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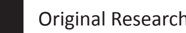

Resisting disposability: Survivalist entrepreneurs in South Africa's informal recycling sector

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Waste is an increasing global environmental issue. South Africa's informal sector plays a crucial role in diverting recyclables from landfills. Despite their indispensable contributions, informal recyclers form part of a societal group that is marginalised, negatively labelled and deemed 'disposable' under neoliberal capitalist structures. This article draws on data from interviews held with 21 participants who work in the informal recycling sector in Gqeberha (formerly Port Elizabeth) in South Africa. It investigates the participants' own perceptions of their societal role, of which four became prominent, namely: (1) cleaners of the environment, (2) providers for dependents, (3) informal environmental educators and (4) community uplifters. We argue that the participants' positive self-views can be seen as a powerful counter-narrative that challenges harmful prevailing stereotypes, which allows for a more nuanced perception of their lives and labour. Their positive self-perceptions and resourcefulness should not be interpreted as an endorsement of neoliberal capitalism that compels them to actively combat stigmatisation. Instead, their determination to resist negative stereotypes simultaneously underscores the necessity of confronting stigmatisation in society.

Transdisciplinary contribution: The parallel themes of agency and autonomy in both informal recycling and entrepreneurship prompt a reconsideration of the conventional entrepreneurial discourse and its applicability to marginalised communities. We recommend that informal recyclers' accumulated knowledge, skill set and well-being be acknowledged to ensure their dignity and that their labour is valued.

Keywords: informal recycling; waste management; waste reclaimer; waste picker; entrepreneurship; skills development; social role; disposability.

Introduction

It is undeniable that the proliferation of waste and its widespread implications have become more than a problem on a global scale. In South Africa, the informal recycling industry plays a significant role in the country's waste management systems.[1] The informal recycling sector contributes to recovering between 80% and 90% of post-consumer paper and packaging, measured by weight.[2] This means that most of the recycled materials in South Africa are recovered by informal recyclers. Diverting recyclables from landfills saves municipalities between R309 and R749 million annually.[3] Despite informal recyclers' resourcefulness and contribution to diverting recyclables from landfills, they remain poor, marginalised and negatively labelled.[4,5,6]

This article draws on qualitative semi-structured interviews with recyclable material sellers (street and landfill waste reclaimers) and buyers (buy-back centre managers and employees or sorters) in Gqeberha (formerly Port Elizabeth) in South Africa's Eastern Cape Province. These two groups form the informal recycling sector, and we use the term 'informal recyclers' to refer to both together. Further along the value chain are large recycling facilities and manufacturers that make use of recycled materials to produce goods.[7] We foreground the participants' perceptions by providing them with a platform to speak back at discourses that assume their lives and labour to be as disposable as the materials they work with.

We argue that crossing the disciplinary boundaries of environmental humanities, sociology and psychology, and incorporating participants' perspectives challenges prevailing stereotypes that overlook their well-being and invaluable contributions to waste management in South Africa. This approach aligns well with transdisciplinarity's 'synthesis of … disciplines from within and

beyond academia to tackle so-called wicked societal problems'.[8] This has the potential to change the public's widespread negative narratives associated with waste.

In South Africa, an array of (predominantly quantitative) research projects is dedicated to the politics of waste, waste reclaimers and informal recycling, although predominantly focussed on the provinces of Gauteng, Free State and the Western Cape has been conducted.[4,9,10,11,12,13] Common research topics include informal recycling economies and job creation[2,14]; entrepreneurial opportunities of buy-back centres[15]; waste reclaimers' incomes[2,14]; the potential health threats they face[16]; their gender[17]; wellbeing[18]; their marginality and stigmatisation in society[4,10,11]; their livelihoods[7,11,13,19,20] and the struggle for integration into formal waste management systems.[6,12,21] Research on informal recycling in the Eastern Cape remains limited[22,23] and usually forms part of a national study.[24,25,26]

As one of the provinces historically most deeply affected by colonisation and apartheid, with persisting high unemployment rates, research in the area is essential in addressing this lacuna. By exploring how informal recyclers in this province resist societal perceptions of disposability, this article contributes to the topic of waste work both in theory and in practice. It advances theoretical discussions on neoliberal capitalism, waste studies and disposability theory. This in turn informs practical considerations for local policymakers, stakeholders and the broader public that emphasise the necessity of approaches to waste management that recognise informal recyclers' agency.

Our article, and the study from which it emanates, is centred on two objectives. Firstly, we aim to understand informal recycling in Gqeberha by exploring participants' perspectives and societal roles. Secondly, we seek to provide insights for policy development that respects the needs and expertise of informal recyclers, while advocating for more empowering terminology in the broader discourse on waste. Considering this, this article aims to answer the following two questions:

- *As informal recyclers, how do the participants perceive their societal role?*
- *What do these views reveal about the stigmatisation, socio-economic positions, and the economic and social systems in which the participants find themselves?*

This article consists of six sections. In the 'Literature review' section we provide an overview of informal recycling in South Africa. In the section 'Theoretical framework: Disposable lives' we use philosopher and political theorist Achille Mbembe's (2003) concept of 'disposability' to lay out how neoliberal capitalism has created its own excess.[27] The 'Methodology' section presents the study's methodological underpinnings. In the 'Findings' section we delve into the study's findings with a particular focus on four prominent societal roles participants see themselves as fulfilling through their labour. The 'Discussion' section consider the impact of these results, namely: (1) how the participants' understanding of and engagement with their work serve as a form of resistance to their presumed disposability, and (2) how neoliberal capitalism, in the first place, proliferates the disposability they are forced to resist. We conclude with recommendations for more inclusive policies that draw on informal recyclers' own understanding of their societal role, instead of the public's assumptions about their value.

Literature review

Informal waste reclaimers have played an active role in collecting recyclables in South Africa since the 1990s, although collecting reusable materials had been a common practice in the country for many decades already.[2] Waste reclaimers are typically divided into street reclaimers and landfill reclaimers. The former collect waste from refuse left in public spaces, such as sidewalks and municipal bags, while the latter operate at landfill sites, where waste is deposited. The South African Waste Sector Survey[2] indicates that the informal waste sector could be twice, or even thrice, as large as the formal waste sector. Very little reliable data on the number of informal waste reclaimers in South Africa exist. Most theorists estimate that this number can be anything between 60 000 and 90 000,[1,2,14] but it could be as high as 215 000.[3] This does not include buy-back centre managers or employees, so the number of 'informal recyclers' (as used in the article) would be even higher.

Reclaiming recyclable waste is labour-intensive, mostly unregulated, often unsafe and offers little financial stability for the recyclers.[7] There are significant variations in income, which is influenced by the geographic areas where they work, available recyclables, the reclaimers' gender and age, and the prices of the buy-back centres they frequent.[2,17] Based on the South African minimum wage of R27.58 per hour, a 40-h work week would generate a minimum income of R4412.80 per month. All monthly estimates provided by other studies are below the minimum wage.[2,13,14] Reclaimers are regularly in 'a highly precarious situation' because their incomes are based 'directly on their work rates, yet subject to the local availability of recyclable materials and the global fluctuations in the commodity prices of the materials they collect'.[7] Similar uncertainties apply to buy-back centres.[15]

The main reasons people engage in informal recycling are poverty and structural unemployment. Notably, the country's unemployment rate, reaching an alarming 31.9%, stands among the highest globally.[28] The Eastern Cape has persistently been the province with the highest unemployment rate in South Africa over the past decade, currently at 38.8%.[28] A substantial portion of South Africa's informal sector thus consists of 'self-employed survivalist entrepreneurs' trying to counter the effects of poverty and meet basic needs.[14]

Black people are the societal group relying most heavily on a precarious and small income from recycling materials

informally. This is largely because, during apartheid, areas designated for black communities by the ruling white party were situated far from the core of white cities and thus economic activity. These areas were also commonly in proximity to zones already designated for industrial activities, including landfill sites.[29] The zones designated for waste disposal were deemed of no value to municipalities.[10] The persistent correlation of black communities with neglected spaces, poverty and waste established a cyclical pattern that perpetuated the perception of them as expendable.

Well after the onset of democracy, this social stigma continues to be extended to informal recyclers whose proximity to and dependence on the recyclables they collect reinforce harmful stereotypes, which subject them to parallel experiences of rejection and exclusion.[30] Informal recyclers are also commonly associated with poverty and homelessness, crime, and alcohol and drug abuse.[4] Based on their appearance, there is a public tendency to stigmatise them as 'smelly, stupid, poor, dirty and messy'.[4] These associations inhibit them from presenting themselves as 'approachable trustworthy'.[4] This is continuously compounded by racism and discrimination.[21] To situate this stigmatisation within the broader societal and economic systems, we now turn to the concept of 'disposability'.

Theoretical framework: Disposable lives

Modernity's supposedly 'forward-moving' trajectory, such as the relentless forces of economic growth, has brought about a division of society with producers and consumers on the one hand, and outcasts on the other.[31] It exhibits a preference for the white over black, rich over the poor, new over the used and the central over the marginal. Consequently, capitalism not only produces an excess of discarded objects inundating the planet, but it also results in billions of marginalised individuals, often along racial lines, who are treated as societal 'rejects': the unemployed, asylum seekers, beggars, migrants and informal recyclers.[31] This is perpetuated by global neoliberal capitalism, a version of capitalism on the rise since the 1970s, 'globally associated with liberalisation and deregulation, particularly the idea that labour should be flexible'.[32] In the contemporary neoliberal necropolitical context, these individuals are considered superfluous to the capitalist system that is driven by profit. By being relegated to the fringes of society, these humans assume the characteristics of waste materials, designated as 'disposable'.[30,33]

By drawing on the concept of 'disposability', particularly as theorised by Mbembe, this study contributes to the discourse on waste, postcolonial studies and critical race theory in the examination of power structures and resistance. 'Disposability' is often applied in discussions related to bio- and necro-politics. It involves examining how certain populations or groups are treated as expendable in socio-political and economic systems. The concept of disposability has been explored by various scholars, often in the context of critical theory, political philosophy and social studies. It ties in with, for instance, Zygmunt Bauman's[31] 'wasted lives' (the disposability of certain individuals under capitalism); Giorgio Agamben's (1998)[34] 'bare life' (life stripped of legal and political protection); Lucy Bell's[30] 'living waste' (an extension of 'wasted lives' that foregrounds materiality) and Judith Butler's (2009) notion of 'grievable lives' (how certain lives are considered worthy of mourning or protection and others not).[35] In 2003, Mbembe published a study entitled 'Necropolitics' in *Public Culture*, where the concept was explored in-depth for the first time in English. Bauman and Agamben feature as clear influences throughout the discussion. The article became the third chapter of Mbembe's 2019 book, acting as a 'conceptual core that tied together the rest of the monograph, where the presence of Waste Theory permeates his necropolitical approach to the contemporary world'.[36] We agree with Martín Fernández that Mbembe's thinking around disposability stands as a:

> [*M*]ajor contribution to the field of waste studies, in that it encloses a reflection on the racial other as 'human waste' from a perspective that has not been sufficiently studied.[36]

Historically, capitalism has been entwined with the exploitation and subjugation of marginalised racial groups, evident in practices such as colonialism and slavery, serving the interests of privileged classes.[37] Capitalist structures have perpetuated racial hierarchies, facilitating the concentration of wealth and power among white people while marginalising black people. According to Mbembe,[38] the unique intertwining of race and capitalism in South Africa, shaped by colonial and discriminatory histories, has led many individuals to consistently assume the form of waste. In the case of informal recyclers, who also face dangerous working conditions and negative societal perceptions that cast them as being expendable, Mbembe's thinking assists in elucidating the dynamics at play. Under capitalism, black informal recyclers are considered easily replaceable, leading to a lack of attention to ensure safe working conditions or providing adequate access to food, housing or healthcare.

Racialisation and classing processes render some lives 'less valuable' than others, which in turn makes them apparently 'fit' to work at the fringes of society.[31,38] Throughout South African history:

> [*S*]quandering and wasting black lives has been an intrinsic part of the logic of capitalism, especially in those contexts in which race is central to the simultaneous production of wealth and of superfluous people.[38]

Systems shape labour; labour in turn shapes bodies, and bodies live in and move through the world. Therefore, we emphasise that we situate the use of the term 'disposability' to describe bodies, lives and capitalist labour within the country's historical context. Humanism, a 'racially exclusive ideological discourse in the heyday of conquest and occupation', Mbembe explains:

> [*W*]as predicated on the belief that a difference of colour was a difference of species. Race in particular did not simply become a crucial, pervasive dimension of colonial domination and capitalist exploitation. Turned into law, it was also used as a privileged mechanism for turning black life into waste – a race doomed to wretchedness, degradation, abjection and servitude.[38]

To think differently about the myth that relates blackness to waste, as perpetuated by colonial and apartheid pasts, it is necessary to broaden the 'traditional definition of "waste" and consider the human itself as a waste product at the interface of race and capitalism'.[38] The vital labour performed by informal recyclers, Mbembe[39] would argue, is a radical example of the dialectics of value and disposability. Gaining insights into the ways in which informal recyclers understand their work, how they interact with 'waste', how they develop entrepreneurial and other skills, navigate potential dangers, and how they undertake their role in society is vital in determining the potential futures of waste management and livelihoods in South Africa's informal sector.

Research methods and design

This article draws on 21 semi-structured interviews with participants, including waste sellers, waste buyers and waste sorters. The qualitative research study that the interviews formed part of was designed and implemented by the two authors of this article, who also analysed its findings. A qualitative research design allows researchers to examine the complexities of participants' perceptions and experiences. This enables one to make nuanced suggestions about the improvement of working conditions, access to resources and the workers' well-being.[40] The interview questions were developed by the researchers based on the lack of qualitative data on informal recyclers' own perceptions of their societal roles. It spanned topics of work routines, role divisions, engagement with materials, work-related challenges and achievements, access to resources, discrimination, pride and skills. The open-ended questions were deliberately designed to give participants the opportunity to discuss any topic they wanted beyond the scope of the study, which fostered the idea of an informal and comfortable discussion.

Between April and July 2023, we conducted interviews at six locations in Gqeberha, South Africa, where people work with recyclable materials. These spaces comprised three buy-back centres of varying sizes, one recycling swap shop, one informal mobile buyer and one scrap metal buy-back centre. We initially envisioned conducting interviews at buy-back centres only. Although we were aware of several buy-back centres across Gqeberha that could potentially form part of the study, we soon realised that many of them no longer exist or are not fully operational because of financial strain, in some cases caused by the impact of the COVID-19 pandemic. Therefore, we also included other types of spaces where recycling takes place. The study also included six participant observation sessions (during which we documented movement in the space and how humans interacted with recyclable materials, bags, trolleys, money and other objects). The data from these sessions fall beyond the scope of this article.

Before data collection commenced, the managers of these spaces were contacted to establish rapport and explain the study's scope. This ensured transparency between the participants and the researchers. All the managers provided written consent for us to be on the premises for data collection. Using a combination of convenience and snowball sampling, we reached interview participants through their affiliation with at least one of these six spaces. Convenience sampling involved interviewing any willing volunteers who met the criteria (being affiliated with the site as a buyer, seller or sorter, and being older than 18 years) and were present at the site during our visits. Where we used snowball sampling, we asked participants to refer us to other possible participants. We also relied on referrals from the managers. Because of the referrals and introduction by a middleman, we were well-received, which further highlighted the important role of contextualising one's role within the network one is studying.

Participants were between 22 years and 72 years old. They included eight waste reclaimers (a combination of street and landfill workers), eight buy-back centre managers and five sorters who work at buy-back centres. Under certain circumstances, some managers and sorters also acted as reclaimers in their 'free' time. Interviews typically spanned between 45 and 60 min. In five instances, participants had work commitments, which resulted in shorter interviews. Fifteen interviews were conducted in English, one in isiXhosa, two in English and isiXhosa, and three in Afrikaans. One researcher speaks English and Afrikaans and the other speaks English and isiXhosa. Both were present for the interviews giving the participant the opportunity to speak in their preferred language between the three.

All interviews were transcribed and translated into English (where they were in isiXhosa or Afrikaans) by the researchers. Transcriptions and other notes were uploaded onto the widely recognised reputable qualitative data analysis program Atlas.ti. It allowed for rigorous and reliable identification of codes with which to dissect 'complex phenomena hidden in unstructured data'.[40] After familiarising ourselves with the transcripts, we manually labelled segments of the text to create initial codes for the data. After this, we started grouping codes together to identify significant themes. We systematically reviewed the themes to ensure that they accurately captured the data and meaningfully answered the research questions. The analysis process involved regular refinement of the codes and themes to ensure accurate and reliable findings. Interview quotations cited in this article are verbatim.

Ethical considerations

The research project was approved by the Humanities Ethics Committee at Nelson Mandela University in February 2023 (Ethics Clearance Number H/22/HUM/SA – 0012). All procedures performed in this study were in accordance with

the ethical standards of the institutional research committee. The participants' anonymity and safety were respected throughout. Participants signed a consent form before the start of the interview, had the opportunity to ask questions and were free to withdraw at any stage (none withdrew). Participants were eager to take part, generally expressed curiosity and most conversed with openness. Participants are referred to by self-selected pseudonyms.

Results

Providing a platform: Participants' views on their societal role

Through this research, we follow Mbembe in making a conscious attempt to 'retrieve life and "the human" from a history of waste'.[38] To achieve this, we asked participants questions that moved beyond the perimeters of their challenges and hardships, and into their personal sense of development, belonging and skills. We largely shared migration scholar Natasha Iskander's[41] experience while researching migrant workers in Qatar in the build-up towards the 2022 FIFA Soccer World Cup. Many of her participants, assuming that she was a human rights researcher or journalist, began by listing their ample grievances and challenges:

> 'Their body language tended to be closed, and their answers perfunctory, reflecting a sense, I suspect, that although the information would be used, it would have little impact on their conditions. In those instances, I recorded their answers, but then gently added questions about skills along with what they had learned, what they felt mastery in, and how they shared their knowledge with their colleagues. With that turn, the interview invariably opened up. The workers I spoke with were keen to describe their areas of competence, and many felt pride at describing the effort and thoughtfulness that learning those skills had required'.[41] (Iskander)

This prompted her participants to share more personal stories, which was also the case in our own research. It became clear that the participants were hardworking individuals with a strong work ethic. Beyond their commitment to their work, they also led complex personal lives. For example, while discussing access to technology, Ntombuvuyo (32) proudly mentioned that besides her work as a sorter at a buy-back centre, she was also the founder of a Facebook group that already assisted 50 women in Gqeberha to find work. In this section, we focus on participants' views of the societal role they saw themselves fulfilling through their labour, and what this meant for their personal well-being, confidence and sense of self. Our findings revealed that participants expressed four prominent roles, namely: (1) cleaning the environment, (2) providing for dependents, (3) serving as informal environmental educators and (4) uplifting their community.

Role 1: 'I am cleaning the environment'

The most frequent response was related to cleaning the environment. More than half of the participants demonstrated an awareness of the relationship between recycling as a waste management practice and waste-related environmental issues (such as pollution, health problems and diseases). They were strongly aware of how their labour alleviated these issues:

> '[*I*]t's a good thing that we're cleaning.' (Siphokazi)
>
> '[*I*]f our environment is clean, it's a better smell, it's better for breathing, it's a better environment. For everyone. So, a safer, cleaner place for us, it's a better South Africa.' (Solly)

A participant explained that she doesn't like it when the place is dirty, because she does not feel right. Asking her how she would describe her role, she explained that:

> 'I just tell the people who ask, we make, uh … our land is clean, because the recycle is very important … And then you must … you must make the responsibility in the recyclers. All the recyclers must make a responsibility about the earth.' (Nozizwe)

Another participant highlighted the importance of his job because:

> '[*P*reviously] it was very dirty and now it's very clean. [*He proudly added that his neighbours were "happy" about this change and*] 'they're encouraging me … Even today I told them I'm coming to … to the interview. They are busy collecting [*recyclable materials*] now.' (Mike)

Several participants were proud about being interviewed and expressed gratitude for the opportunity to:

> 'Be able to air out our views and get some kind of healing.' (Neliswa)

Another participant saw himself as:

> 'Part of the cleaning process, [*we are running*] our own Operation Clean Up.' (Samuel)
>
> 'Even when I walk past a black bag, the papers are all thrown out … then you get some of those guys who have that mentality … they are just … Ah, that "don't care" [*mentality*]. Then I'll put the waste back inside [*the bag*], close it. You see? Nobody is paying me for that, but I just feel … since I'm busy with waste [*anyway*], I have … I might as well throw what I don't use back into the bag.' (Samuel)

These examples underscore the participants' cognisance regarding the repercussions of their labour, reflecting a conscientious commitment to cleaning the 'earth', as Nozizwe (62) put it. Our findings align with the existing research[13,19] that although the primary incentive for engaging in recycling activities was economic, participants were cognisant of the favourable environmental outcomes of their labour. This challenges the impression that they are working for the sole purpose of earning an income without understanding their labour's contribution to society. Their sense of responsibility extends beyond personal gain, encompassing a dedication to environmental health.

Role 2: 'I am a provider'

Almost half of the participants also highlighted their roles as providers. On average, they reported having more than three people directly dependent on their contingent income. Providing food, educational opportunities and shelter for

their dependents were described as important reasons to work. Neliswa, a widowed pensioner, buy-back centre buyer and craftswoman, had eight dependents, the highest number of dependents recorded, which included her children and grandchildren:

> 'I am proud that I am going to sell something. I'm going to get food to eat at home, give to my family.' (Siyabulela)

He added:

> 'And I like my job; love my job too much.' (Siyabulela)

To be able to provide for dependents, the participants explained that they commonly followed a more or less fixed schedule, usually linked to waste collection days in the neighbourhoods, where they worked on days when buyers came to landfill sites. This meant that their sense of responsibility towards others guided their practices and daily routines.

A participant explained that providing for her children served as a source of pride:

> 'I'm proud, I'm a mother of three. One, is turning 23 [*years*], one is 19 [*years*], one is doing grade … 11 this year. All those kids I try by all means, they must go to bed with supper on the table.' (Mnike)

One participant agreed that:

> 'Through my job I am helping my kids.' (Siphokazi)

Another one explained that:

> '[*S*]ome people are throwing money away [*when they are throwing recyclables away*], this is money that I collect ... to put food on the table.' (Doug)

Taking care of dependents through recycling is a key reason why participants felt gratitude for their work, as articulated by a participant who stated:

> 'Recycling, it's my life. And then the people who recycle, it's their life.' (Nozizwe)

Caring for relatives and other people in the participants' social networks emerged as a prominent interview topic. Through researching the experiences of well-being of women waste reclaimers in India, Wittmer[42] also found that recyclers often made connections between their labour, their sense of well-being and their ability to provide for people in their kinship network. Despite finding themselves in precarious circumstances, the participants appeared to derive a sense of purpose and resilience from the imperative to support their dependents. This commitment served as a motivating force, enabling them to persevere in the face of marginalisation and adverse treatment.

Role 3: 'I am an informal environmental educator'

A third response relating to the participants' perceptions of their societal role was the position of informal environmental educator. Six participants spoke about themselves as bearers of knowledge that must be passed on to others. Some, such as Nozizwe and Neliswa, presented educational workshops in their community, aimed at equipping people with basic skills about sourcing, sorting and selling recyclables. Also, most participants simply tried to educate other people through their positive actions and informal conversations:

> 'People first have to see you prosper [*by recycling informally*], then they'll open their eyes.' (Samuel)

For many participants, educating others seemed to bring them a sense of purpose. Having worked in the industry for a long time as a sorter, a participant said that:

> '[*Y*]ou're like a teacher' responsible for educating others. She was asked by her manager to 'coach [*new sorters at the buy-back centre*] for a certain period' and added that 'anyone can question me anything, 'cause I know my … [*Dramatic pause*] job! [*Claps hands together, sits back in chair*].' (Mnike)

Mnike added that her role as 'coach' was also informed by her clear understanding of value:

> 'Nothing go to waste. Everything has a value, everything is valuable … Sometimes, if I pass the rubbish place, there's a full of white paper … [*Points with finger*] There's a money, there's a money … 'Cause I learn, I learn, over the past 13 years, everything can get a money … [*People*] can make a money.' (Mnike)

Tying in with the educator role was the idea of being a role model, particularly among older participants:

> 'It's not about money. In future, you want to be someone who will teach the … the generation that are coming at the back. Always, you want to be a role model. So, you must be.' (Vukile)

Participants often demonstrated self-confidence about their position as someone who must set an example for others in society and that the knowledge they have acquired and the person they have become is worthy of being shown to others. To reach this level of confidence, participants explained that they continuously sought to expand their knowledge and learn new skills related to waste management and recycling. Some expressed their gratitude for recycling workshops they attended. Five participants mentioned a recycling workshop co-hosted by Petco, a producer responsibility organisation, and Sustainable Seas Trust, a non-profit organisation in Gqeberha. A participant who completed such a workshop and saw the benefits, said:

> 'Whatever classes we have to follow, whatever opportunities we get to learn about that, that could take us to that opportunity to say, this can be a business. We are much welcome to grab that opportunity.' (Solly)

The participants exhibited pride in their ability to learn, adapt to new methods and position themselves as knowledgeable in recyclable materials. This underscores their capacity to discern and benefit from presented opportunities, reflecting a valuable and salient skill set.

Role 4: 'I uplift my community'

Many participants complained that they received very little support from the government, but that this was also a pertinent

driver for them to assume the role of active members in the betterment of their community. Five participants, in particular buy-back centre managers and employees, expressed their concern for the well-being of their community. The oldest buy-back centre we visited was established in Motherwell Township in 1998. Neliswa, who has managed the buy-back centre with two colleagues since then, explained that community members in Motherwell:

> 'have jobs in the palm of their hands because they can collect garbage and bring it to us [*to sell at the buy-back centre*].' (Neliswa)

The most recently founded buy-back centre, established in January 2023, was in Walmer Township. Speaking about the situation in the township, one of the six founders of the buy-back centre, said that he:

> '[*F*]eel[*s*] pain about the people … They are struggling … Lot of crimes. Street kids. But the … [*Pause*] I promised them … We are trying to create a job for another people here.' (Mike)

In addition, his colleague explained that:

> '[*I*]f this thing will work out, we will also have a soup kitchen. Or we will have something, maybe like cooldrink … slices of bread for the children [*or a*] packet of chips.' (Solly)

Notably, both buy-back centres shared a commitment to the upliftment of their poor communities. The managers saw themselves as self-employed, resourceful entrepreneurs, actively working to fill the void left by a lack of government support, embodying a dual role as economic actors and community builders.

These four positive roles can aptly be summarised:

> 'It is to work and educate people about recycling [*because*] I contribute towards keeping the environment clean, thus improving people's lives.' (Neliswa)

The participants conveyed a sense of responsibility towards their environment, largely understood the environmental benefits of recycling, working hard to provide for themselves and for dependents, and often took time to educate others on what they learned. The participants' views on their roles provide insights into the society they live and work in, to which we now turn.

Discussion

In this section, we discuss how the participants' positive self-perceptions can be seen as a powerful counter-narrative that challenges harmful prevailing stereotypes. Resisting stereotypes, in turn, fosters a more accurate understanding of informal recyclers' vital role. Yet, the desperate attempt to resist prejudices emphasises that recyclers still must battle stigmatisation. Thus, it is crucial that their positive roles and perceptions should *not* be misconstrued as an approval of the neoliberal capitalist system that forces informal recyclers to actively resist negative stereotypes. A brief discussion on this vital point concludes this section.

Resistance

The stereotypical view of informal recyclers as disposable members of society, similar to criminals, drug addicts or homeless people, is challenged by the important societal roles that participants saw themselves as fulfilling. Additionally, these roles also do not correlate with the assumption that the informal sector consists of workers with little transferable knowledge and low levels of skills. In fact, all four of the roles actively contradict these connotations.

Research findings suggest that for humans to mitigate exclusionary or oppressive social and capitalist contexts, well-being must be asserted in the form of dignity, respect, self-presentation and a sense of responsibility.[4,23,42] For example, studying street waste reclaimers in Cape Town, Teresa Peres[4] found that recyclers presented an 'idealised impression of themselves and their work … to distance themselves from discrediting attributes'. During this process of 'idealisation', participants substituted discussions about stigma with narratives aimed at portraying a positive image of their role. As a way of resisting and overcoming the stigma associated with their work, the participants commonly regarded themselves at a much better social standing than criminals, illegal drug users or beggars.[4] Our research ties in with Peres's findings that participants used 'impression management', as theorised by Erving Goffman, as an 'effective enabler' to change the public's perception of them.[4]

The roles identified by the participants can further be interpreted as what James Scott[43] calls 'everyday forms' of resistance because they actively resist stereotypes on a small scale and without 'calling attention to themselves'. As the roles linked with a responsibility towards the participants' environment (collecting recyclables removes litter and in turn ameliorates soil, air and water quality) and to their dependents and community (providing and caring for them), this can also be seen as a form of 'resistance from the ground', as Catejan Iheka[44] calls it. These resistance practices 'involve tending the earth', while challenging oppressive and unjust social and neoliberal capitalist structures.[44] To illustrate this form of resistance, Iheka[44] refers to environmental activist Wangari Maathai's Green Belt Movement founded in 1977. The action of planting over 50 million trees to restore the effects of deforestation enriched the ecosystem and created jobs for thousands of rural women in Kenya. This served as a counterweight to the country's oppressive post-independent government that unequivocally impoverished citizens and destroyed forest resources. Although Iheka proposes the concept to speak about agricultural activities and 'practices rooted in the land', its grassroots nature, the manual labour involved in it, and the benefits for humans and the environment alike, make this form of resistance applicable in the context of informal recycling.[44]

By acquiring skills related to recycling, the participants further resisted the common understanding that the informal sector consists of unskilled workers. Interviewing waste reclaimers at a major landfill in Johannesburg, Melanie Samson[12] found that the recyclers were:

> '[*A*]cutely aware that it was they who had produced the knowledge that the dump could generate value, turned this idea into a reality, and possessed the intellectual and physical skill required to identify, extract, and prepare items with potential value'. (Melanie)

This also correlates with Iskander's findings that migrant workers actively embed skills and knowledge into their daily labour as a form of resistance to their perceived disposability.[41] Through acquiring recycling-related skills, participants defy the stereotype of the unskilled informal sector worker and actively contribute to the knowledge and value generated from their work, aligning with broader narratives of resistance to disposability.

This challenges the common image of their lives and labour as expendable. It does not, however, grant neoliberal capitalism the permission to disguise its navigation as 'entrepreneurial' or 'resourceful', a point we discuss in the 'Entrepreneurs? ' section.

Entrepreneurs?

The participants created their own opportunities within the waste management industry and took pride in their independence, self-employment and entrepreneurship. This provided them with a sense of accomplishment and agency over their livelihood. As Derrick Blaauw et al. have found, participants possibly accepted the permanency of their precarious situation and therefore adapted their expectations of life.[23] Yet, this does not diminish the role that their agency played in feeling in control of their own destiny.[23]

In the context of labour and entrepreneurship, these observations resonate with the broader discourse on development and self-determination. Entrepreneurship, as discussed in contemporary theory, is often seen as a vehicle for economic empowerment and autonomy. However, entrepreneurship has been appropriated as a 'development apparatus', particularly influenced by neoliberalism.[45] The current theoretical foundation of entrepreneurship discourse assumes all types of entrepreneurships are equal contributors to job creation and economic growth, and overlooks the nuanced realities faced by individuals engaged in *survivalist* entrepreneurial activities, such as informal recyclers, who find themselves at the bottom of the value chain.[45]

The mainstream narrative falsely attributes entrepreneurial success to individual commitment rather than systemic issues, convincing the poor that 'their inability to capitalise on entrepreneurial development and support initiatives can only be blamed on their shortcomings or lack of motivation'.[45] In reality, neoliberalism:

> [*P*]ushes more people into unemployment or into precarious employment without conventional labour protection; insecurity increases as labour rights are placed out of reach of a growing number of workers through flexibilization, informalisation and growing unemployment.[46]

Merely expanding the definition of entrepreneurship highlights the discourse's blatant ideological support for capitalism. Depicting struggling, marginalised and poor people who use the meagre resources at their disposal as 'self-employed entrepreneurs' ignores the South African government's responsibility to have to provide protective regulations and safe working conditions.[46]

While mainstream narratives emphasise the potential for entrepreneurship to contribute to job creation and economic growth, the harsh realities of informal recyclers largely do not reflect these assumptions. Maria Smit and Marius Pretorius[45] call for a re-evaluation of the prevailing entrepreneurship narrative and the myth surrounding 'the entrepreneur'. The parallel themes of agency and autonomy in both informal recycling and entrepreneurship prompt a reconsideration of the conventional entrepreneurial discourse and its applicability to marginalised communities.

Recommendations

In the absence of informal recyclers, the country's recycling metrics would be rendered negligible. It is essential that informal recyclers are recognised for the invaluable role they play in recycling in South Africa. Acknowledging the positive environmental, social and economic contributions of informal recyclers is vital to alter the prevailing negative image associated with their work. This article contributes positively to this much-needed shift by critically expanding on existing theories of disposability and bringing it into conversation with waste studies and by using this cross-pollination as the backdrop to better understand the lived experiences of informal recyclers.

As this article has shown, it is crucial to view informal recyclers through their own perspective and not make skewed assumptions about those working with waste. Beyond their indispensable contribution to waste management, the participants who formed part of our study also revealed the capacity to focus on the positive aspects of their work and regularly took the opportunity to educate people, despite the difficult circumstances they face daily. By acknowledging and promoting their positive impact on the environment and the community, the prevailing negative image of informal recyclers could be changed. When focussing solely on the negative perceptions, understanding remains limited and stereotypes continue to be perpetuated. By focussing on informal recyclers 'in their capacity as generators of knowledge and transformers of social reality' allows for more nuanced understandings of their lives and labour, and 'how alternatives can be imagined and created'.[12]

As our article's second objective outlined, challenging social stigmas is beneficial not only for the well-being of informal recyclers but also for informing just policy development in the sector that acknowledges the expertise of informal recyclers. Numerous initiatives and research projects are already underway in South Africa to find solutions to

integrate the informal waste sector into the formal local waste economy. The recycling policy landscape is increasingly shaped by joint efforts of researchers, environmental justice organisations such as groundWork, and organised waste reclaimers' associations, including the South African Waste Picker Association and the African Reclaimer Organisation. This has resulted in the official Waste Picker Integration Guideline for South Africa, compiled by the Department of Environment, Forestry and Fisheries and the Department of Science and Innovation.[5] This document, aimed at municipalities, emphasises the importance of expanding the recycling economy in a way that recognises the value, positive contribution and extensive expertise held by informal recyclers. This has the potential to improve their job security, working conditions and incomes. Yet, to enable a non-stereotypical interpretation of informal recyclers and their work, changing public perception still requires a lot of attention.[4,5] Achieving integration necessitates a deliberate focus on addressing racism and its intersections with class, as well as other manifestations of exploitation and oppression.[21]

There is a necessity to address environmental and social issues simultaneously as justice is made up of a combination of social, political, financial, ethical and environmental aspects. To create more equitable and environmentally responsible waste management systems, it is crucial to listen to and incorporate the views of those who work in the industry. Discussing only challenges captures academia and the public in loops, where what we think we know overshadows what we might learn. In imagining more just futures, collaborative action by various stakeholders, including but not limited to academic institutions, government and municipalities, businesses, non-profit organisations and communities, could facilitate conceptualisation and implementation processes.[5] For example, community-based waste segregation programmes that involve informal recyclers in the collection and sorting of recyclable materials could be developed. Involving local communities in recycling efforts (such as participation in initiatives that promote responsible waste disposal and recycling) raises awareness about the important role of informal recyclers in waste management. Informal recyclers could be provided with training on sustainable waste management practices. Furthermore, by recognising informal recyclers as integral stakeholders in waste management systems, their contributions to a cleaner, healthier environment will be more readily celebrated.

Conclusion

In summary, if the marginalised perspectives of informal recyclers are to be rightfully acknowledged, environmental narratives in the coming years must address environmental, capitalist and postcolonial injustices. In short, recyclers' voices 'should be listened to when seeking ways to enhance [*their*] role … in the recycling value chain'.[14] Being incorporated – planning *with* informality – will only be beneficial if reclaimers' needs are heard and their accumulated knowledge and skills valued.[11] Granting a platform for informal recyclers will allow them to counter the prevailing discourse on waste, challenging the assumption that their lives and labour are as disposable as the waste they depend on. This is a vital step to providing alternative interpretations and imaginaries of dignified and valued lives.

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Authors' contributions

O.L. was the project coordinator and handled administrative aspects. O.L. and P.G.N. contributed to the design and implementation, the analysis of the results and the writing of the manuscript of this research study.

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Data availability

The data that support the findings of this study are available from the corresponding author, O.L., upon reasonable request.

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References

1. Godfrey L, Strydom W, Phukubye R. Integrating the informal sector into the South African waste and recycling economy in the context of the extended producer responsibility [homepage on the Internet]. CSIR Briefing note. 2016. [cited 2024 Jan 12]. Available from: https://www.csir.co.za/sites/default/files/Documents/Policy%20Brief_Informal%20Sector_CSIR%20final.pdf
2. Godfrey L. Quantifying economic activity in the informal recycling sector in South Africa. S Afr J Sci . 2021;117(9/10):8921. https://doi.org/10.17159/sajs.2021/8921
3. Godfrey L, Oelofse S. Historical review of waste management and recycling in South Africa. Resources. 2017;6(57):1–11. https://doi.org/10.3390/resources6040057

4. Peres TS. Stigma management in waste management: An investigation into the interaction of 'waste pickers' on the streets of Cape Town and the consequences for agency. Doctoral thesis. Cape Town: University of Cape Town; 2016.
5. Samson M. Waste picker integration guideline for South Africa [homepage on the Internet]. 2020. [cited 2024 Jan 22]. Available from: https://wasteroadmap.co.za/wp-content/uploads/2021/02/Waste-Picker-Integration-Guidelines.pdf
6. Samson M. Whose frontier is it anyway? Reclaimer "Integration" and the battle over Johannesburg's waste-based commodity frontier. Capitalism Nat Soc. 2020;31(4):60–75. https://doi.org/10.1080/10455752.2019.1700538
7. Schenck CJ, Theodore N, Blaauw PF, Swart EC, Viljoen JMM. The N2 scrap collectors: Assessing the viability of informal recycling using the sustainable livelihoods framework. Community Dev J. 2018;53(4): 656–674. https://doi.org/10.1093/cdj/bsx018
8. Van Zyl I. Transdisciplinarity as engaged scholarship. J Transdiscip Res S Afr. 2023;19(1): 1–2. https://doi.org/10.4102/td.v19i1.1411
9. Viljoen K, Blaauw D, Schenck R. Street waste pickers in South Africa [homepage on the Internet]. Unpublished presentation, Johannesburg: University of Johannesburg; 2012. [cited 2024 Jan 21]. Available from: https://karoofoundation.co.za/wp-content/uploads/2019/07/Street-waste-pickers-overview-Cradock-newest-FFF.pdf
10. King GFJ. "Skarrelling": A socio-environmental history of household waste in South Africa [homepage on the Internet]. MA dissertation. Stellenbosch: Stellenbosch University; 2014. [cited 2023 Nov 18]. Available from: https://scholar.sun.ac.za/items/43188214-736e-4036-81f2-d4ea511f482c
11. Van Heerden A. Valuing waste and wasting value: Rethinking planning with informality by learning from skarrelers in Cape Town's Southern Suburbs. MA dissertation. Cape Town: University of Cape Town; 2015.
12. Samson M. Accumulation by dispossession and the informal economy: Struggles over knowledge, being and waste at a Soweto garbage dump. Environ Plan D. 2015;33(5): 813–830. https://doi.org/10.1177/0263775815600058
13. Schenck CJ, Blaauw PF, Swart EC, Viljoen JMM, Mudavanhu N. The management of South Africa's landfills and waste pickers on them: Impacting lives and livelihoods. Dev South Afr. 2019;36(1): 80–98. https://doi.org/10.1080/0376835X.2018.1483822
14. Yu D, Blaauw D, Schenck R. Waste pickers in informal self-employment: Overworked and on the breadline. Dev South Afr. 2020;37(6):971–996. https://doi.org/10.1080/0376835X.2020.1770578
15. Viljoen J, Blaauw D, Schenck R. The opportunities and value-adding activities of buy-back centres in South Africa's recycling industry: A value chain analysis. Local Econ. 2019;34(4): 294–315. https://doi.org/10.1177/0269094219851491
16. Schenck CJ, Blaauw PF, Viljoen JMM, Swart EC. Exploring the potential health risks faced by waste pickers on landfills in South Africa: A socio-ecological perspective. Int J Environ Res Public Health. 2019;16(11):2059. https://doi.org/10.3390/ijerph16112059
17. Wilson KS, Kootbodien T, Made F, et al. Men and women waste pickers on landfills in Johannesburg, South Africa: Divergence in health, and socioeconomic status. Int Arch Occup Environ Health. 2022;95(2): 351–363. [cited 2023 Nov 18]. Available from: https://doi.org/10.1007/s00420-021-01787-8
18. Blaauw P, Pretorius A, Viljoen K, Schenck R. Adaptive expectations and subjective well-being of landfill waste pickers in South Africa's Free State Province. Urban Forum. 2020;31(1):135–155. https://doi.org/10.1007/s12132-019-09381-5
19. De Kock RE. Garbage picking as a strategy for survival: A case study of a sub-sector of the informal sector. MA dissertation. Durban: University of Natal; 1986.
20. Naidoo J. A Study of the garbage pickers within the Port Shepstone Disposal Site. Honors dissertation, Richards Bay: University of Zululand; 1994.
21. Samson M. Building from what exists: Integrating reclaimers into our understanding of the recycling economy [homepage on the Internet]. CSIR Briefing note; 2020; Available from: https://www.researchgate.net/publication/342976637
22. Ntongana K. The implications of landfill closure for waste reclaimers in rural local municipalities: The case of Fort Beaufort landfill, Raymond Mhlaba Local Municipality, Eastern Cape. MA dissertation. Alice: University of Fort Hare; 2018.
23. Smit S. The design of a waste recycling facility for the waste pickers of Arlington landfill, Gqeberha: Recognising the needs of unacknowledged stakeholders in the circular waste economy. MA dissertation. Gqeberha: Nelson Mandela University; 2020.
24. Viljoen J. Economic and social aspects of street waste pickers in South Africa. PhD thesis. Johannesburg: University of Johannesburg; 2014.
25. Mudavanhu N. An analysis of livelihoods of landfill waste pickers in South Africa [homepage on the Internet]. MA dissertation. Cape Town: University of the Western Cape; 2019. [cited 2024 Jan 21]. Available from: https://etd.uwc.ac.za/
26. Viljoen K, Blaauw D, Schenck R. 'Sometimes you don't make enough to buy food': An analysis of South African street waste pickers' income. J Econ Finan Sci. 2018;11(1): 1–13. https://doi.org/10.4102/jef.v11i1.186
27. Mbembe A. Necropolitics in Public Culture 15, no. 1: 11–40. Translated by Libby Meintjes, 2003.
28. Stats SA. Quarterly Labour Force Survey (QLFS) Q3:2023 Risenga Maluleke Statistician-General [homepage on the Internet]. 2023. [cited 2024 Feb 05]. Available from: https://www.statssa.gov.za/publications/P0211/Presentation%20QLFS%20Q3%202023.pdf
29. Tomita A, Cuadros DF, Burns JK, Tanser F, Slotow R. Exposure to waste sites and their impact on health: A panel and geospatial analysis of nationally representative data from South Africa, 2008–2015. Lancet Planet Health. 2020;4(6): 223–234. https://doi.org/10.1016/S2542-5196(20)30101-7
30. Bell L. Place, people and processes in waste theory: A global South critique. Cult Stud. 2019;33(1):98–121. https://doi.org/10.1080/09502386.2017.1420810
31. Bauman Z. Wasted lives: Modernity and its outcasts. Cambridge: Polity Press; 2004.
32. Van Der Westhuizen C. Setting the scene: Public Works employment from the RDP to the NDP. In: Parenzee P, Budlender D, editors. Who cares? South Africa's Expanded Public Works Programme in the social sector and its impact on women. Cape Town: Heinrich Böll Stiftung. 2016, p. 11–30.
33. Tuana N. Climate apartheid: The forgetting of race in the Anthropocene. Crit Philos Race. 2019;7(1):1–31. https://doi.org/10.5325/critphilrace.7.1.0001
34. Agamben G. Homo Sacer: Sovereign Power and Bare Life. Translated by D Heller-Roazen. Stanford: Stanford University Press; 1998.
35. Butler J. Frames of War: When Is Life Grievable? New York: Verso; 2009.
36. Fernández MF. A necropolitical approach to waste theory. Revista Canaria de Estudios Ingleses. 2023;86:147–156. https://doi.org/10.25145/j.recaesin.2023.86.09
37. Pellow DN. Resisting global toxics: Transnational movements for environmental justice. Cambidge: MIT Press; 2007.
38. Mbembe A. Democracy as a community of life. The Salon. 2011;4: 1–6.
39. Mbembe A. Out of the dark night: Essays on decolonization. New York: Columbia University Press; 2021.
40. Friese S. Qualitative data analysis with Atlas.ti. London: SAGE; 2019.
41. Iskander N. Does skill make us human? Migrant workers in the 21st-century Qatar and beyond. Princeton, NJ: Princeton University Press; 2021.
42. Wittmer J. "We live and we do this work": Women waste pickers' experiences of wellbeing in Ahmedabad, India. World Dev. 2021;140;1–10. https://doi.org/10.1016/j.worlddev.2020.105253
43. Scott JC. Weapons of the weak: Everyday forms of peasant resistance. New Haven, CT: Yale University Press; 1985.
44. Iheka C. Naturalising Africa: Ecological violence, agency, and postcolonial resistance in African literature. New York: Cambridge University Press; 2018.
45. Smit M, Pretorius M. Untrepreneurship: Undoing the myth of entrepreneurship as a development apparatus. Afr J Bus Ethics. 2020;14(1):62–81. https://doi.org/10.15249/14-1-273
46. Van Der Westhuizen C. Women and work restructuring in the Cape Town clothing industry. In: Webster E, Von Holdt K, editors. Beyond the apartheid workplace: Studies in transition. Durban: University of KwaZulu-Natal Press; 2005, p. 335–55.