

DOI: 10.5281/zenodo.21397282

EXCLUSION FROM SKILLS DEVELOPMENT FRAMEWORKS: AN ETHNOGRAPHIC STUDY OF BUSH MECHANICS IN SOUTH AFRICA

Simiso Lewis Madiba^{1*}

¹Directorate of Postgraduate Studies, iYuniversity Walter Sisulu

Received: 20/04/2026
Accepted: 05/05/2026

Corresponding Author: Simiso Lewis Madiba
(smadiba@wsu.ac.za)

ABSTRACT

Skills development remains a central component of South Africa's efforts to address unemployment, inequality, and economic participation; however, workers in the informal economy often remain excluded from formal training, certification, and recognition systems. This study explores the experiences of bush mechanics and examines their exclusion from South Africa's skills development frameworks. Guided by the Capability Approach, the study employed an ethnographic research design involving participant observation, informal conversations, field notes, and semi-structured interviews conducted within the natural work environments of bush mechanics. The findings reveal that bush mechanics acquire substantial technical competencies through experiential learning, mentorship, observation, and apprenticeship-like practices. Participants demonstrated advanced problem-solving abilities, improvisational skills, and extensive tacit knowledge despite limited access to formal qualifications. The study further found that bush mechanics experience persistent exclusion from skills recognition mechanisms, training opportunities, and institutional support structures, largely due to the privileging of formally accredited learning pathways. Despite this exclusion, they play a significant role in supporting local livelihoods, economic activity, and community resilience. The study concludes that existing skills development frameworks inadequately recognise competencies acquired through informal learning and recommends more inclusive approaches, including accessible Recognition of Prior Learning mechanisms, community-based certification, and hybrid training models that acknowledge diverse pathways to occupational competence.

KEYWORDS: Bush Mechanics, Skills Development, Informal Learning, Recognition Of Prior Learning (RPL), Capability Approach.

1. INTRODUCTION

South Africa's economy continues to experience persistent skills shortages, notwithstanding an extensive national skills development architecture designed to enhance employability and foster economic participation. Key formal mechanisms, such as the Sector Education and Training Authorities (SETAs) established under the Skills Development Act, are mandated to coordinate training initiatives, identify specific sectoral skills deficits, and contribute to human capital development within the national economy. These frameworks constitute a core component of national strategies aimed at aligning educational outputs with labour market demands; however, significant disparities between skills supply and demand persist, particularly within marginalized sectors. Matha and Jahed (2024) highlight that formal skills systems frequently prioritise credentialed learning pathways, which can inadvertently neglect alternative forms of knowledge production and acquisition prevalent in the informal economy.

Within this context, the informal economy plays a crucial role in providing livelihoods for millions of South Africans, especially those excluded from formal employment opportunities (Masuku & Nzewi, 2021). According to the Statistics Quarterly Labor Force Survey (QLFS) for the first quarter of 2026, the official unemployment rate of 32.7%, accompanied by declines in employment across both formal and informal sectors (Statistics Quarterly Labour Force Survey, 2026). The lack of formal employment opportunities drives many, especially those with limited education, to seek livelihoods in the informal economy. Informal occupations have become essential for economic survival.

It is within this informal landscape that the notion of the bush mechanic emerges. The term "bush mechanic" is not commonly found in formal English; rather, it generally refers to an individual who, out of necessity and using readily available materials, solves practical problems through unconventional and inventive techniques. In this study, a bush mechanic is defined as a practitioner who repairs motor vehicles without formal training, relying instead on experiential and acquired knowledge. Their work typically includes welding, electrical repairs, and general mechanical services. Bush mechanics operate largely within informal business settings, exchanging their services for monetary compensation and contributing to local economies, particularly in underserved rural and peri-urban areas (Madiba, 2025)

Despite their practical importance, bush

mechanics remain largely excluded from formal skills development frameworks, accreditation systems, and institutional support (Madiba, 2025). This exclusion is symptomatic of a broader systemic challenge: informal workers face barriers to recognition due to the absence of formal qualifications, limited access to training institutions, and the misalignment between policy frameworks and lived realities. As a result, their skills, which are often highly adaptive, context-specific, and innovative, are undervalued and remain invisible within national skills planning systems.

1.1. Skills Development Frameworks in South Africa

This article explores two key frameworks for skills development in South Africa: the National Skills Development Strategy III (NSDS III) and the Sector Education and Training Authorities (SETAs). According to the Department of Higher Education and Training (2024), NSDS III aims to enhance workforce skills through structured training, while SETAs implement vocational education and training. However, these frameworks largely overlook bush mechanics individuals who solve practical problems using unconventional methods and readily available materials. Their skills, acquired through experiential learning, are not formally recognized, resulting in a disparity in which their expertise is undervalued despite its importance to local communities. This highlights the need for more inclusive approaches to skill recognition.

1.1.1. National Skills Development Strategy III

The National Skills Development Strategy III (NSDS III) was designed to establish an inclusive skills development system aimed at addressing socio-economic inequalities through targeted education, training, and workplace learning initiatives. The strategy recognises skills development as a critical instrument for promoting employability, economic participation, and social inclusion. However, despite its transformative aspirations, empirical evidence suggests that workers operating within informal sectors continue to experience exclusion from formal training opportunities, certification processes, and skills recognition mechanisms.

Powell and McGrath (2024) observe that South Africa's skills development system continues to encounter challenges in integrating learning acquired outside conventional educational institutions. They argue that vocational education

and training policies remain largely structured around institutional learning pathways, often overlooking the realities of skills acquisition within informal economic sectors. Despite policy commitments to inclusivity, access to skills development opportunities remains unevenly distributed. Research suggests that qualifications frameworks and skills recognition systems continue to privilege institutionally acquired competencies, often marginalising workers whose expertise has been developed through workplace experience, informal learning, and practice (Allais, 2022; Singh, 2021; Wheelahan et al., 2022). As a result, workers in the informal economy frequently encounter barriers to certification, occupational mobility, and professional recognition despite possessing substantial practical expertise.

The significance of recognising learning acquired outside formal educational settings is further emphasised by Maurer (2023), who argues that contemporary vocational education systems must accommodate diverse forms of knowledge acquisition if they are to achieve meaningful social inclusion. Maurer (2023) maintains that Recognition of Prior Learning (RPL) serves as a critical mechanism for validating workplace-acquired competencies and facilitating access to further learning and employment opportunities. Nevertheless, the effectiveness of RPL remains dependent on the accessibility, responsiveness, and inclusivity of the institutional structures responsible for assessing and certifying experiential learning.

From a policy implementation perspective, Tshephe and Govender (2025) identifies several challenges that undermine the successful implementation of RPL in South Africa. These challenges include administrative complexities, limited institutional capacity, inadequate awareness among potential beneficiaries, and inconsistent implementation practices. Tshephe and Govender (2025) further argues that such barriers disproportionately affect workers operating within informal sectors, many of whom lack the resources and support necessary to navigate formal recognition processes. Consequently, numerous skilled individuals remain excluded from opportunities that could facilitate occupational mobility, entrepreneurship, and professional advancement.

The need to integrate informal workers into national skills development frameworks is also highlighted by Nafukho and Muyia (2021), who argue that sustainable economic development requires skills policies that recognise competencies acquired through both formal and informal learning

pathways. Furthermore, Nafukho and Muyia (2022) contend that the failure to acknowledge experiential knowledge perpetuates social and economic inequalities by restricting access to opportunities for individuals whose livelihoods are primarily dependent on informal economic activities.

Some bush mechanics possess formal educational qualifications, technical training, or partial exposure to accredited vocational programmes, while others have acquired their competencies exclusively through experiential learning, observation, mentorship, and prolonged engagement in vehicle maintenance and repair. The researcher, therefore, argues that the challenge facing bush mechanics extends beyond the absence of formal education. Rather, it concerns the broader failure of the skills development system to adequately recognise, develop, and support technical competencies regardless of whether they originate from formal or informal learning environments.

Furthermore, the exclusion of bush mechanics from meaningful participation in skills development initiatives contradicts the inclusive objectives underpinning NSDS III. Although the policy seeks to promote equitable access to skills development opportunities, many bush mechanics remain excluded from training programmes, artisan development pathways, certification opportunities, and professional recognition. This exclusion affects both those with formal educational backgrounds and those with informally acquired expertise. Consequently, the skills development system inadvertently creates a hierarchy of knowledge that privileges formally accredited learning while undervaluing practical competencies demonstrated through occupational performance.

The persistent exclusion of bush mechanics from formal skills development frameworks raises important concerns regarding equitable access to opportunities for skills development, recognition, and occupational advancement. Although many bush mechanics acquire substantial technical competencies through workplace experience, observation, mentorship, and practical engagement, these competencies often remain unrecognised within formal certification and training systems. As a result, individuals possessing valuable occupational expertise may be excluded from opportunities intended to enhance employability, entrepreneurship, and socio-economic mobility. This limitation highlights the need for skills development policies that extend beyond the recognition of educational credentials to include demonstrated competence, practical expertise, and workplace

performance.

This position is supported by UNESCO (2022), which emphasises that inclusive lifelong learning systems should recognise learning regardless of where it occurs, provided that competencies can be demonstrated and appropriately assessed. Such an approach is particularly relevant in contexts where occupational knowledge is acquired predominantly through informal learning processes rather than formal educational pathways. In the case of bush mechanics, technical competence is often developed through experiential learning, workplace participation, self-directed practice, and mentorship, yet these forms of learning remain inadequately accommodated within existing skills recognition mechanisms. Consequently, achieving the objectives of the National Skills Development Strategy III (NSDS III) requires more flexible and inclusive approaches to recognising occupational competence, irrespective of how such competence was acquired.

NSDS III provides a useful analytical framework for examining the extent to which South Africa's skills development system advances the principles of inclusivity, equity, and lifelong learning. The framework enables an assessment of whether existing policies and interventions adequately recognise diverse learning pathways and create opportunities for workers in the informal economy to access skills development, certification, and occupational progression. Within this context, the experiences of bush mechanics provide an important lens through which to evaluate the responsiveness of national skills development policies to individuals whose expertise has been acquired outside conventional educational and training institutions.

1.1.2 Sector Education and Training Authorities (SETAs)

The Sector Education and Training Authorities (SETAs) framework constitutes a fundamental component of South Africa's skills development architecture. Established under the Skills Development Act 97 of 1998, SETAs were intended to facilitate sector-specific skills planning, promote workforce development, and strengthen the alignment between education, training, and labour market needs. Within the broader policy landscape, SETAs continue to play a significant role in implementing the objectives of the National Skills Development Plan (NSDP) 2030, which seeks to develop a skilled and capable workforce capable of supporting inclusive economic growth and social development (Department of Higher Education and Training [DHET], 2020).

The underlying rationale of the SETA system is that skills development should be demand-driven and responsive to the needs of specific industries. According to McGrath and Yamada (2023), contemporary skills systems are increasingly expected to facilitate closer relationships between education providers and labour markets in order to improve employability and economic productivity. From this perspective, SETAs provide an important institutional mechanism for identifying sectoral skills needs and coordinating relevant training interventions. Similarly, Akoojee (2021) argues that sector-based training authorities can contribute significantly to workforce development by ensuring that training provision remains responsive to changing occupational requirements.

However, the effectiveness of demand-driven skills planning remains contested. While proponents argue that employer-led planning improves labour market responsiveness, critics caution that such approaches may reinforce existing inequalities by privileging the needs of established industries and formal employers. Allais (2022) argues that skills policies centred primarily on labour market demands often fail to address broader questions of social inclusion and equitable access to training opportunities. In addition, Allais (2022) notes that an excessive focus on employability risks reducing skills development to an economic instrument while neglecting its developmental and transformative functions.

At the operational level, SETAs rely heavily on Sector Skills Plans (SSPs), Workplace Skills Plans (WSPs), and Annual Training Reports (ATRs) to identify scarce and critical skills. These planning tools are intended to generate evidence-based interventions that address sector-specific workforce challenges. However, Rasool and Botha (2021) contend that the quality and reliability of skills planning data remain problematic because many employers either underreport skills needs or lack the capacity to provide accurate workforce information. Consequently, the identification of scarce and critical skills may not adequately reflect the realities of rapidly changing labour markets or the experiences of workers operating outside formal employment structures.

The funding role of SETAs has also attracted considerable scholarly attention. Through the Skills Development Levy (SDL), SETAs provide financial support for learnerships, apprenticeships, internships, and occupational training programmes. Research by Powell (2021) suggests that such interventions have the potential to improve labour

market participation and facilitate transitions from education to employment. Likewise, McGrath et al. (2020) argue that workplace-based learning opportunities remain essential for developing occupational competence and enhancing employability in contemporary economies.

Despite these potential benefits, several scholars question whether SETA-funded programmes adequately reach marginalised groups. Vally and Motala (2022) argue that post-apartheid skills development initiatives have frequently prioritised formal labour market participation while overlooking workers engaged in informal economic activities. Their analysis suggests that many skills interventions continue to reproduce historical inequalities by concentrating resources within formal enterprises and accredited institutions. This critique is particularly relevant to the present study because bush mechanics frequently operate outside the formal economy and therefore fall beyond the primary reach of SETA programmes.

A growing body of literature further highlights the exclusionary effects of formalised skills development systems. Maurer (2023) argues that vocational education systems that privilege institutionally acquired knowledge often fail to recognise valuable competencies developed through experiential learning. Similarly, Tshephe and Govender (2025) identifies significant barriers within Recognition of Prior Learning (RPL) processes, including administrative complexity, limited institutional capacity, and inadequate awareness among potential beneficiaries. These barriers disproportionately affect individuals working in informal sectors, many of whom possess substantial occupational expertise but lack formal certification.

The experiences of bush mechanics challenge conventional assumptions underpinning the SETA framework. While some bush mechanics possess formal educational qualifications or technical training, others have acquired their expertise entirely through practical experience, mentorship, and self-directed learning. The exclusion of bush mechanics from SETA-supported programmes cannot be attributed solely to a lack of formal education. Rather, it reflects a broader structural limitation within the skills development system, which continues to privilege accredited learning pathways over demonstrated occupational competence.

This position is supported by UNESCO (2022), which maintains that inclusive lifelong learning systems should recognise competencies irrespective of where learning occurs. However, a contrasting view is presented by Wheelahan and Moodie (2021),

who caution that excessive reliance on informal learning recognition may undermine the standardisation and quality assurance objectives that vocational qualification systems seek to achieve. From their perspective, formal qualifications remain important for ensuring consistency, accountability, and labour market credibility. This debate reveals a critical tension within skills development policy: the need to balance quality assurance with equitable recognition of diverse learning pathways.

The SETA framework highlights a tension in South Africa's skills development. While it has advanced workforce development through structured training and industry partnerships, it continues to marginalize informal workers, particularly bush mechanics, whose skills are acquired outside traditional education. This exclusion undermines goals of inclusivity and social justice and represents a missed opportunity for economic growth. Bush mechanics play a vital role in their communities and possess valuable skills that could be leveraged through targeted training and support. Thus, while SETAs remain central to the skills development system, their effectiveness in fostering equity and inclusion is still debated.

2 INFORMAL ECONOMY AND SKILLS RECOGNITION

2.1 Informality and Livelihood Strategies

The informal economy has increasingly attracted scholarly attention as a significant source of employment, income generation, and livelihood support, particularly in developing countries where formal employment opportunities remain limited. The International Labour Organization estimates that more than 60% of the world's employed population derives income from informal economic activities, highlighting the sector's importance in sustaining livelihoods and fostering economic resilience (International Labour Organization [ILO], 2023). Within the South African context, informal economic activities serve as a critical survival mechanism for individuals who face barriers to entering the formal labour market, including limited educational opportunities, unemployment, and structural economic inequalities.

Scholars differ in their interpretations of informality and its developmental significance. Williams and Kayaoglu (2020) argue that the informal economy should not merely be viewed as a residual sector characterised by vulnerability and precariousness but rather as a dynamic space of entrepreneurship, innovation, and adaptive economic activity. According to these authors, many

informal workers actively choose self-employment as a strategy for generating income and exercising economic agency. This perspective challenges traditional narratives that portray informal work solely as a consequence of exclusion from formal employment.

By contrast, engagement in informal occupations is often seen as constrained by forces outside of workers' control. Some authors argue that individuals enter informal jobs because they have fewer opportunities for formal employment due to a lack of education or other employment opportunities, poverty, or labour market marginalisation (Chen & Carré, 2022; International Labour Organization [ILO], 2023; Williams & Kayaoglu, 2020). Under this interpretation, informal labour is merely symptomatic of structural inequalities that prevent workers from pursuing other economic activities. Informal economic contributions may provide livelihoods and income, but they are not typically associated with decent work or employment-related benefits such as skills development (Chen & Carré, 2022; ILO, 2023). This definition applies closely to bush mechanics, as many turned to the occupation due to joblessness and/or lack of access to schools. As such, informal occupations can be said to arise from structural barriers that restrict access to the formal labour market and recognised skill development.

Within African economies, the relationship between informality and livelihoods remains complex. Fox and Signé (2022) observe that informal enterprises contribute substantially to economic activity and employment creation, particularly in contexts characterised by slow formal sector growth. However, they caution that policy interventions frequently overlook the developmental needs of informal workers, thereby limiting opportunities for skills enhancement, business development, and economic mobility. This observation is particularly relevant to bush mechanics, whose livelihoods depend on informal automotive repair services that contribute to local economies while remaining largely excluded from formal support systems.

Informal workers often develop sophisticated occupational competencies despite operating outside formal institutional structures. This is supported by Meagher (2021), who argues that informal economies are sustained by intricate systems of social networks, apprenticeship arrangements, and mechanisms for practical knowledge transfer that facilitate skills development and economic participation. Bush mechanics represent a clear example of this phenomenon. Although some possess formal

educational qualifications or vocational training, many acquire technical expertise through observation, experimentation, mentorship, and practical experience. Therefore the contribution of bush mechanics to local economic development cannot be adequately understood through conventional labour market categories that distinguish sharply between formal and informal work. Instead, their experiences demonstrate how livelihood strategies often combine formal knowledge, informal learning, entrepreneurial initiative, and occupational adaptation.

Nevertheless, the continued marginalisation of informal workers within national development frameworks remains a significant concern. Chen (2022) argues that policy approaches that fail to recognise informal livelihoods risk perpetuating social exclusion by limiting access to training opportunities, financial support, and economic advancement. The exclusion of bush mechanics from mainstream skills development initiatives undermines their capacity to improve their livelihoods and contribute more effectively to economic development. Consequently, there is a need for policy frameworks that acknowledge the economic value of informal occupations while supporting pathways for skills development and professional growth.

2.2 Recognition of Prior Learning (RPL) Debates

Recognition of Prior Learning (RPL) has been identified as a useful policy instrument for advancing access, equity and lifelong learning. RPL occurs when learning acquired through work experience, informal learning, or 'alternative' educational settings is assessed and recognized. According to proponents of RPL, all learning should count, provided one can prove competence. Andersson and Fejes (2023) posit that recognition can "open up access to qualifications and position adult learners as competent" by making visible skills that are otherwise hidden. Central to their argument is recognition's departure from traditional assumptions about how legitimate learning can take place. For these authors, opening access to competency-based assessments enables workers with significant prior learning to pursue further learning and employment. Cooper and Ralphs (2022) similarly view recognition through frameworks of social justice. The authors argue recognition can be used as a "framework for opening up access to those individuals whose schooling may have been disrupted by structural disadvantages". This

perspective draws significantly on recognition's ability to make formal valid alternative knowledge gained from the workplace and community.

Wheelahan (2022) raises the argument that considerations of experiential learning bring questions of standardisation and knowledge equivalence into question. Wheelahan (2022) explains that qualification frameworks "need to have systems that recognise competencies against prescribed occupational standards if qualifications are to be trusted and valued by the general public" (p. 41). Implicit in this statement is that although RPL can promote inclusion, equivalence is necessary to preserve standards. Bohlinger and Wolf (2021) make a similar claim when they state that inclusion versus quality is often at odds when trying to implement RPL. Contrary to these arguments, Harris (2021) problematises why standardisation is prioritised over inclusion. Assessment methods favour workers who learn explicit knowledge that can be articulated outside of the workplace (2021). Implicit knowledge situated in the workplace often goes unnoticed in traditional assessments of competence.

In addition, UNESCO (2023) acknowledge that systems for lifelong learning must also include recognition systems that enable labour market attachment and social equity. These systems must allow for seamless movement between informal learning, formal learning systems, and the workplace. However, UNESCO (2023) states that they should not punish workers for how they learned skills. The researcher also believes that this notion could apply to bush mechanics because bush mechanics usually learn their skill set through schooling, on-the-job training and informal learning.

For these reasons the researcher conceptualises RPL as a possible solution to bush mechanics being locked out of formal skills development. However, researcher also feels that unless institutes are willing to recognise knowledge in different ways RPL will continue to fall short on its goal of quality and inclusion.

3 INDIGENOUS AND EXPERIENTIAL KNOWLEDGE

3.1 Tacit Knowledge Systems

Tacit knowledge has become increasingly important in skills development and workplace learning. It refers to understanding gained through experience, observation, and social interaction rather than formal instruction. Unlike explicit knowledge, which can be documented, tacit knowledge is embedded in practical activities and acquired through extended engagement in specific jobs

(Nonaka & von Krogh, 2021). Eraut (2020) argues that a substantial proportion of professional expertise is acquired informally through workplace participation rather than through formal education. Furthermore, Eraut (2020), workers develop judgement, problem-solving abilities, and contextual understanding through repeated engagement with real-life tasks, making tacit knowledge a fundamental component of workplace learning. This perspective is particularly relevant to occupations where learning occurs primarily through practice rather than structured training programmes.

Billett (2021) argues that occupational competence emerges through participation in work activities, interaction with experienced practitioners, and exposure to authentic workplace challenges. From this perspective, learning is not merely an individual process but a socially situated activity that occurs within specific communities of practice. Such a view challenges traditional assumptions that formal education constitutes the primary source of occupational knowledge. Wheelahan and Moodie (2021) argue that while experiential learning contributes significantly to workplace competence, it may not always provide access to the broader theoretical knowledge required for occupational mobility and innovation.

In contrast, Guile and Unwin (2022) argue that conventional distinctions between theoretical and practical knowledge often underestimate the complexity of workplace learning. Workers continuously integrate theoretical understanding with practical experience in ways that generate sophisticated forms of occupational expertise (Guile and Unwin, 2022). Consequently, they advocate for skills development systems that recognise the interdependence of formal and experiential learning rather than privileging one form of knowledge over another.

Within informal economic settings, tacit knowledge often constitutes the primary mechanism through which occupational skills are acquired and transmitted. Meagher (2021) observes that informal workers frequently rely on observation, imitation, experimentation, and social interaction to develop occupational competencies. These learning processes enable individuals to acquire specialised skills despite limited access to formal educational opportunities. Such findings are particularly relevant to bush mechanics, whose expertise often develops through repeated engagement with vehicle maintenance and repair activities.

The experiences of bush mechanics challenge conventional views on legitimate knowledge

sources. While some have formal qualifications, many gain technical skills through informal, hands-on learning. Their ability to diagnose faults and improvise solutions highlights that valuable expertise can arise from practice. Skills development frameworks that ignore tacit knowledge may overlook crucial technical expertise in the informal economy.

Furthermore, Hager (2022) argues that contemporary skills development systems should move beyond narrow credential-based approaches and acknowledge the role of practice-based learning in developing occupational competence. Recognising tacit knowledge is essential for promoting inclusive skills development and addressing the marginalisation of workers whose expertise has been acquired outside formal educational pathways. In this study, tacit knowledge provides an important lens for understanding how bush mechanics acquire, apply, and transfer technical skills despite limited engagement with formal training systems.

3.2 Apprenticeship-Like Learning in Informal Settings

Apprenticeship has historically been recognised as one of the most effective mechanisms for transmitting occupational knowledge and developing vocational competence. Traditionally associated with formal trades and regulated training systems, apprenticeship models are increasingly being examined within informal economic contexts where learning occurs through workplace participation, observation, and mentorship. These informal learning arrangements often resemble apprenticeships despite lacking formal accreditation, structured curricula, or institutional oversight.

According to Lange, Rauner, and Smith (2021), apprenticeship systems remain among the most effective approaches to vocational learning because they integrate theoretical understanding with practical workplace experience. Walther and Suarsana (2022) argue that informal apprenticeship systems provide accessible pathways for individuals excluded from formal education and training. Similarly, Afenyadu (2021) maintains that informal apprenticeship systems represent one of Africa's most significant yet underappreciated mechanisms for skills development. These systems enable the transfer of occupational knowledge through mentorship, observation, and practical engagement while simultaneously supporting economic participation (Afenyadu, 2021).

However, other scholars caution against romanticising informal apprenticeship systems. King

(2021) argues that while informal apprenticeships provide valuable learning opportunities, they may also reproduce inequalities due to the absence of standardised training, quality assurance mechanisms, and formal certification. Allais (2022), also argues that skills acquired through informal learning pathways are frequently undervalued within labour markets because they lack formal recognition.

The researcher observes that learning among bush mechanics closely resembles apprenticeship processes described in the literature. Many bush mechanics acquire their skills through prolonged interaction with experienced practitioners, observation of repair techniques, guided practice, and gradual assumption of increasingly complex tasks. Although these learning processes may not occur within formally regulated apprenticeship programmes, they nonetheless facilitate the development of substantial occupational competence. Apprenticeship-like learning among bush mechanics should not be viewed as inferior to formal vocational training. Rather, it represents an alternative pathway through which technical knowledge is produced, transferred, and refined.

UNESCO-UNEVOC (2022), emphasises the need for vocational education systems to acknowledge diverse learning pathways and create bridges between informal and formal skills development processes. This approach would enable workers who acquire competencies through apprenticeship-like arrangements to access further learning opportunities, professional recognition, and labour market mobility. Therefore, the experiences of bush mechanics demonstrate the importance of developing inclusive skills recognition frameworks that value learning outcomes rather than privileging specific modes of learning.

In conclusion, tacit knowledge systems and apprenticeship-like learning are vital for developing occupational competence in informal economic contexts. Literature shows that technical expertise arises from experiential learning, mentorship, and workplace participation. For bush mechanics, these processes are essential for skill acquisition and transfer. The researcher argues that skills development policies should broaden their definitions of learning to include alternative pathways for developing and sustaining occupational competence.

4. THEORETICAL FRAMEWORK

4.1. Capability Approach Theory

The Capability Approach is a normative theory of

human development and social justice that seeks to evaluate individual wellbeing based on the real freedoms and opportunities people have to achieve lives they value. The theory was originally developed by economist and philosopher Amartya Sen during the late 1970s and 1980s, with its foundational principles being articulated in works such as *Commodities and Capabilities* (1985) and later comprehensively developed in *Development as Freedom* (1999). Sen developed the Capability Approach as a critique of traditional development theories that measured progress primarily through economic growth, income, or resource accumulation. He argued that possessing resources alone does not necessarily improve people's lives because individuals differ in their ability to convert resources into meaningful outcomes. Consequently, development should be assessed according to the opportunities available to individuals and their freedom to pursue goals they value (Sen, 1999).

The theory was subsequently expanded by philosopher Martha Nussbaum, who further refined its ethical and social justice dimensions. Nussbaum (2011) argued that societies should create conditions that enable individuals to develop and exercise fundamental human capabilities necessary for living a dignified life. While Sen deliberately avoided prescribing a universal list of capabilities, Nussbaum proposed a set of central human capabilities that should be protected and promoted through public policy and institutional interventions. Together, the contributions of Sen and Nussbaum transformed the Capability Approach into one of the most influential frameworks for analysing issues of inequality, social exclusion, education, and human development.

The Capability Approach is built around three interrelated concepts: resources, capabilities, and functionings. Resources refer to the means available to individuals, including education, training opportunities, income, infrastructure, and institutional support. Capabilities refer to the genuine opportunities and freedoms individuals possess to utilise these resources in ways that improve their lives. Functionings represent the actual achievements or outcomes individuals realise, such as securing employment, establishing a business, acquiring recognised qualifications, or improving their socio-economic conditions. According to Sen (1999), development should not be evaluated solely by the availability of resources but by whether individuals have the capability to transform those resources into valued functionings.

A further important element of the theory is agency, which refers to an individual's ability to

make choices and act in pursuit of goals that they have reason to value. Recent scholarship continues to emphasise the significance of agency within education and skills development contexts. Walker and Unterhalter (2023) argue that the Capability Approach provides a powerful framework for understanding educational inequalities because it focuses on the opportunities available to individuals rather than simply their access to resources. Similarly, Tikly (2023) contends that capability-based approaches to education and skills development are particularly valuable because they highlight how social, economic, and institutional barriers can constrain individuals' opportunities to benefit from learning and training initiatives.

The application of the Capability Approach within vocational education and training has received growing scholarly attention. McGrath and Yamada (2023) argue that skills development systems should be evaluated according to their ability to expand people's choices, freedoms, and opportunities rather than merely their contribution to labour market productivity. Likewise, Powell and McGrath (2024) maintain that vocational education should promote both employability and human flourishing by creating conditions that enable individuals to participate meaningfully in economic and social life. These scholars challenge narrow human capital perspectives that reduce skills development to economic outcomes and instead advocate for approaches that emphasise social justice, inclusion, and individual empowerment.

Therefore, the Capability Approach is suitable for this study because it shifts attention from whether bush mechanics possess skills to whether they have meaningful opportunities to develop, utilise, and gain recognition for those skills. Existing literature demonstrates that bush mechanics acquire technical competencies through diverse pathways, including formal education, informal learning, apprenticeship-like arrangements, workplace experience, and self-directed practice. However, many remain excluded from SETA-funded programmes, formal certification pathways, Recognition of Prior Learning processes, and other opportunities designed to advance occupational development. From the perspective of this study, the challenge facing bush mechanics is therefore not primarily a lack of skills but a limitation in the opportunities available to convert those skills into recognised qualifications, improved livelihoods, and socio-economic mobility. Further, the exclusion of bush mechanics from formal skills development frameworks constitutes a capability deprivation. Although many possess valuable technical expertise

and demonstrate significant occupational competence, institutional barriers limit their access to training opportunities, professional recognition, entrepreneurial support, and occupational advancement. Consequently, the Capability Approach provides an appropriate lens for examining how existing skills development systems either expand or constrain the freedoms, choices, and opportunities available to bush mechanics.

5 METHODOLOGY

The research study adopted ethnography as research design. Ethnography was suitable because the researcher wanted to see how skills are learnt, practiced and passed on naturally in working situations through observations, participation and engaging with the participants. The design was also suitable because it complemented the Capability Approach by allowing the researcher to see the types of opportunities, freedoms or limitations and agency that bush mechanics experienced.

This study was completed in Mthatha, in the Eastern Cape province of South Africa. Data collection lasted three months and two weeks. Over the duration of the study the researcher visited informal vehicle repairing sites where the bush mechanics went about their daily business. It was noted that the participants practiced their trade outside of organisational structures and did not identify with formal professional bodies or associations. All of the participants worked from informal roadside stands, open fields, and unlicensed repair sites. The researcher observed that some of the participants experienced unstable working conditions due to occasionally being moved on by municipal officials as they lacked officially designated areas to trade or operate from. These elements allowed for the researcher to collect rich data on aspects of informality, exclusion, and marginalization. Eighteen (18) bush mechanics participated in this study.

Purposeful sampling methods were used when choosing participants based on their involvement in informal vehicle repair and maintenance. Participants ranged from older workers with experience to younger workers who are currently learning through workplace learning and immersion. Participant observation, informal discussions, field notes, and semi-structured interviews were used to

collect data. Spending long periods in the field allowed the researcher to witness workplace practices, how participants learn, and how they interact with one another. During this time the researcher was able to establish trust with the participants and gain a better understanding of their experiences. These methods allowed for data triangulation and helped to establish credibility. Data was analyzed using thematic analysis by noting similarities in the observations, discussions, and interviews. The researcher took on the role of a participant-observer during the study. Reflexive field notes were taken in which the researcher recorded what was observed, preliminary interpretations, and biases that may have influenced takeaways. This allowed the researcher to better understand how participants made sense of their world and helped establish trustworthiness.

6. FINDINGS

The findings in this study draw on extended fieldwork, participant observation, and informal interviews with bush mechanics across the study sites. Rather than relying exclusively on self-reported accounts, the analysis prioritizes direct observation of daily work routines, peer interactions, problem-solving strategies, and the broader social contexts in which mechanical knowledge is developed and applied. This ethnographic approach frames bush mechanics as a specific occupational community defined by shared practices, values, and methods of learning. Across the sites, observation confirmed that these mechanics hold substantial technical expertise and perform critical economic and social roles, even though formal skills development frameworks largely overlook their contributions. The analysis identifies six interconnected themes.

6.1 *Becoming a Bush Mechanic: Learning Through Participation and Necessity*

Entry into occupation among the field sites was seldom characterized by vocational training. Across all sites individuals mentioned entering into vehicle repair through participatory work in the workshop, as well as learning informally by watching other mechanics work on vehicles and vehicles being worked on in the community. One participant stated during an off-the-record discussion:

"I never went to college to learn this type of work. I would come home from school and help my uncle fix cars. I watched him do his work then he would let me do small tasks until I caught on."

Field notes support participant responses that novices to the occupation are often given simple tasks (passing tools, cleaning parts, watching others repair vehicles) to slowly integrate them into their role. Another factor involved with entering into the occupation was related to economic status. One individual relayed:

"There were no jobs. I had to do something that would give me money to eat. Fixing cars was my way of providing for myself."

It can be concluded that the process of socialization into the role of a bush mechanic is influenced by a variety of factors. These factors may include the individual's prior experiences, cultural background, the community's values and traditions, access to resources and tools, as well as the mentorship from more experienced mechanics. Additionally, the environment in which one operates, such as exposure to diverse problems and challenges in remote areas, also plays a significant role in shaping one's skills and knowledge in this trade. Ultimately, the interplay of these elements contributes to how effectively one adapts to and excels in the unique demands of being a bush mechanic.

6.2 Occupational Knowledge as Practice, Improvisation, and Experience

A prominent observation throughout the fieldwork was the depth of practical knowledge demonstrated by participants. Mechanics routinely diagnosed and repaired complex faults without access to sophisticated diagnostic equipment commonly found in formal workshops. Improvisation was a defining feature of occupational practice. During observations, participants frequently modified tools, adapted vehicle parts, and repurposed available materials to resolve mechanical challenges.

As one mechanic explained:

"Sometimes we don't have the right tools, but the car still needs to be fixed. You learn how to make a plan with what is available."

Participants often struggled to explain the technical reasoning behind their decisions, instead relying on intuition developed over years of practice.

"You can hear from the engine that something is wrong. After working on cars for many years, you just know where to start."

These observations indicate that much of their expertise is tacit, embodied, and acquired through experience.

6.3 Informal Apprenticeship and Collective Learning

Learning among bush mechanics occurred continuously through observation, demonstration, imitation, and participation in repair activities. Less experienced mechanics were frequently observed working alongside senior bush mechanic who demonstrated repair techniques and supervised practical tasks.

One young participant stated:

"Nobody teaches you in a classroom. You learn by watching and doing the work every day."

The researcher also observed mechanics consulting one another when faced with difficult repairs. Informal discussions frequently evolved into collaborative problem-solving sessions. As one experienced mechanic explained:

"If I get stuck, I ask the others. We work together because every car teaches us something different."

These findings suggest that bush mechanics operate within communities of practice where knowledge is collectively produced and shared.

6.4 Living on the Margins of Formal Skills Recognition

A recurring theme throughout the fieldwork was the experience of exclusion from formal systems of skills recognition. Participants frequently expressed frustration that their practical competence was overlooked because they lacked formal qualifications.

One participant commented:

"People think that because you do not have a certificate, you do not know anything. But sometimes we fix vehicles that others have failed to repair."

Several younger participants also highlighted how the absence of certification limited employment opportunities.

"When jobs are advertised, they ask for qualifications. Even if you know the work, you cannot apply without papers."

Field observations revealed a clear distinction between possessing practical competence and possessing institutionally recognised credentials. These findings suggest that formal recognition systems continue to privilege certified knowledge over demonstrated occupational expertise.

6.5 Distance Between Bush Mechanics and Skills Development Institutions

Throughout the fieldwork, participants demonstrated limited familiarity with formal skills development structures such as SETAs and TVET colleges. Informal conversations revealed uncertainty regarding available training opportunities and recognition mechanisms.

One participant stated:

"I have heard about SETAs, but I do not know what they do or how they can help someone like me."

Others described formal institutions as inaccessible due to financial and administrative barriers.

"Most of these programmes are not meant for people working here. We do not know where to start or who to speak to."

The researcher observed that learning and skills development occurred largely outside the visibility of formal institutions, creating a gap between policy intentions and the realities of informal occupational learning.

6.6 Bush Mechanics as Community Assets

Despite their marginal position within formal skills development systems, bush mechanics performed important economic and social functions within their communities. Observations revealed that their work extended beyond vehicle repair to include mentoring younger individuals, providing technical advice, and supporting local livelihoods.

One participant reflected:

"People depend on us. If their cars are not working, they cannot get to work or transport goods."

Several mechanics also described their role in helping younger people acquire skills.

"The young boys who come here learn something useful. Maybe one day they will have their own businesses."

Community members were frequently observed seeking assistance and advice from bush mechanics, demonstrating the trust placed in their expertise. These findings suggest that bush mechanics contribute significantly to local economic activity, skills development, and community resilience.

6.7. Summary of Findings

The study discovered that bush mechanics learn their technical skills informally through learning-by-doing, watching, coaching, and informal-apprenticeship models as opposed to formal skills training and education. Through observation and interviews it was noted that bush mechanics learned and utilise implicit knowledge gained from practical experience and that it is maintained within communities of practice. Bush mechanics have valuable problem solving skills and offer necessary services to the communities in which they operate, yet they are still largely marginalised from skills recognition, training programs, and support networks. Study participants noted minimal contact with any skills development agencies and felt there was limited access to certification due to lack of credentials. Bush mechanics support the livelihoods of those around them by keeping crafts, equipment, and transportation running. They allow people to commute to work or travel to gather resources by repairing their vehicles. They often coach the youth and provide help to their communities. The research highlighted a significant skills gap between formal training and education versus informal apprenticeships. This has left bush mechanics marginalised from recognition despite their skills being valuable.

7. DISCUSSION

Findings have shown that bush mechanics with little to no formal education acquire significant technical skills through learning by doing, observation, apprenticeship and on-the-job training. These results mirror arguments made by proponents of the Capability Approach who argue that development should focus on individuals' capabilities, agency, and freedom to achieve what they value, rather than access to commodities or resources. While participants had agency in the development of their technical skills, their lack of education and exclusion from formal skills development frameworks limited their ability to translate their skills into recognised qualifications,

better livelihoods, and career mobility. Results thus indicate that bush mechanics have the will and skill to better their livelihoods but lack of opportunities for their skills to be formalised and rewarded. Nevertheless, participants were able to achieve a level of agency by crafting livelihoods for themselves through the creation of informal businesses and occupation-specific skills outside of formal education establishments.

The findings also highlight ways in which learning amongst bush mechanics aligns with the theory of Communities of Practice (CoP), a theory of learning that conceptualises learning not as an individual activity but rather learning achieved through belonging and engagement in communal practices. Rather than learning in a classroom environment bush mechanics learn-by-doing: through watching others, learning together, informal mentorships and apprenticing. Novice workers pick up the trade by working on repairs and talking with more experienced workers about their trade. These results show us that learning is indeed socially situated and supported amongst occupational groups. Bush mechanics are a prime example of a community of practice where knowledge, skill and identity are transferred between generations informally.

These findings add weight to bodies of literature that focus on tacit knowledge or skills learned informally through doing. Participants displayed expert knowledge in terms of their technical skills, knowledge about the norms of the workplace and identity as bush mechanics. However, they found it hard to express these capabilities in conversation. Their skill was demonstrated through activities and tasks performed everyday at work. Skills were learned through encounters with real-life repair jobs over a number of years without access to institutional resources. Institutionalised skills development processes currently overlook informal learning by placing higher value on institutional learning. Bush mechanics will continue to be excluded from industries and markets that recognise only institutional skills qualifications. Recognition of Prior Learning (RPL) could act as a tool that recognises the

skills and knowledge of those who have been unable to access formal learning whilst creating pathways for social and economic inclusion.

8. POLICY IMPLICATIONS

8.1 *Inclusive Skills Development Frameworks*

The findings highlight the need for skills development policies that recognise competencies acquired through informal learning, workplace experience, and mentorship. More inclusive frameworks would enable bush mechanics to access opportunities currently reserved for formally qualified workers.

8.2 *Recognition of Prior Learning (RPL) Reform*

Existing RPL systems should be simplified and made more accessible to informal workers. Flexible assessment and trade-testing mechanisms could provide practical pathways for recognising competencies gained through experience.

8.3 *Hybrid Training Models*

Skills development institutions should adopt hybrid training models that combine workplace-based learning with targeted theoretical instruction. Such approaches would bridge the gap between formal and informal learning systems.

8.4 *Community-Based Certification*

Community-based certification involving experienced practitioners and training institutions could provide credible and accessible mechanisms for recognising occupational competence acquired outside formal education.

8.5 *Support for Informal Sector Innovation*

Government and skills development agencies should support innovation within the informal sector through training, technical assistance, and enterprise development initiatives. Such support would strengthen the economic and social contributions of bush mechanics while promoting inclusive development.

9. LIMITATIONS OF THE STUDY

This study has several limitations. First, the research was conducted in one selected towns in the Eastern Cape and involved a relatively small sample of eighteen bush mechanics; therefore, the findings reflect the experiences of participants within a specific context and may not be representative of all bush mechanics in South Africa. Second, the ethnographic design prioritised depth of

understanding over breadth, meaning that the findings are context-specific and should not be interpreted as statistically generalisable. Third, access to participants was occasionally constrained by the informal nature of their work, including the absence of permanent operating sites and periodic disruptions caused by municipal enforcement activities. Finally, the study was limited by the scarcity of scholarly literature specifically addressing bush mechanics, which restricted opportunities for direct comparison with previous studies. Consequently, the analysis relied on broader literature relating to informal learning, skills development, tacit knowledge, and the informal economy. Despite these limitations, the study provides important empirical insights into an under-researched occupational group and contributes to emerging debates on skills recognition, social inclusion, and workforce development in South Africa.

10. CONCLUSION

This study explored the lived experiences of bush mechanics and their exclusion from South Africa's skills development frameworks through an ethnographic examination of their work practices, learning processes, and occupational realities. The findings revealed that bush mechanics acquire substantial technical competencies through experiential learning, mentorship, observation, and apprenticeship-like practices. Despite demonstrating significant expertise and contributing meaningfully to local economies and community livelihoods, they remain largely excluded from formal systems of skills recognition, certification, and institutional support. The study therefore highlights a persistent disconnect between the realities of informal learning and the structures intended to promote skills development and workforce participation.

Drawing on the Capability Approach, the study found that the challenge facing bush mechanics is not the absence of skills but the limited opportunities available to convert those skills into recognised qualifications, occupational mobility, and improved socio-economic outcomes. While participants exercised considerable agency in creating livelihoods and developing expertise outside formal educational pathways, institutional barriers constrained their capabilities and restricted access to valued functionings such as professional recognition, career advancement, and participation in formal economic opportunities.

The study contributes to scholarship on informal learning, skills development, and the informal

economy by providing empirical evidence that occupational competence can be developed and sustained outside conventional educational institutions. It further demonstrates the importance of communities of practice and tacit knowledge in shaping vocational learning and skills acquisition. Ultimately, the findings underscore the need for more inclusive and flexible skills development systems that recognise competencies acquired

through non-formal and informal learning pathways. Recognising the contributions of bush mechanics is not only a matter of workforce development but also one of social inclusion, equity, and justice. Such recognition would contribute to a more responsive skills development system that values diverse forms of knowledge and expands opportunities for historically marginalised workers.

REFERENCES

- Akoojee, S. (2021). Skills development in South Africa: Trends and challenges in the post-school education and training sector. *Education as Change*, 25, 1–18. <https://doi.org/10.25159/1947-9417/10115>
- Allais, S. (2022). Skills and inequalities in South Africa: Why education and training policy continues to fail. *Journal of Education and Work*, 35(6–7), 660–673. <https://doi.org/10.1080/13639080.2022.2122629>
- Allais, S. (2022). Skills for inclusive growth in South Africa: Challenges for vocational education and training. *International Journal of Educational Development*, 90, 102541. <https://doi.org/10.1016/j.ijedudev.2022.102541>
- Chen, M. A., & Carré, F. (2022). *The informal economy revisited: Examining the past, envisioning the future*. Routledge. <https://doi.org/10.4324/9781003156005>
- Department of Higher Education and Training. (2011). *National Skills Development Strategy III 2011–2016*. Department of Higher Education and Training. https://www.gov.za/sites/default/files/gcis_document/201409/national-skills-development-strategyiii.pdf
- Department of Higher Education and Training. (2020). *National Skills Development Plan 2030*. Pretoria: Department of Higher Education and Training.
- Department of Higher Education and Training. (2024). *National skills development policy and implementation reports*. Pretoria: Department of Higher Education and Training.
- Fox, L., & Signé, L. (2022). *The opportunities and challenges of Africa's informal sector*. Brookings Institution. Retrieved from <https://www.brookings.edu>
- International Labour Organization. (2023). *World employment and social outlook: Trends 2023*. International Labour Office. <https://doi.org/10.54394/SNKE9850>
- Madiba, S. L. (2025). Assimilating bush mechanics into the small-scale motor industry in Africa: A personal and academic exploration. *E-Journal of Humanities Arts and Social Sciences*, 6(10), 2529–2543.
- Majola, E., Powell, L., & Jordaan, C. (2024). Vocational education and graduate struggles in the Eastern Cape, South Africa: A Freirean approach. *Education as Change*, 28, 1–21. <https://doi.org/10.25159/1947-9417/15943>
- Masuku, B., & Nzewi, O. (2021). The South African informal sector's socio-economic exclusion from basic service provisions: A critique of Buffalo City Metropolitan Municipality's approach to the informal sector. *Journal of Energy in Southern Africa*, 32(2), 59–71. <https://doi.org/10.17159/2413-3051/2021/v32i2a5856>
- Masuku, B., & Nzewi, O. (2021). The South African informal sector's socio-economic exclusion from basic service provisions: A critique of Buffalo City Metropolitan Municipality's approach to the informal sector. *Journal of Energy in Southern Africa*, 32(2), 59–71. <https://doi.org/10.17159/2413-3051/2021/v32i2a5856>
- Matha, Q. P., & Jahed, M. I. (2024). A critique of the techniques used by the sectorial education and training authorities to detect skills shortages in South Africa. *Administratio Publica*, 32(4), 156–175. <https://doi.org/10.61967/adminpub.2024.32.4.8>
- Maurer, M. (2023). Recognizing prior learning in vocational education and training: Theoretical and policy perspectives. *Compare: A Journal of Comparative and International Education*, 53(8), 1384–1401. <https://doi.org/10.1080/03050068.2022.2132445>
- McGrath, S., & Yamada, S. (2023). Skills for development and vocational education and training: Current and emergent trends. *International Journal of Educational Development*, 102, Article 102853. <https://doi.org/10.1016/j.ijedudev.2023.102853>

- McGrath, S., Powell, L., Alla-Mensah, J., Hilal, R., & Stuart, R. (2020). New VET theories for new times: The critical capabilities approach to vocational education and training and its potential for theorising a transformed and transformational VET. *Journal of Vocational Education and Training*, 74(1), 1-22. <https://doi.org/10.1080/13636820.2020.1786440>
- Powell, L. (2021). Planning for freedom: From human capital to human capabilities. *Journal of Education*, 84, 85-105. <https://doi.org/10.17159/2520-9868/i84a05>
- Singh, M. (2021). Recognition, validation and accreditation of non-formal and informal learning: Contemporary developments and challenges. *International Review of Education*, 67(5-6), 677-696. <https://doi.org/10.1007/s11159-021-09910-8>
- Statistics South Africa. (2026). Quarterly labour force survey (QLFS), Quarter 1: 2026 <https://www.statssa.gov.za/publications/P0211/Presentation%20QLFS%20Q1%202026>.
- Tshephe, G. P., & Govender, N. (2025). Barriers to recognition of prior learning for Sector Education and Training Authority-Accredited Providers in Gauteng. *International Journal of Educational Development in Africa*. <https://doi.org/10.25159/2312-3540/17369>
- UNESCO. (2022). Making lifelong learning a reality for all: Recognition, validation and accreditation of learning outcomes. UNESCO.
- Vally, S., & Motala, E. (2022). The making of post-apartheid state policies for workers, adult and community education and training: Abandoned possibilities. *Education as Change*, 26, 1-24. <https://doi.org/10.25159/1947-9417/11366>
- Wheelahan, L., & Moodie, G. (2021). The problem with skills: The limits of vocational education and training reform. *Journal of Vocational Education and Training*, 73(2), 167-184. <https://doi.org/10.1080/13636820.2020.1804355>
- Wheelahan, L., Moodie, G., & Buchanan, J. (2022). Skills formation, informal learning and social inclusion in changing labour markets. *Journal of Education and Work*, 35(6-7), 645-659. <https://doi.org/10.1080/13639080.2022.2122741>
- Williams, C. C., & Kayaoglu, A. (2020). COVID-19 and undeclared work: impacts and policy responses in Europe. *Service Industries Journal*, 40(13-14), 914-931. <https://doi.org/10.1080/02642069.2020.1757073>
- Williams, C. C., & Kayaoglu, A. (2020). COVID-19 and undeclared work: Impacts and policy responses in Europe. *The Service Industries Journal*, 40(13-14), 914-931. <https://doi.org/10.1080/02642069.2020.1754050>