South Africa. These themes include politics, power outages, strikes, crime, corruption, and unemployment (issues that have historically held greater significance for Black people and women) (Ornico 2019). It is not clear through the literature and research if the participants reflect what is actually important to them personally, or if they – like many of us, simply mirror what they are told to think is important by the media. However, considering Maslow's Hierarchy (McLeod 2020), it can be assumed that both the existing literature and the participants are prioritising certain issues above consumption and waste, as these are seen as more pressing to their survival. For example, unemployment has a direct and visible impact on how a person lives, while waste is somewhat of a distant problem. The way people view issues (as important or not important) also speaks to their own perception of others. The literature speaks to the way that certain groups in South Africa are viewed. For example, the global north is commonly portrayed and perceived as "having the answers" for how society must function, while the global south must follow these ideals. Failing to do so results in poor or primitive living conditions (Jambeck 2017; Edmond 2019; United Nations 2020).

Another consideration is the lack of accountability or responsibility for waste. Literature mentions how South Africans tend to push waste responsibility onto others, rather than taking action themselves (Kubanza 2010: 97). Not a unique issue to South Africa, a tendency to push responsibility is seen in many other places, such as India (Upadhya, 2009: 26). This was mirrored by the participants, who tended to speak negatively of "the other" in relation to consumption and waste practices. For example, several white participants (Marie, Bella, Kate, Jane and David) tended to favourably reflect on their own cultures while "looking down" on other cultures and the way they manage

consumption and waste. Kate for example criticised Indian culture for their use of fireworks at Diwali, since these are harmful to the environment. Velly and John agreed that Black culture tends to waste more, and therefore looked negatively upon their own race and cultures. This is significant as it shows how society views people of colour and minority groups as "problematic", while seeing white culture as "knowing better". This is so wide-spread, that it seems even some Black South Africans agree.

Application of Theory

The literature and research findings paint a clear picture of how gender roles are still standard practice in many South African homes. While women have more career and social opportunities than they had previously, they are still expected to be the primary homemakers, child-rearers, feeders, cleaners, cooks, and even the recyclers and sustainable shoppers of the home environment. More than this, both the literature and research findings agree that women are still seen to possess certain "feminine" characteristics that are associated with the above activities. For example, both the literature and the participants used words like "caring" to describe women in relation to their consumption and waste practices. The participants also seemed to see these qualities as positive traits, suggesting that women having this connotation is a *good thing*. While this can be seen as neither here nor there, it is my understanding through feminist theory that it serves to further entrench these ideals in women and encourages them to continue to behave in these ways. This supports the idea that gender norms (some of which are not seen negatively) serve to reinforce the power and control that patriarchal structures continue to have over certain groups. By suggesting that women "care" more about environmental issues, it also takes the responsibility off men. This way, men are encouraged to continue devastating the planet as a means for profit (since men are stereotypically seen as the breadwinners), while women "deal with it" by making better, eco-friendly decisions in the home. It is clear then that gender norms in the context of consumption and waste are detrimental to society at large, and affects every person – regardless of their gender, race, class, and culture.

Research Findings

Responsibility and Future Behaviour: How the Middle Class Feels About Consumption and Waste Going Forward

As seen in other sections, participants understand that "someone" is to blame for issues of consumption and waste. This "someone" differs between them but is nevertheless important to identify if waste solutions are to be created. The participants were therefore asked "*who do you think is responsible for issues of waste and waste management?*" The purpose of this question was to understand whether middle class individuals take accountability or push this onto others.

A pattern emerged where four common ideas were put forward by participants. They said that either it was the responsibility of every individual; the responsibility of the government; the responsibility of each individual *and* the government, or the responsibility of retailers/producers/corporates.

Of the 16 participants, 9 said waste is everyone's responsibility and/or the responsibility of government/municipality; and 7 said it was "*somebody else's"* responsibility, citing the government or the retailer/producer/corporation.

Of those participants who said everyone shares equal responsibility, 5 were men and 4 were women (Steve, John, Bella, Mika, Mpho, Carl, Palesa, Kate and David). These answers represented the perspectives of 1 Coloured participant, 3 Black participants, and 5 white participants.

The participants who said that it was somebody else's responsibility included Mandy, Anele, Velly, Jane, Marie, Gamu, and Lerato. These represent the perspectives of three Black women, three white women, and one Black man.



Figure 24: Waste Responsibility.

Credit: Carina Mason

Everyone is Responsible

As shown above, most respondents felt that each person in society must be held equally accountable for the waste they produce:

> If I consume something and I throw it away, I'm responsible for where it goes. Whether I know where it goes or not - it's a consequence of my action. So I wouldn't even put it on the person who created it because without the consumer they wouldn't create it […] So from a factual point of view, I suppose we also have some kind of responsibility to put it out so that they (municipalities) can collect it. From a moral point of view, I would say yeah, it's the consumer. – David

David took full responsibility for consumption and waste – despite what products are made of (for example, harmful plastic that. Is non-recyclable) and despite the consequence of lack of waste services (both factors impact waste management). Other respondents also showed open accountability, but said that other entities such as the media have some responsibility:

> You, yourself and I are only responsible are the person that is responsible for waste. If you're not responsible for waste, you cannot hold companies or media or anyone responsible for telling you what to do. But it comes with the caveat of, I think that I do hold media and companies to a certain degree responsible because they have a bridge into gathering that information in terms of what portal tools to use. So that I think they do have a huge responsibility to report on, provide information and support the individual to be able to reduce and help with monitoring their waste. – Kate

In the above, the media is described as a responsible party in “bridging the gap” between the consumer and best practice regarding waste. This best practice was also mentioned by other participants, who felt that individuals (with the help of producers and government) need to recycle and do other green practices such as cleaning less (using less detergent and paper towel).

> It starts with each person being responsible about their waste, not overbuying, not over cleaning, not just using Colton roll because you cannot wash or run your washing machine too many times because you want to be excessively clean. Not choosing aerosol cans unnecessarily. – Kate

Carl, who also thinks each person is accountable, went on to list all the entities that he feels should have responsibility:

> I think every single one of us as individuals is responsible. And then I think that every single company or creative product should hold themselves accountable and responsible. And then I think your government, through legislation should hold every single country accountable. And then even further than that, your overarching organizations that can place international sanctions should hold countries accountable. I think it's something that should penetrate every single level of thinking from an individual in a home all the way up to the highest levl – Carl.

Despite holding themselves and every other individual accountable, most of the participants did make mention of other entities that influence the way each person is

able to manage waste. This suggests that waste management is a collective effort and requires government involvement.

Individuals and Governments are Responsible

Many of the respondents said that both individuals and the government must work together to solve waste-related issues in South Africa:

> I think it's a collective effort. I think it has to come from both the private sector the public sector, and every individual. I think we are all collectively responsible because you can have regulations in place, but it comes down to the people to act on them. – Mpho

The above acknowledges that even if South Africa has legislation to regulate consumption, waste and waste management, that the individual is still ultimately responsible for enacting this.

John who agreed that both individuals and governments should take steps to mitigate waste, mentioned a collective ownership of the natural environment, and how this should be the motivating factor for everyone to take action:

> Every person is responsible regarding issues of waste. […] And I think if we do it that way, it it'll be less of a burden on the government or whoever might have to help. And then it'll make life much easier because at the end of the day, the environment is ours. If I just litter everywhere and then throw my waste everywhere, that affects me […] So it should start with me as the person before it comes to your government and everyone – John.

Another participant had a similar sentiment, but suggested that civilians have the power to enact change by imposing on government:

> I think we all have an equal responsibility, and in order for things to happen or in order for roles to apply, it begins with us. We have the power to tell the government that listen here, this is what we've seen and the government is not

> doing anything to assist us with this. So how about we work together, the government has money, hence the adverts can go out. – Palesa

Palesa described how individuals have the power to influence the government into making better decisions. This unique outlook suggests that the power comes from the bottom up – not the other way around. Kate described a relationship in which the individual and other entities can influence each other:

> The individual is not going to be able to support that mechanism. They're not going to do it on their own. But if the individual actually doesn't tell the brands and the companies what they want, the companies then also won't support that. So there's a relationship that between an individual and a company that needs to happen. But strictly so, the individual is responsible for waste. – Kate

Some of the participants also mentioned the convenience factor and suggested that they would only be inclined to manage their own waste if it was easy to do so:

> I think that it should be our responsibility to a point. I mean, there's only so much we can do. So I think we should take responsibility for our own waste. And then of course, I think the municipality and the government as well. […] It would be tedious to drive every day to go through the stuff away at wherever it should go. So maybe having the municipality provide the recycling bins – Mandy.

This was mirrored by Anele:

> I do think that the individual is also responsible in terms of managing their waste. I do think that in terms of recycling, is there a recycling facility that's close by? Cause I mean that will determine one's motivation to recycle. – Anele

Bella also spoke to incentivisation to waste management, and how this could encourage more people to be waste conscious:

> “At the end of the day, it's as individuals of South Africa, it's our responsibility to take care of our own waste as a person. But then also it's the responsibility

> of the government to tell us what we need to do and what we can do to help or maybe even provide the incentives to do so."

The above suggests that while Bella feels that everyone should be responsible, she thinks South Africans require a push or a motivation to manage their own waste.

These three participants describe a feeling of apathy toward waste given the effort or time it would take to sort it and dispose of it correctly. Ironically, Steve mentioned how individuals tend to use the government/municipality as a "scapegoat" to not take full responsibility themselves:

> I think they're using the system as the scapegoat. […] They're blaming everything on the systems rather than putting the blame on themselves. So they're critiquing the system in general compared to critiquing themselves. I think people should actually just look at what they can personally do to make their personal situations better before they decide to criticize what systems have been within place – Steve.

This shows how some South Africans tend to push the blame onto others instead of taking action themselves. This is seen across many issues – not just issues of consumption and waste.

Meanwhile, another participant mentioned a sense of aloofness in considering waste, and said that individuals should not be accountable:

> It is fair to say that, maybe detached is the wrong word, but you are somewhat removed from waste, so you know, I don't think that maybe every person is responsible for their own waste or waste management. You think that it should be an organization that handles it, an external party. – Anele

The Government is Solely Responsible

While many of the respondents said that multiple stakeholders should be responsible, a few said that government is solely responsible for issues of waste and waste management. These four participants were Anele, Velly, Gamu and Lerato. What is

interesting to consider, is that all these participants are Black, which may suggest that Black people might feel more inclined to rely on government to solve societal problems, than perhaps white people. This also implies a sense of powerlessness that these Black respondents might feel in issues of consumption and waste.

> I would think the municipality should be the ones that are (responsible) and the government. […] because in my own understanding or in my own way I've seen things, to the people I've interacted with, waste is not even a topic of conversation at all. So I believe it's highly unlikely that people even know much about the topic, let alone who's responsible for it or who's supposed to do it. As long as the dust bins are getting cleaned every week and there's no dirt, I think it's not a problem because we believe it's the responsibility of the government to do such things. To take care of the waste. – Lerato

In the above, Lerato described a lack of awareness and a lack of seeking awareness regarding waste. In saying “as long as there’s no dirt, it’s not a problem”, he described the principle of “out of sight, out of mind”. As mentioned in the literature review, people tend to want to rid themselves of waste and dirt to feel clean (Douglas 1966; Soma 2017). Once this dirt has been discarded, it no longer becomes a concern for the individual who made it. The problem identified here, is that a lack of interest and awareness translates into a lack of accountability. Furthermore, individuals who push responsibility onto others can in turn feel helpless in creating solutions. A sense of helplessness was suggested by some of the participants, especially when discussing what is made by producers and what is available to them in stores.

The Producer is Responsible

Three of the participants mentioned the responsibility of manufacturers and producers, who choose the types of materials used in the creation of products, and can determine whether waste will be recyclable, biodegradable, or permanently within the environment:

> It should be the individual that should be responsible for their own waste. But I think who created it, it all started with corporate money. People consume with

> money, and the more money you consume with the more money somebody makes. So I think corporate is a lot to blame for this. – Carl

Carl described South Africa as a capitalist society in which we are driven by corporates to consume for their profit. In this process of consumption, little responsibility is taken for the End of Life (EoL) of that product, which means that once it has been sold, retailers do not care where it lands up. Although this is changing with the introduction of Extended Producer Responsibility policies, a lack of interest in the EoL is still largely the case among producers in South Africa and around the world.

As seen in the above, most participants feel that every individual should be held responsible for the waste they produce. Many of the participants also said that several people/entities should also be responsible, including the retailers and government. However, the noteworthy findings were that some participants felt that there needs to be some type of convenience in place for them to manage their waste; whether this is retailers providing customers with waste-free options in stores, or government's providing bins or incentives; participants tended to think that waste management should be done with as little effort as possible.

The Future

The second set of questions were asked to each participant a few days after they kept a waste diary. The purpose of this follow-up interview was to see if there had been a shift in attitude toward consumption and waste, and if the respondent had become more aware of issues of waste. The participants were asked: "*Did it surprise you to learn how much waste you did or did not produce during the research process? Why?"*

Of the 16 participants, 14 said they were surprised by how much waste they produced, and that the act of keeping the waste diary made them become more aware of waste in general. However, two of the 16 participants said that they were not surprised by the amount of waste they produced over 48 hours, as they are already "waste conscious".

John who became more aware following the waste diary said that he has now started to encourage friends to become more aware too:

> Now I kind of keep track and then make sure I dispose as responsibly as I can and then where possible try to educate my friends. If they just dispose of everything anywhere, I'll either pick it up or make them pick it up, something like that. – John

Mandy described how her perception has changed and how she has started asking herself more questions in daily life:

> My perception changed in the fact that we producing all this waste and we could recycle it, do so much more with it than merely just throwing it away, never actually thinking we are throwing away this […] Does this have a negative impact as much as normal plastic, A little bit more of, a little bit less? Is this even biodegradable and whatever else? So I think the waste diary definitely made me more aware – Mandy.

Mpho also mentioned how shocked he felt at his own waste production:

> Ever since we started with the research process, I've kind of been more aware of what sort of waste I produce in terms of what I buy and how I consume things. So it's been a bit of a revelation for me to just notice that I produced so much waste as an individual, as a single individual in this world. So it's been an eyeopener for me – Mpho.

Here, Mpho used words like “revelation” and “eyeopener” which indicate shock or surprise, but also that he has been profoundly affected by the exercise of keeping the waste diary. Another participant mirrored this sentiment by saying the research had a “big impact” on him:

> Just on the daily, weekly and potentially monthly basis would produce and then where that goes, how much of it is recyclable and how much of it isn't. And you know the impact that some of my purchasing decisions have or could have on that. So yeah, it's had a big impact to be honest. – Carl

Overall, the participants noted that some change had occurred with them through the keeping of a waste diary. This suggests that making people more aware and accountable for their waste *could have* a positive influence on the way they waste and handle waste going forward.

The next question asked was "*How would you feel about picking up waste that does not "belong" to you?"* The purpose of this question was to gage how open the participants were to manage the issue of waste for their community or country – regardless of whether they had caused it. To this, most of the participants (13 of them) expressed that they had no issue with picking up waste that does not belong to them. Only three participants (Anele, Velly and Lerato) said that they were uncomfortable with doing this, citing that they do not have the time or interest.

One of the 13 willing respondents, Steve said he "always took pride in a cleaner environment", which suggests that some people might be motivated to pick up waste or litter for their own aesthetic comfort, or at an attempt to preserve nature. This was mirrored by other respondents who openly said they were part of environmental movements that had involved waste clean-ups in the past:

> At university and at school I was one of the leaders of the environmental club, so we always used to go around and pick up waste. Even now when we go walking in the afternoons, if I see a packet lying around, then I usually pick it up. – Mika

Mandy said she was part of a clean-up initiative as well, but found clean-ups emotionally and/or psychologically challenging:

> Part of our youth group at church were actually doing one on Saturday. […] so we we're actually doing a beach clean-up. But honestly I really don't enjoy them […] it's important obviously, but I don't feel super proud at the end of those things. It's very depressing to me. […] all this waste and people who eventually put it there whether it came from the ocean or the other side of the ocean or wherever came from or in a field, it's like you're picking it up and it's making it

> nice and clean, but it's not really dealing with upstream problem per se. Which I think is more important and obviously more difficult. – Mandy

The above shows how waste impacts individuals differently. While some of the respondents displayed apathy toward waste, others expressed that they are deeply affected by it. For example, while those who seem to care about the environment spoke with detail, those who said they would not pick up other people's waste were brief in their responses:

> "There is a lot of waste in certain parts and I feel that it would take up too much of my time to pick up waste that does not belong to me." – Anele

Velly simply said she "probably won't do it", while Lerato said "If it's in my space then I'm aware of it. But if it's in someone else's space or rather maybe let's say in public where in the streets, I don't really pay too much attention in terms of picking up the waste that does not belong to me."

Of the 13 participants who said they would pick up other peoples' waste, 2 of them mentioned that it depends on the type of waste and whether they have gloves/bags or other equipment (Jane and Carl). For example, it was noted that food scraps and medical equipment pose health hazards to the person picking these up.



Figure 25: Attitudes Toward Picking up Waste.

Credit: Carina Mason

The participants were then asked: "*What do you think the solution to overconsumption and waste is?*". The purpose of this question was to encourage middle-class individuals to brainstorm ideas that could possibly be used as solutions or recommendations in this research and in their own daily lives.

13 of the 16 respondents said that education or awareness building is the solution to over-consumption and waste. Of the 3 remaining, mention was made of changing lifestyles and of a change in product design:

> The solution […] is more of a psychological issue. I say that because I think that how you perceive yourself determines how you actually treat waste and many factors can go into that. For example, if you are someone who holds, let's say, upward social mobility and access to consumables and you view that as something that is a reflection of your identity and you're trying to maybe overcompensate for lack or I don't know, self-esteem or identity. I think it's easy for one to over consume and to create a lot of waste as a mechanism to show that they have made it, that one is no longer lacking in their identity or their self-worth. So I think that the solution is maybe to create efforts towards minimalism and environmental consciousness and positioning that as something that is

> desirable, something that is cool, or something to attain. Maybe give it high social status. – Anele

Anele offered an interesting insight when saying that it is often shown as attractive or desirable to have many material items in society, and that in order for real change to take place, a shift in what we consider desirable needs to change. Her mention of "minimalism" suggests that the solution to waste could be for people to adopt the mentality of consuming less in the first place, and looking after what we already have. However, this participant also mentions how some cultures or sub-groups tend to see excess as interlinked to their identity – making consumption and waste a complex issue to tackle, especially within the context of South Africa.

This complexity was mirrored by other participants who made specific mention of South Africa being part of a global capitalist society that encourages consumption or over-consumption:

> It's the capitalist market that sort of forces it upon us and it's the way that products are sold to us. You know, each little item being individually wrapped and separated and it sort of forces you to buy perhaps more than you would want to or need to, and then overconsumption at a greater level, just as displays of wealth. – Carl

Carl also acknowledged the complexity of consumption and waste, but used the word "forces" to suggest that individuals are at the mercy of authority (advertising, the media, government etc) in South Africa.

Overall, education was seen as the number one solution to issues of over-consumption and waste in South Africa. Since all the respondents are educated themselves (as was the criteria for participation), it can be assumed that they feel their own education has allowed them to view matters of consumption and waste as important, and has allowed them to think critically on the subject.

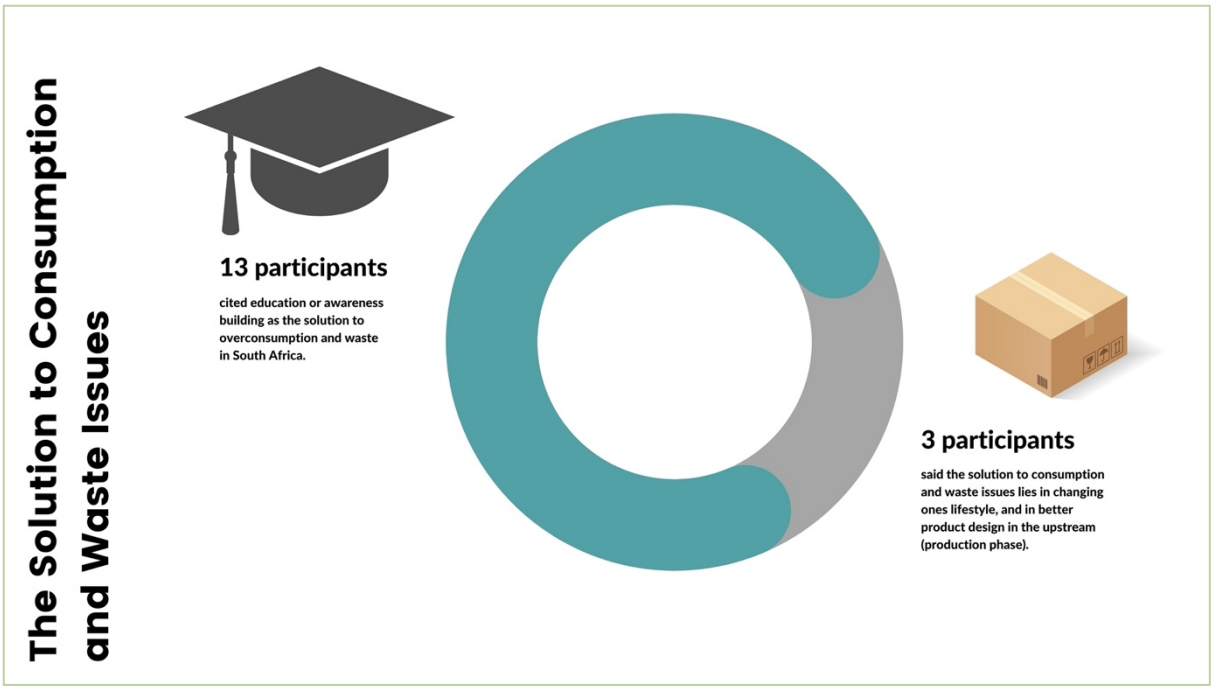


Figure 26: Solutions to Consumption and Waste.

Credit: Carina Mason

The final question that was asked to the participants, was "*what do you think your relationship with consumption and waste will be going forward following your experience with keeping a waste diary?*" The purpose of this question was to understand whether or not the exercise of keeping a waste diary, and talking about consumption, waste and waste issues, would be enough to change the perception of these middle-class participants.

Of the 16 participants, 7 said that not much has changed after their involvement with this research and in keeping a waste diary. Three of these seven participants stated that they are already aware of waste, which is why their waste practices would largely remain the same:

> "Like I said, I think I have been a bit more conscious but having been quite conscious before, I don't think much has changed." – Steve

Another participant who also said nothing had or would change following this experience, said that this is because he still believes waste is not his issue:

> But it's really something I don't think is my responsibility. I think my responsibility ends with actually just taking a little waste and putting it in a dust bin or disposing of it. That's where I think my role ends in terms of where the waste goes after that. That really isn't anything that I think about and I am not sure, I don't think that my relationship or with consumption is going to be different after keeping a waste diary. – Lerato

The above outlier gave an interesting perspective by saying that his role in waste is to simply dispose of it. Once it is thrown away, it is no longer his responsibility or concern. This suggests that some South Africans may feel distant from the waste they produce, and are therefore more likely to push the responsibility onto another person or entity. The problem with this is that if enough people share this perspective, the amount of waste will only increase as time goes on.

Meanwhile, nine of the 16 participants stated that the exercise of keeping a waste diary and having a discussion on consumption and waste has made them more aware of the way they consume and the waste they produce. Mandy spoke of becoming more aware of herself and her place in the environment, and the impact she was having on the environment:

> As a human being in the rat race we call life, I feel that you get so involved in your own life, you really forget about the effects that you have on the environment and the community and on other people sometimes. So I feel taking a step back, reanalysing for myself, for my household thinking, alright, how can we make a difference? – Mandy



Figure 27: Effects of Research on Participants.

Credit: Carina Mason

While most of these nine participants said that they were likely to continue making some changes (for example, buying less plastic, wasting less food and so on), two of them seemed to have been more affected than the others:

> I think it's going to be very different. I think it's going to be a lot of thought put into how I do my shopping and what I consume. There's going to be a changed behaviour in terms of where I do my shopping, because now I have to find places where they can allow me to purchase in bulk using reusable containers where I can just refill every time I need certain items around the house. I think there's going to be a lot of work from my side to be constantly aware of what I consume, what I buy, and how that contributes to my waste production. So it's going to be difficult at first, but I think it's something that can be done. I just need to be a little bit more disciplined and a bit more aware of what I consume. – Mpho

Mpho spoke assertively about his plans to manage his consumption and waste going forward. He described a plan of action in terms of how he would shop differently and buy more sustainably. Seemingly, this participant was changed by this research. A

second participant also spoke about how he planned to make changes going forward, and went so far to say he even planned to educate others about waste:

> I'm going to keep up doing what I have been doing. I'm going to educate those that are close to me, so as many people as I can educate and then lead by example as well. That's what I'm going to do. And then if possible, repeat the research, not necessarily the full research, but have people keep their waste diaries so that they are aware of what they consume and then what impact it has on our environment. – John

John expressed an interest in keeping a waste diary again in future and in encouraging others to do the same. This suggests that this research had significant impact on at least one or two participants.

Interestingly, both the above participants who were seemingly most affected by this research, identify as Black men, which was the group to waste the least compared with other genders and races. It was also the group that the other participants tended to think consume and waste the most.

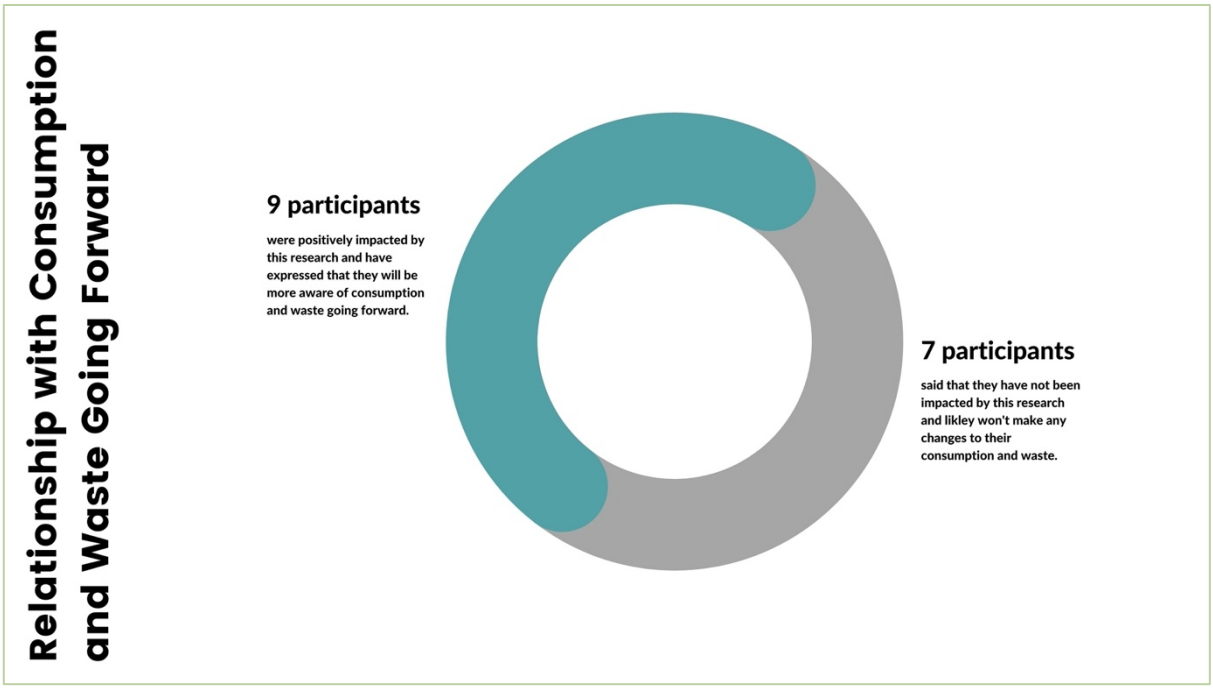


Figure 28: Lasting Effects of this Research on Participants.

Credit: Carina Mason

Link to Literature

To further link the above findings to the literature, it is first useful to summarise the main points:

- 9 participants think waste is everyone's responsibility, while 7 say it is "someone else's" (government/municipality/retailers/producers). Of the 9 that think it's everyone's responsibility, 3 were Black men, 1 was a Black woman, 3 were white women, and 2 were white men.
- Participants who thought waste is somebody else's responsibility comprised 3 Black women, 3 white women, and 1 Black man.
- 4 Black participants thought the government is solely responsible for issues of waste (Anele, Velly, Gamu and Lerato). This may suggest that Black participants rely on government to solve societal issues more than white ones. This could also perpetuate a sense of powerlessness.
- 14 participants felt surprised/affected by the results of the waste diary. This means making people more aware and accountable for their waste can have a positive effect on their waste practices.
- 13 participants said they would be open to picking up waste that does not belong to them, while 3 of the Black participants said they were not interested in doing this (Anele, Velly, Lerato).
- 13 participants agreed that education is the key solution to consumption and waste issues.
- 9 participants expressed that keeping a waste diary has made them more aware of consumption and waste. 2 of the participants who expressed that they had been positively impacted by this research were Black men (John and Mpho).

The literature shows that around the world, people tend to push waste responsibility onto others. Extensive research suggests that this is because people view waste as dirt that they wish to be rid of (Douglas 1966; Upadhya, 2009: 26; Kharas 2017; Iqani 2020 23), while others think governments and municipalities are paid to take care of waste on their behalf (Kubanza 2010: 97). More than this, the middle and upper classes who have historically had access to service delivery

(such as waste removal) tend to rely on these services. Meanwhile, people living in poorer communities do not have waste service delivery, and are therefore made responsible for “dealing with” their waste however necessary. This often results in illegal dumping and burning of waste, which not only negatively impacts environmental health, but is also detrimental to human health (World Bank n.d.). Interestingly, four of the Black participants said they feel the government is responsible for waste management. This could be because Black people have historically been at the mercy of the system, and therefore feel helpless in their abilities in such issues.

Furthermore, the literature finds that in contexts where there is high unemployment, people tend to use waste as a means to make a living (Sembiring and Nitivattananon 2010). “Waste pickers” for example, spend their days sifting through bins and landfills to look for high-value recyclables that they can sell in exchange for an income. While these people fill a gap in terms of being responsible for the mismanaged waste of others, they are often treated poorly by society (Schenck & Blaauw 2011: 412; Dlamini et al. 2018). This further perpetuates the idea that waste is dirty and that it is not something most people want to handle or be around.

This issue of mismanaged waste is further compounded in developing countries where adequate infrastructure and recycling systems are typically outdated or lacking (Simelane 2015). In South Africa, this means that most of our waste is taken to already full landfills (Strydom 2018), which are estimated to be at capacity by 2025 (Qukula 2022). Furthermore, only 9% of South Africans recycle (Linnenkopper 2019). A general sense of apathy toward waste and issues of waste is noted in the country, with PETCO (2019) saying that people avoid practices like recycling because it requires too much effort. This literature is in line with the research findings, which revealed that some of the participants suggested they would be open to better waste-management practices if these were made convenient. Furthermore, many of the participants did not claim to recycle during the interviews. The findings also revealed that while many of the participants expressed that they would be open to picking up waste that does not belong to them, most currently do not take part in community clean ups with one citing that clean ups take a “psychological toll” on her (Mandy).

The findings suggest that although most participants feel responsible for their own waste, they feel helpless in managing that waste because there is a negative association with waste; a lack of education; a lack of infrastructure and support; and a lack of personal time and interest to engage in these behaviours. This is reflected in existing literature which points to the need for an entire systemic change in waste management (Benoit n.d. 77). This systemic change is needed in individual households too, where consuming and waste practices are still largely gendered Holtzhausen (2011: 176; Gerba n.d; IQ Business 2020; Nielsen 2021).

The literature suggests that despite generally consuming more than men, women tend to be more environmentally aware and open to better consumption and waste practices (Hunt 2020). Interestingly, the two research participants who expressed a greater impact had been had on them following the waste diary, were Black men. Meanwhile, two of the three participants who said they would not take part in clean ups were Black women. The findings therefore contradict the literature in that men appear to be more interested in matters of waste than women.

Finally, almost all participants agreed that education and awareness are paramount to change consumption and waste issues in South Africa. This is supported by existing literature that shows a direct correlation between education and positive action (Damerell et al., 2013; Goldman & Alkaher & Aram 2021).

Theoretical Application

Unlike the previous two findings sections, the women respondents seem to contradict the literature when asked about waste responsibility here. While feminist theory argues that women have been conditioned to be “caring” and to take responsibility for the home and all those in it (Burke 2021; OECD 2022; de Wilde and Parry 2022), the research findings revealed that of the 7 participants who feel waste is “somebody else’s” responsibility, 6 identify as women. This suggests that in this study, women do not hold themselves accountable for the waste produced in their household. Mandy (Coloured woman), Anele (Black woman), Velly (Black woman), Jane (white woman), Marie (white woman), and Gamu (Black woman) all said that waste is the responsibility

of either government, or the producers and retailers who make the products we consume. As seen here, there is no apparent correlation of race to this perspective either. Further to this, of the 3 participants who said they would not be willing to pick up litter that does not belong to them (which could be labelled as an act of "caring" or helping the community), 2 were women (Velly and Anele).

The impact of this finding is significant in relation to feminist theory, which recognises this type of gender role resistance as a form of agency and empowerment. Since gender roles have been constructed by the patriarchy to control, women who refuse to "obey" are challenging the system and thereby changing it. In so doing, women are given the freedom to assert their own identity and live a life unique to their desires. While it is not clear if the women respondents went "against the grain" on purpose or to overthrow the patriarchy, their answers still challenge the status quo and are therefore important in portraying a new mindset on gender roles in relation to consumption and waste.

Summary and Conclusion

During a period of three months, 16 middle-class South African citizens were included in this research, which aimed to find out what gendered perception the middle class has of consumption and waste.

For this research, middle class participants were defined as those who:

- Are South Africans aged between 25-45.
- Live in a South African suburban area.
- Earn R15 000 or more per month.
- Pay for their own home (either rent or a bond).
- Have a tertiary qualification or be currently enrolled in one.

The research process involved interviewing each participant and asking them a set of preliminary questions. Thereafter, they were asked to keep a waste diary where they recorded the waste they produced during a 24-48 hour period. This was shared via WhatsApp in the form of text messages and/or pictures. Once complete, the respondents were asked to answer several follow up questions pertaining to their

experience with said diary, and whether their initial perception of consumption and waste had changed. Finally, the research participants completed a 10-question multiple choice survey on their experiences of gender roles in the home environment they grew up in.

- The 16 participants that were involved in this study comprised of 10 women and six men.
- Two of the participants were Coloured, seven were Black, and seven were white.
- Seven of the participants lived in Johannesburg, three lived in Pretoria, three in Cape Town, one in Durban, one in Port Elizabeth, and one in Paarl (at the time of the research).
- This study followed a qualitative research design, where an interpretivist-constructivist paradigm was used. Purposive sampling was employed to find the 16 participants, who formed a heterogenous sample. Semi-structured interviews, a waste diary and a survey were used as data-collection techniques. The data was interpreted using a narrative analysis.

The below summary encompasses the most important points or findings identified in this study. These points are extracted from both the literature review and the research findings and are merged together to conclude this dissertation.

South African Culture Promotes Consumption While Also Criticizing It

South Africans tend to associate capitalistic society with the global north, who is blamed for its consequences. Yet South Africans – particularly those with the means to and those in positions of power – consume frivolously. The way in which South Africans consume is unique to our diverse culture and turbulent history, which in a sense has perpetuated consumption among the Black middle and upper classes since they now use consumption as a mark of post-apartheid freedom

The World Agrees that Waste is Bad and Must "Go Away"

Across different cultures and beliefs, it is agreed that waste is dirty and must be disposed of. More than this, waste should be kept as far from its makers as possible, and to be near dirt symbolizes a lower-class status. The same is said for those who work with waste. Waste pickers for example, are viewed negatively in South Africa, despite providing a valuable and necessary service.

Working Class Black Participants Are More Impacted by Waste

Due to a lack of service delivery in townships and rural areas, apartheid and the pervasive legacy of its inequalities, Black working-class people are more likely to experience visible waste in their daily lives. More than this, they are often forced to live alongside it. On the other hand, white middle- and upper-class people who receive waste related services tend to live in clean suburban areas, without the health threats associated with mismanaged waste.

South Africa Does Not Collect Enough Waste or Recycle

The waste-collection rates in South Africa are extremely poor compared with other countries around the world. Europe, Central Asia and North America report to collect around 90% of waste produced, while South Africa only collects around 44%. Further to this, the recycling rate is only around 9%, since South Africans claim to lack awareness, time, and interest in doing such activities.

The Pile of Waste is Growing

Not just in South Africa, but around the world the amount of waste is increasing. The literature notes that this increase is in line with a growing middle class. To make matters worse, in many parts of the global south there is a lack of adequate waste infrastructure, which means waste is predicted to overwhelm humans and the natural sphere within the next few years. South Africa's landfills are set to be at full capacity by 2025.

"Someone Else" is Responsible for My Waste

The literature and the research findings point to people's tendency to push waste responsibility onto others (for example, governments, municipalities, and producers)

rather than being discerning consumers. This is not a uniquely South African perspective, as many countries seem to adopt this attitude. One reason cited is that the problem feels overwhelming for an individual to deal with. This is compounded by the lack of infrastructure and service delivery in South Africa, as well as a general lack of waste education or interest in the subject. Nine participants thought that everyone is responsible for waste, while seven said that the government or producers/corporates are responsible. Interestingly, despite having the assigned gender attribute of being "caring" and more interested in environmental issues, the women in this study tended to think waste is someone else's responsibility. Six of the seven participants who pushed responsibility, were women.

Most Participants Are Onboard to Pick Up Waste

Despite an unwillingness to take responsibility for waste, most of the participants (13 out of 16) said they would be willing to pick up waste that does not belong to them. The three remaining participants said they had no interest in such activities. Of these three, two were women – further contradicting the stereotype that women are more "caring" or willing to take responsibility and help.

There is a Lack of Media Coverage on the Effects of Consumption and Waste

Besides there being a general lack of coverage in the media on stories of consumption and waste, these issues – along with other environmental topics – are often seen as "rich people problems" in the South African context. In other words, the general public tends to feel separated from waste and its effects. This is further perpetuated by the fact that environmental issues have historically been written/reported by white men. Furthermore, white men have historically been responsible for the degradation of natural landscapes (in the form of mining etc) that they have left barren for people of colour and other minority groups and communities. The media coverage that does exist tends to be about issues happening in suburban or developed areas, further excluding the perspectives of people in townships and rural locations. It was also highlighted that South African media tends to prioritise reporting on stories about corruption, crime, racism, inequality, unemployment, housing, education, sexual assault and other topics deemed "more pressing". The media is found to not report on environmental issues such as waste with enough frequency, while also being found to

promote the act of consumption (namely through advertising). Most participants agreed that the above issues are more important than waste, while only three said that stories on consumption and waste are as important. Participants also noted that of all media platforms, they are most likely to encounter waste-type stories on social media. Interestingly, one participant (a Black man) said he finds environmental stories boring and would likely scroll past these since according to him, the media is meant to entertain.

Food Waste is the Biggest Waste-related Issue

It was found that food waste is the biggest contributor to all waste globally, and also contributes around 8% to the greenhouse gas emissions that are perpetuating climate change. In South Africa, food waste (which continues to grow) equates to a cost of about R21 billion every year. The participants mirrored this since they both thought food and plastic were the most prevalent in their homes, and they reported to throw these types of waste out the most (during the waste diary period).

Household Size, Class, and Culture Affect Food Waste

Some research suggests that bigger households likely plan meals better, and therefore waste less food. Other studies note that middle income groups are said to produce the most food waste compared with the upper classes. These upper classes also tend to "rid" their food waste by donating it to poorer people, suggesting that there is a perception that lower-income individuals are deserving of "food waste"

The Middle Class is Almost Impossible to Define

Within the diverse and dynamic context of South Africa, it is almost impossible to define who the middle class is. This is because the defining characteristics of what it means to be middle class varies depending on who is asked. While come define the middle class based on income, others look to standard of living. Some even consider occupation as a determining factor and yet others describe it as a verb rather than a noun (that being in the middle class requires some action such as rejecting cultural traditions). Since so many variations exist, it was important that this study created its own social construction of what it means to be middle class by defining a set of

“features” that all participants were expected to have. These were: individuals who are aged between 25-45; pay for their own suburban home or living space (either through a bond or rent); have a monthly income of over R15000; have a tertiary education; and live in a South African suburb. The participants however, seemed to equate being middle class to having an income. For them, class is directly related to money.

The Middle Class in South Africa is Growing, as is its Consumption

It is estimated that the average middle-class person in South Africa goes through their monthly salary within 5 days of being paid. Both the literature and research findings reveal that the middle and upper classes in South Africa consume and waste the most. The working class cannot afford to consume and waste as much as the other classes.

There are Few Environmentally-friendly Brands that Speak to Black People

Several well-known environmental brands in South Africa were created and are run by white, middle to upper class people. This is mirrored in other countries, where to be eco-friendly is to some extent seen as a “privileged” behaviour. This is mostly due to the affordability of products, and who different price brackets speak to. A large percentage of South Africans live below the poverty line and are unemployed. For them, buying eco-friendly alternatives is not realistic. This suggests that environmental behaviour is seen as unrelatable to millions. Practicing environmentally friendly lifestyles can also be seen as a restriction on one’s freedom – particularly those who have a history of repression and now use consumption to express themselves and make themselves seen.

Gender is Not the Same in Africa as it is in the Global North

While developed countries have rushed to be more inclusive and accepting of various genders, certain societies and cultures still hold onto patriarchal structures and binary gender norms. South Africa, with all its diversity and progress, is still one of the poorest ranking countries in terms of gender-based violence and other gender-based discrimination. For the large part, South Africa still prescribes to a patriarchal system that prioritises the power of and interests of men above women. These ideals tend to be normalised through traditional African cultures and religious beliefs

Gender in South African Media Still Perpetuates the Patriarchy

To a large extent, women are still portrayed in the media as stereotypical wives, mothers, and caretakers, as well as sexual objects who exist to fulfil the desires of men. It is also noted that while there are women working in the media and holding senior positions, the media industry is still predominantly owned by men who push male agendas. Interestingly, it seems that more women than men report on climate change or green issues. This suggests that through their social conditioning to be "caring" figures, women now tend to be associated with environmentalism or "caring for the planet". This serves to deter men further from engaging in the topic as studies show they do not wish to be seen as "feminine". The inverse is true, and some research talks about women avoiding "masculine behaviour" to be perceived favourably in society

Women Consume and Waste More, but also Care More

Several studies show that women tend to buy more when shopping, compared with men. This is for various reasons – many of which relate to gender-roles. For example, women have historically been expected to look after their husbands and children, which requires them to go grocery shopping more frequently and shop for more items. Recent studies reveal that women continue to shop, cook, and clean for the home environment. Women are also expected to physically look and dress a certain way, which requires the purchasing of clothes, make up, hair dye, beauty products and so on. Biologically, women also experience life differently, and therefore consume items (such as pads and tampons) that men do not have to consume. For all these reasons and more, women tend to create more [gendered] waste then men. The research participants however, initially thought in the interviews that men (especially Black men) waste more than women. However, the waste diaries revealed that Black men wasted the least, while women created the most waste, with one white woman (Mika) creating the most of all (53 items). In total, the women in this study collectively produced 256 items of waste, while the men produced 80.

Conversely, women have been shown to "care" more about environmental issues and are much more likely to make sustainable decisions compared with men. Whether or not this is a choice, or a gender-role characteristic assigned to women (to be caring),

women do seem to feel more affected by green matters and feel greater guilt about producing food waste. Studies also suggest that women tend to separate recyclables more than men and participate in more community clean-ups.

Perceptions of Race are Skewed and Unreliable

The literature reveals that Black people constitute most of the South African population, and about half the population lives below the poverty line. This suggests that many people of colour are still considered working class and are therefore unable to consume as freely as the middle and upper classes. Despite this, significant research suggests that many Black people behave in practices of conspicuous consumption at an attempt to demonstrate their status and how far they have come. In this sense, consumption is synonymous with freedom. The Izikhotane culture for example, consists of young Black men who burn and destroy material items to tell society that they have made it. This has been criticized as being unnecessarily wasteful and for promoting conspicuous consumption. Several of the research participants seemed to also have a negative perception that Black people (particularly Black men) waste more than other groups. Three of the participants equated this to visible litter found in historically “Black areas”. This is an unreliable metric, since townships and rural areas are known to be underserviced in terms of waste collection. Therefore, it is impossible to judge whether Black people create more waste than other races. Although identifying the topic as contentious, the participants who did think race is a relevant factor in terms of how much a person consumes and wastes, related this to more than just race and rather to the historical and political influences unique to Black people in South Africa. One of the participants (who identifies as a Black man) said that Black culture tends to not care about waste and litter and sees this as someone else’s problem. This, as some other participants pointed out, is likely because these people have “more important things to worry about”. The waste diary findings however, revealed that Black participants created less waste than white participants over the 24–48-hour period (134 items versus 164). Furthermore, the two participants who wasted the least (5 items each) were Black men.

When asked if this study had an impact on the way participants viewed consumption and waste going forward, the two participants who noted the most change and stated

that they would be adopting better practices, were Black men. Therefore, despite having a negative "waste reputation", most Black participants in this study seemed to be waste conscious and open to change. It is important to mention however, that one of the other Black men explicitly stated that he has no interest in matters of consumption and waste (Lerato), as did one Black women (Velly). It follows that race has not shown to be a reliable factor when considering how much an individual consumes and wastes, nor how willing they are to adopt better waste practices.

Education is Key in Solving Waste-related Issues

Almost all of the participants (13 out of 16) agreed that education is key in spreading consumption and waste awareness and preventing related issues. The literature agrees with this, and several studies conducted have shown an increase in environmental awareness and engagement after taking part in educational programmes. These positive results have been recorded with both children and adults.

Feminist Theory as a Theoretical Framework

Feminist theory explores and challenges the many ways in which women have been discriminated against within a male-dominated society. It was a suitable framework for this study since it considers how participants are not one-dimensional beings but are rather influenced by several factors such as age, race, culture, religion, sexual orientation and so on. More than this, the more "different" from a white heterosexual man a person is in society, the more persecution they likely face. In investigating the intersection of class, consumption, and waste, it was useful to wear a gendered lens. This is because through gender and with the help of feminist theory, I was able to analyse societal complexities in much greater detail.

"Participatory Feminism" as a Possible Approach to Future Research

A new approach was created for this research, called participatory feminism. Participatory feminism puts forward that women must actively participate in listening, observing, and reflecting on other women and their unique struggles. It also says that women should look to and rely on one another for information about their experiences – rather than looking to the media or other systems under patriarchal control.

Furthermore, participatory feminism says that when we listen to and observe the experiences of other women, we serve to enrich our own experiences of womanhood. This is because despite our differences, women are linked by an invisible source of power, that can be used to further challenge the patriarchy. Lastly, participatory feminism says that whenever possible, women in positions of power (white, middle- and upper-class women) should use their power to give marginalised women a space from which to be seen and heard.

Conclusion

The conclusion to this research is best presented by answering the original research questions.

Primary Research Question

How do middle class women and men in South Africa, perceive waste and waste responsibility in relation to their own consumption?

The middle class in South Africa tends to perceive their own waste as the responsibility of the government, municipalities, and producers. Once waste has been created, most feel that they want to be as far away from it as possible, and that being near waste threatens their social status. They believe that public entities should set up waste facilities across the country and provide a waste collection service to the public, to make the process of ridding one's waste as convenient as possible. Furthermore, the middle class feels that there should be more media coverage about issues of waste, as well as greater education on the subject, which would encourage interest and a promote a sense of responsibility.

Secondary Research Question

How does race, gender and class affect the perception the South African middle class has on consumption, waste, and waste responsibility?

It was found that issues of consumption and waste affect people differently according to their gender, class and race, and that historical factors (such as apartheid and patriarchal structures from the west) have caused waste-management problems that can still be seen today. The middle class perceive issues relating to consumption and

waste differently, depending on their demographics and personal experiences. For example, the middle and upper classes consume and waste more than the working class. Furthermore, while men are perceived to waste more than women, and Black people are perceived to waste more compared with other races, the findings of the waste diaries contradict these perceptions, as white women were the group to produce the most amount of waste, while Black men produced the least. Despite this, women are generally still responsible for the majority of house-keeping work including grocery shopping, cooking and cleaning. Women therefore, can be said to produce more waste than men. Furthermore, women participants tended to push waste responsibility onto other entities (such as the government and producers), while men tended to say it is everyone's responsibility. This contradicts the stereotype that women are more "caring" than men and environmental issues are seen as "feminine".

The above literature and findings examine the complexity of class, consumption and waste through a feminist lens and within the South African context. The research seems to agree that there is in fact a correlation between these themes, and that each one (in its own right) is a complicated matter with various other sub-influences and considerations. Few literature exists on how South Africa's middle class is influenced by or deals with issues of waste. This research is therefore fundamental in contributing additional data to the fields of communication, sociology, anthropology, cultural studies and environmental studies, and will hopefully add a new perspective on the correlation between consumption, waste and the middle class in South Africa.

Recommendations for Future Research

If this type of study is repeated, one recommendation would be to extend the time period in which the waste diaries are kept. It is my understanding that many of the participants felt more aware of their waste while keeping a waste diary, and that extending that period would only promote greater awareness and possibly even change. More than this, keeping a waste diary for a longer time would yield richer results and possibly even change the current ratio (which shows that women created more waste than men).

Further to this, it would be interesting to have participants keep a waste diary at different times throughout the month and year, to see if this impacts the amount of

waste produced. For example, one can hypothesize that an average person produces more waste over December, which is when many receive salary bonuses, take holidays, buy presents, and spend more time eating and drinking with loved ones. It is highly possible that the type of waste produced during seasons changes too. For example, in winter, people might consume and dispose of more blankets, gas, heaters, soups and so on. While in summer, people might consume and dispose of more plastic straws, sunglasses, ice cream sticks etcetera. Furthermore, people are likely to consume more when they have more disposable income, which is typically at the end of the month near pay day. The waste diaries for this study were kept during the middle of the month, which could suggest that respondents' waste was limited to that which they were able to afford/consume. It would be interesting to see the contrast to the waste produced at the beginning and end of the month.

It would also be noteworthy to assess whether the perception an individual has of consumption and waste changes throughout a year. For example, an individual may become more aware of waste during the summer period when they are likely to spend more time outdoors and in nature. This could translate into that person becoming more receptive to messages of waste prevention by the media. Conversely, that same person may feel less aware of waste issues when they are spending most of their time indoors in the winter months.

It was clear during the research, that participants became more aware of waste as an issue just by keeping a waste diary. This suggests that exposure to a problem makes people more aware of it, and therefore more likely to change something in the future. With this, it is my belief that future research would benefit from showing participants footage of actual waste (for example, videos of landfills across South Africa, or photos showing litter or illegal dumping sites around their city). The participants could then be asked how they feel about what they have seen, and if seeing it has had an impact on their perception of waste and their motivation to act against it.

The follow-up interview should be done a month or more after the waste diary is recorded. This would be useful to assess if the waste diary had a lasting impact on a person. With this information, it would be interesting to see how effective the waste diary was in encouraging awareness and even behaviour change.

Another significant finding in this research is that many South Africans still hold on to stereotypes of what certain races or genders are like or do. For example, it was found that many of the respondents initially thought that Black men are the race and gender to waste the most compared with others. Through the keeping of the waste diary however, it was shown that white women produced the most waste. Future research could explore why participants have these ideas in the first place, and what factors influence these stereotypes.

This research supports the idea that there needs to be a Systems Approach to the way consumption and waste is managed. A Systems Approach refers to making changes at all stages of a products' life cycle. In other words, manufacturers and producers should only create products that are made from recycled/recyclable or biodegradable materials. Consumers must then take ownership of their own spending behaviour and only buy items when necessary. These items should be washed, sorted, and properly disposed of at homes, schools, and businesses. For this to be successful, proper waste-management facilities need to be in place (such as bins and collection and sorting personnel and services). As seen in the findings, participants said they would be more open to engaging in "green" waste behaviours if there were established systems in place to simplify this. One of the participants also spoke about having incentives. The government could therefore provide civilians with motivation to dispose of their waste correctly. This could be in the form of offering food stamps, discounts, free medical supplies, stationary, or any other items that would alleviate the other "more pressing" problems facing the country.

Another point highlighted in this research, is that most of the participants believe that education is the solution to issues of over consumption and waste. Focus therefore needs to be placed on spreading awareness about waste and how it affects people – not just the natural environment, to encourage a sense of personal involvement. This type of education should ideally start as early as possible – within the primary school environment – as this would promote a life-long relationship between people and the planet. However, community clean-up initiatives at businesses, schools and churches could also go a long way to get people interested and involved.

It was noted in this study that some participants feel detached from or “bored” by issues of waste. Campaigns should therefore show how interconnected we are to the waste we produce and what the future implications of mismanaged waste are. Furthermore, government should work with the media to create “fresh” or relevant campaigns around waste awareness, that not only inform and educate, but intrigue and surprise viewers. These campaigns should be pushed on social media, as this is where the participants felt that most “green” stories are shared. However, pushing these stories on more traditional platforms – such as radio, TV, and newspapers – could potentially increase overall awareness and reach a wider audience. These “older” platforms are also seen as more reliable and therefore more authoritative compared with social media.

Further research into consumption and waste in South Africa is crucial for addressing the environmental, health, social and economic challenges facing the country, while simultaneously promoting sustainable development for all.

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Appendix A

LinkedIn Advert posted to recruit research participants:

Good day LinkedIn family,

I am currently a Master's Degree student in Media Studies at Wits University. As part of my studies, I am conducting research to investigate the perception that the South African suburban middle class has of consumption and waste. The data collection process will follow three phases:

1. Phase 1: An initial Zoom interview where I will ask you about your lifestyle, consumption, and waste. This interview should not take longer that 40 minutes.
2. Phase 2: A digital waste diary (via WhatsApp), in which you will record all the waste you produce and are exposed to within a 24-48 hour period. You will share these findings with me on a private WhatsApp group that will be created between each participant and myself.
3. Phase 3: A final Zoom interview where we discuss your waste diary findings in detail, as well as your overall perception of waste and how this has possibly changed following your keeping of a diary. This interview should not take longer than 40 minutes.

If you meet the below criteria, please message me to be a part of this study:

- You have the time and the desire to be a part of this important study.
- You are a South African citizen aged between 25-45.
- You live in a South African suburban area.
- You earn R15 000 or more per month.
- You pay for your own home (either rent or a bond).
- You have a tertiary qualification.

If you have any questions during or after this research, feel free to contact me on the email address listed below. Once completed, this study will be available online through the university library website.

Thank you!
Carina (Borralho) Mason
borralho.carina@gmail.com

Interview Questions

Phase 1: A Preliminary Interview

The preliminary interview questions were as follows (although these adapted during the interviews):

1. What makes you associate with being “middle class”?
2. Do you think class, race and gender are relevant factors in terms of how much an individual consumes and wastes? Why?
3. What other influences do you think affect your perception of consumption and waste? (cultural, religious, historical factors for example).
4. Tell me about your lifestyle. How much do you think you consume per day?
5. How much do you think you waste per day?
6. What type of waste do you think you produce most of?
7. What does the media tell you about issues of consumption and waste?
8. Who do you think is responsible for issues of waste and waste management?

Phase 2: A Waste Diary

A WhatsApp conversation was created between each research participant and the researcher, and remained active until the study was concluded. The purpose of the WhatsApp group was to give the participant an easy and affordable way to record their waste over a limited time period (24-48 hours). This means that all the data was easily accessible and rich since text, pictures, videos and voice notes can be shared via this platform.

Phase 3: An In-depth Interview

The proposed concluding interview questions are as follows (although these were adapted during the interviews):

1. Did it surprise you to learn how much waste you did or did not produce during the research process? Why?

2. Did you become more aware of waste around you while keeping a waste diary, and did you feel more or less affected by it? How has your perception changed through this process (if at all)?
3. What have you learned about your own consumption during this process?
4. How would you feel about picking up waste that does not “belong” to you?
5. Who do you think should be held responsible for issues of waste management in our country?
6. How important do you think matters of waste are compared with other issues in South Africa?
7. What do you think the solution to overconsumption and waste is?
8. What do you think your relationship with consumption and waste will be going forward following your experience with keeping a waste diary?

Phase 4: A Short Survey

1. I am (Asian, Black, Coloured, Indian, White)
2. I identify as (A Woman, a man, Gender Fluid)
3. My sexual preference is (Heterosexual, Homosexual, Bisexual, Asexual Pansexual)
4. My belief system is (Agnostic, Atheist, Buddhist, Christian, Hindu, Jewish, Muslim, Other)
5. My culture is (Afrikaans, English/European, Indian, Khoi, Pedi, Shangaan, Sotho, Swazi, Tsonga, Tswana, Ndebele, Xhosa, Venda, Zulu, Other)
6. In my culture/upbringing, it was custom for … to do the grocery shopping for the home (Women, Men, Both Equally)
7. In my culture/upbringing, it was custom for … to cook and clean (Women, Men, Both Equally)
8. In my culture/upbringing, it was custom for … to dispose of the waste in the home (Women, Men, Both Equally)
9. In my culture/upbringing, it was custom for … to care more about consuming responsibly, recycling and/or proper waste management (Women, Men, Both Equally)

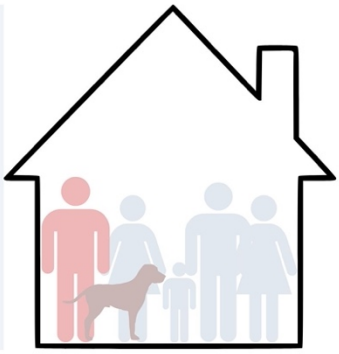
10. I associate environmentally-friendly behaviour such as recycling or caring about waste with being a traditionally … role (Feminine, Masculine, Gender Neutral

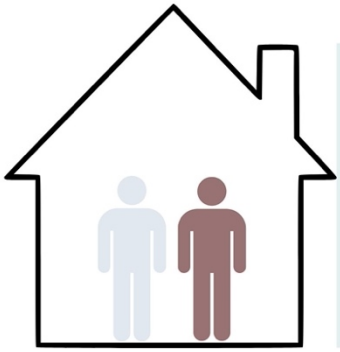
Appendix B

Participant Profiles

Steve

"Steve" is a 27-year-old coloured man who lives with his girlfriend, sister, brother in law, their child, and their dog. He has recently completed a Masters degree in waste management, and is therefore interested in matters of waste, which is one reason he participated in this study. Steve says that through his own education, he has changed from being materialistic to minimalistic. He believes community involvement is cornerstone to waste solutions in South Africa, and is proud of the influence he has had on his family members in terms of adopting better waste practices.



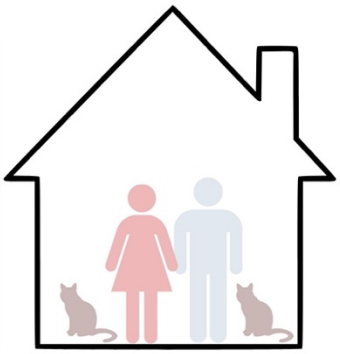


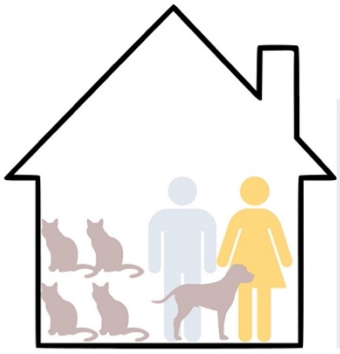
John

"John" is a 30-year-old black man who lives with a roommate. John works in the investment sector and is also studying part time. He came from a poor background and grew up in a township before working his way to now living in a suburban area. John therefore has first-hand insight into how different classes waste, and thinks that poorer communities tend to care less about waste. John thinks the solution to waste issues is education and believes in leading by example with picking up waste. He was one of the participants who wasted the least during the waste-diary period.

Mandy

"Mandy" is a 29-year-old coloured woman who lives with her husband and two cats. Working in the waste-management sector, Mandy is already interested in issues of waste and takes pride in living as eco friendly as possible. As part of her routine, Mandy separates her and her husbands waste at source, rinses recyclable items, and has a home composting system for food scraps. Mandy comes across as conscientious and smart, and is genuinely interested in living a waste conscious life.



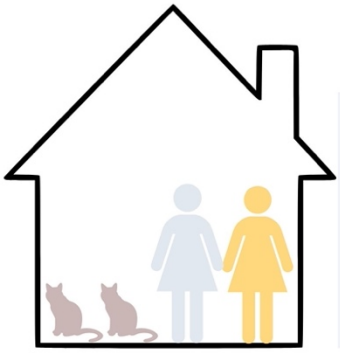


Bella

"Bella" is a 27-year-old white woman who lives with her husband, dog and four cats. Bella is an environmental consultant and has been involved in a study that considered the effects of waste on the marine environment. Bella thinks that women tend to waste more than men, and that historic access to education has caused white people to be more aware of waste issues in South Africa.

Credit: Carina Mason

Participant Profiles

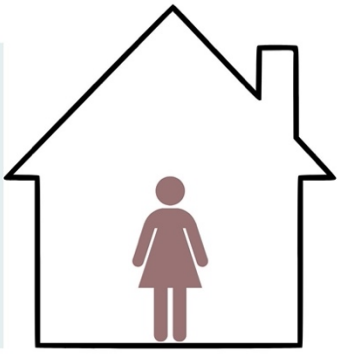


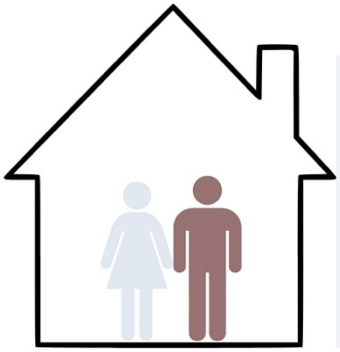
Mika

"Mika" is a 31-year-old white woman who lives with her wife and two cats. Working in the property industry, Mika is aware of waste but was the participant who recorded the most items of waste during the waste diary period. Despite this, Mika said she believes that women tend to waste less than men. Mika and her wife try to do shopping once a month in order to buy in bulk and save money, but neither currently recycle or separate their waste at source.

Anele

"Anele" is a 35-year-old black woman who lives alone. She works in the publishing industry, and shops, cooks and cleans for herself. Anele said that when shopping, she is more price conscious than waste conscious, and would likely buy cheaper items over eco friendly ones. She does however rinse her recyclables so that waste pickers do not have to touch old food/dirt when collecting. Anele thinks culture is a relevant factor in terms of how much an individual consumes and wastes.



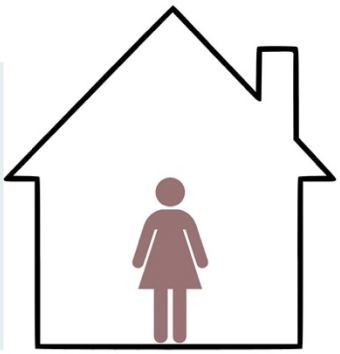


Mpho

"Mpho" is a 28-year-old black man who lives with his girlfriend, and works full time in the finance sector. Mpho says both him and his girlfriend share grocery shopping responsibilities, but his girlfriend does most of the cooking despite also working full time. Mpho takes his own shopping bags with him to the stores, and asks for paper straws when buying drinks. He is therefore aware of plastic waste as an issue, and tries to play his part to mitigate it.

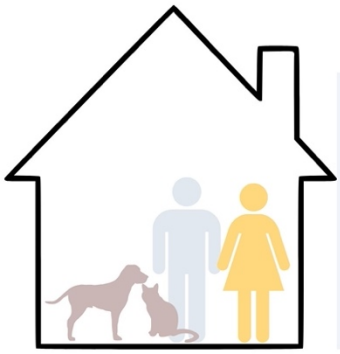
Velly

"Velly" is a 37-year-old black woman who lives alone. Although she works a high-profile corporate job, she likes to entertain often, and will have friends over at her house a few times a week. She admits to not being very eco conscious, and says that the most waste she produces is expired food or food leftovers. While knowing that waste is an important issue, Velly believes that there are much more pressing issues in South Africa.



Credit: Carina Mason

Participant Profiles

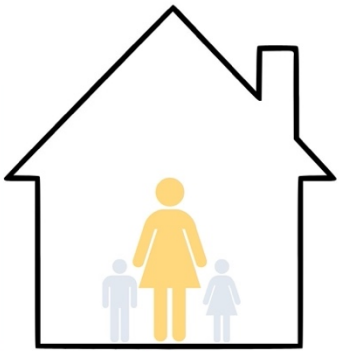


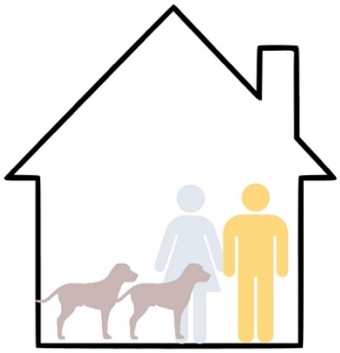
Jane

"Jane" is a 40-year-old white woman who lives with her boyfriend, dog and cat. She works a high-stress job within the medical industry, but is still responsible for cooking and cleaning most days of the week. Jane says she also tries to recycle wherever possible, and says she is aware of waste issues, whereas her boyfriend does not care as much about these topics.

Marie

"Marie" is a divorced 35-year-old white woman who lives with her two young children (aged 6 and 5). While also looking after her two kids, Marie is employed full-time in the communication sector, and reports to being extremely busy most days with money being tight. Marie is proudly Afrikaans, and mentioned how some cultures tend to care more about waste issues compared with others, and that her own culture taught her to care.





Carl

"Carl" is a 31-year-old white man who lives with his wife and two dogs. He works as a manager at a funding firm and reports to have little time to do much else. Despite being busy, Carl is committed to try separate waste at home and buy eco-friendly alternatives when possible. Him and his wife share the grocery shopping and cooking responsibilities, although his wife cooks and cleans more during the week despite also being employed full time.

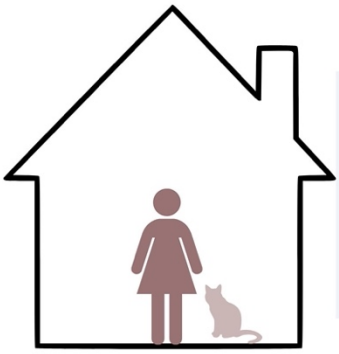
Palesa

"Palesa" is a 37-year-old black woman who lives with her husband and three children (aged 11, 7 and 3). She is a working mom whose husband is responsible for most of the grocery shopping and cooking during the week. Palesa's husband does not currently work, which is why he takes on the home responsibilities. Since she works for a non-profit, Palesa is aware of social issues such as waste, and says education is the key solution.



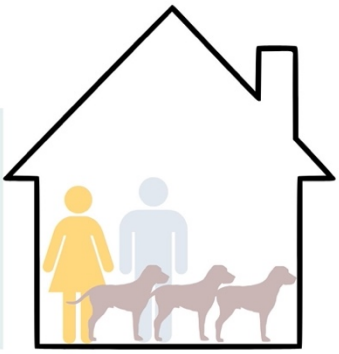
Credit: Carina Mason

Participant Profiles



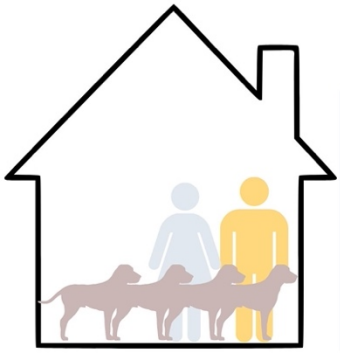
Gamu

"Gamu" is a 33-year-old black woman who lives alone with her cat. Gamu works long hours in the education sector, and admits to eating take aways often as this is more convenient. Gamu described a sense of apathy when talking about waste, as the problem seems overwhelming to her. This is compounded by her struggle with anxiety disorder.



Kate

"Kate" is a 35-year-old white woman who lives with her husband and three dogs. She is proudly childfree-by-choice and conscious of environmentally friendly behaviour, and tries to make eco friendly decisions when possible. Kate works in the agricultural industry and is also studying part time.



David

"David" is a 39-year old white man who lives with his wife and four dogs. Him and his wife split grocery shopping and cooking responsibilities, but mostly buy take aways as this is more convenient for both their busy schedules. Despite sharing the consumption and waste duties, David says he thinks women tend to shop and cook more compared with men - especially in South Africa.



Lerato

"Lerato" is a 28-year-old black man who lives with his friend, wife and child. Lerato has recently changed from eating take aways almost every night, to cooking for himself. He has done this as a means to save money and not out of choice since he would prefer to eat out. He believes that men tend to waste more than women, because women look after their belongings better. Lerato describes waste as a "boring" topic and is not instinctivly interested in it. He would rather be entertained by the media.

Credit: Carina Mason

Appendix C

Ethical Clearance Certificate

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Research Office

HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)
R14/49 Borralho

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER: H22/06/01**
PROJECT TITLE	Consumption, waste and the middle-class: A qualitative exploration of attitudes and beliefs in South African suburbs
INVESTIGATOR(S)	Mrs C Borralho
SCHOOL/DEPARTMENT	School of Literature, Language and Media/
DATE CONSIDERED	24 June 2022
DECISION OF THE COMMITTEE	Approved Risk Level: Minimal
EXPIRY DATE	06 July 2025
DATE 27 July 2022	**CHAIRPERSON** _____ (Professor J Watermeyer)

cc: Supervisor : Professor M Iqani

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University. Unreported changes to the application may invalidate the clearance given by the HREC (Non-Medical)

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to submit an amendment of the protocol to the Committee. **I agree to completion of a regular progress report. For Minimal and Low studies, this is due annually on 31 December. For Medium and High Risk studies, this is due twice annually on 30 June and 31 December.**

_____ **Signature**

28/ 07 /2022 **Date**

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES