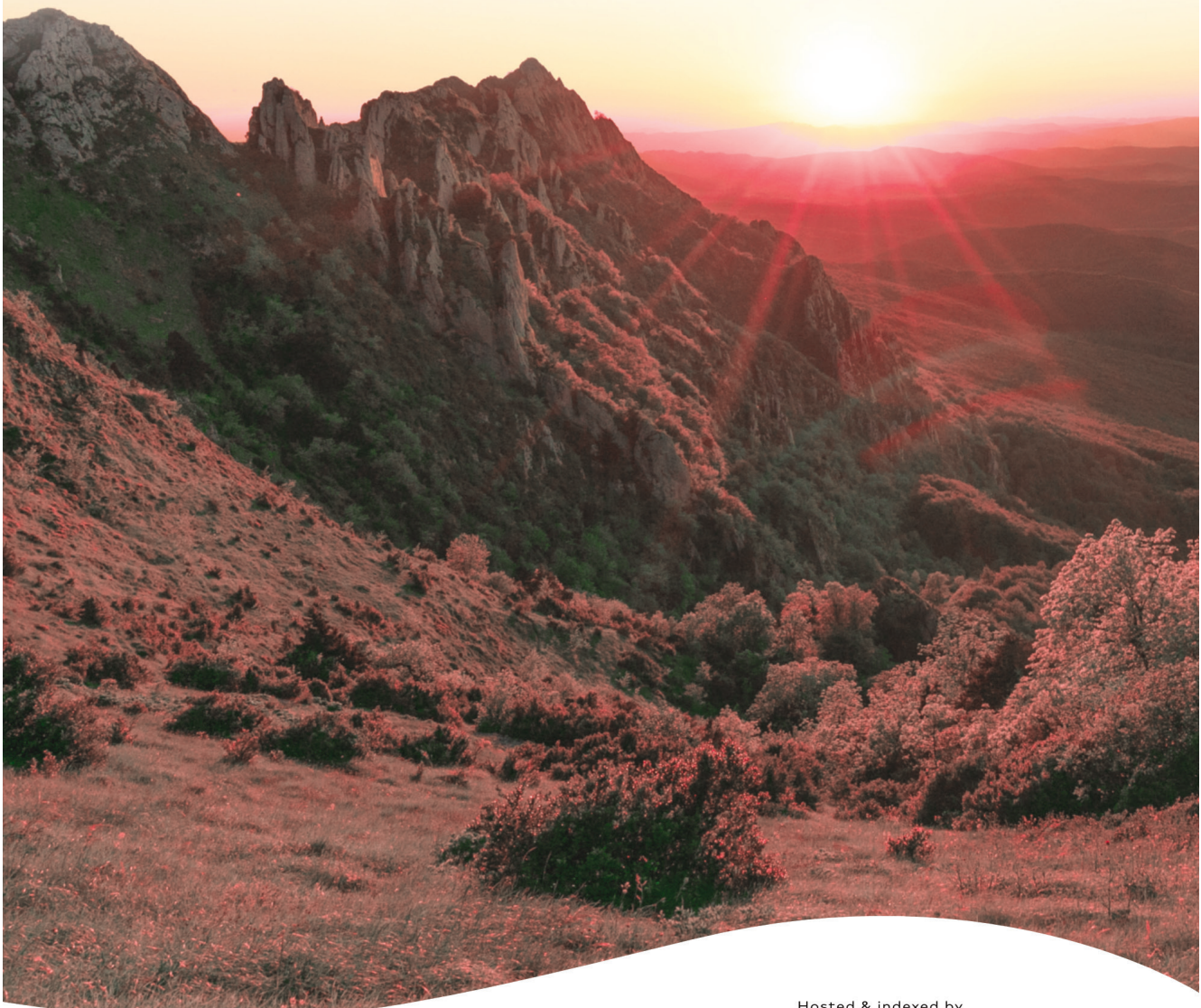


# The Dyke

**Volume 17 No.1**

*Special Issue on Drugs and Substance Abuse*



Hosted & indexed by  
**Sabinet**  
African Journals

## Coping with drug and substance abuse among the university youth in Zimbabwe: Towards a 'quad-helix' model

Langtone Maunganidze<sup>a</sup>

<sup>a</sup>Midlands State University, Zimbabwe

### ARTICLE HISTORY

Published online, 2024

### ABSTRACT

The emergence of drug and substance abuse (DSA) among the youth has long become a global 'panic' but has continued to attract fervent interest and attention from both scholarship and development practice. Although extant literature shows how the Zimbabwe government and non-state actors have over the years attempted to disrupt the drug and substance supply, and demand chains, the scourge has remained a recalcitrant challenge. The failure to comprehensively deal with the issue potentially undermines the United Nations Sustainable Development Goals in particular SDG3 and also the country's vision of attaining the status of a 'middle – income economy' by the year 2030. It also threatens the ZANU(PF) party-led administration's mantra of 'inclusive' development, given that the youth who are the expected drivers of the country's future are at the centre of the problem. This article acknowledges the multi-faceted and layered nature of the phenomenon. In light of this, it draws inspiration from a multi-sectoral development philosophy and deploys Flora and Flora's '*Community Capitals Framework*' to analyse the factors influencing DSA among the youth, particularly university students and delineate possible ways of addressing the challenge. With a particular focus on the youth in Zimbabwean universities and colleges, the research on which the article is based followed a qualitative approach, predicated on a combination of documentary survey of print and digital evidence, and snippets of ethnographic unstructured interviews and lived experiences of selected key informants. As a coping strategy, the article recommends the adoption of a 'quadruple helix' (quad-helix) framework that promotes a multi-sectoral and multi-dimensional approach involving synergistic interactions among universities, private and public sector, communities and civil society.

**Keywords:** community capitals, drug, substance abuse, quad-helix



## **Introduction**

**O**ne of the United Nations Sustainable Development Goals, SDG3, is ‘ensuring healthy lives and promoting well-being for all at all ages’ (UN Global Compact, 2015). At country level, yearning for a productive and responsible citizenry should be the moral compass guiding the realisation of the goals. However, the emergence of drug and substance abuse (DSA) among the youth particularly those in universities and colleges, has become a global ‘panic’ attracting fervent interest and attention of both scholars and development practitioners. Substance abuse includes repeated or persistent problems related to substance abuse (Ahmedani & Perron, 2013; Saladino et al., 2021). At a global level, the failure to comprehensively deal with the issue potentially threatens the realization of the SDGs and respective countries’ visions.

**I**n the Zimbabwean case, extant literature is replete with evidence showing how long the government and non-state actors have been rolling out intervention programs aimed at disrupting the drug and substance supply, and demand chains. Despite the perceived risks and disapproval associated with drugs, and substance abuse; disorders at both community and national levels, the scourge has remained a recalcitrant problem for both scholarship and social work practice.

**D**ata collected from six African countries Uganda, Swaziland, Namibia, Kenya, Zambia and Zimbabwe indicated that 6.6% of youth abuse drugs while about 10% use illicit drugs (WHO, 2014, cited in Moyo, 2020). Drug use, particularly among the youth in Zimbabwe, has already been reported to be reaching crisis levels (Maraire, Chethiyar & Jasni, 2020). The effects of drug abuse by the Zimbabwean youths include health complications, where 45% of admitted patients in Zimbabwe’s mental health institutions in 2019 were youth drug abusers (Rwafa, Mangezi & Madhombiro, 2019). Of these, 57% of all admissions in mental health institutions in Zimbabwe in 2018 were drug abuse-induced mental illnesses, of which, the majority; 80% fell in the youth category (ZCLDN, 2019, cited in Maraire, Chethiyar & Jasni, 2020). A study by Moyo (2020), on the relationship between substance abuse and academic performance among university youths in Bulawayo, Zimbabwe’s second-largest city, established that the majority of youths turned to drugs and substance abuse to cope with their stressors that included pressure from peers and academic challenges.

Despite the existence of institutional interventions such as policies and masterplans on drug and substance use, in the main, these have either been largely piecemeal or fragmented. This has called into question the efficacy and sustainability of the traditional approaches. Apart from disrupting the livelihoods at both individual and community levels, DSA particularly among the youth potentially threatens Zimbabwe's vision of attaining the status of an 'upper middle-income economy' by the year 2030 (Government of Zimbabwe, 2018), may become a pipe dream given that the youth who are ideally the drivers of the country's development. Consequently, the ZANU(PF) Party, and government mantra of 'inclusive' development that 'leaves-no-place-and-no-one-behind' (Bwititi, 2021) may become a pipe dream given that the youth who are ideally the drivers of the country's future is at the centre of the problem. Although, in terms of the theory of planned behaviour, individuals make rational decisions on why, how and when to (ab)use drugs and other related illicit substances, there are also driving forces beyond the individual's choices. Human behavior is an outcome of multi-faceted and multilayered factors that are also synergistic and mutually reinforcing which calls for the deployment of multi-sectoral and interdisciplinary interventions. Thus, the study on which this article is based, draws inspiration from a multi-sectoral development philosophy and specifically deploys Flora and Flora's (2008) '*Community Capitals Framework*' to analyse the factors influencing DSA among the youth, particularly college students, and delineate possible ways of addressing the challenge. In the main, the article recommends the adoption of a 'quadruple helix'(quad-helix) (qhx) framework (Kimatu, 2016; Roman, Varga, Cvijanovic & Reid, 2020) involving an integrated partnership among four principal actors; government, industry, universities and civil/community.

The quad-helix is an extension of the triple-helix, which is about the dynamics arising from the interactions between three principal institutional spheres in an economy, namely the university, industry and government (Etzkowitz & Leydesdorff, 1995; Etzkowitz, Ranga & Dzisah, 2012). Figure 1 shows the triple-helix.



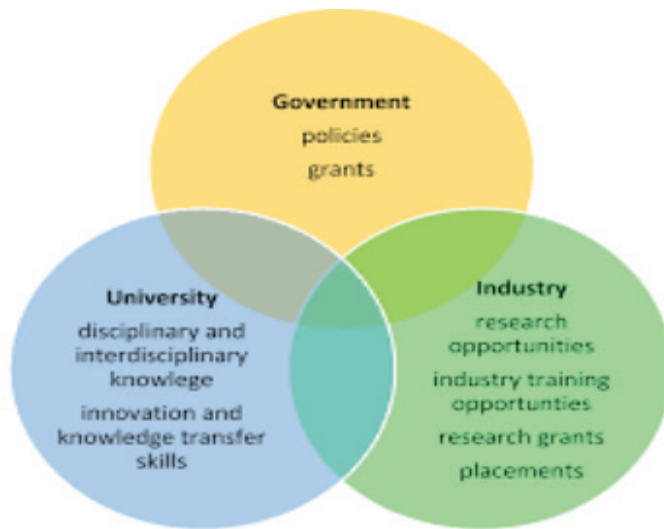


Figure 1: Triple-Helix

According to Saad and Zawadie (2011), in the triple-helix, particularly in developing countries, the boundary between the institutional spheres is necessarily blurred. There is also the low volume of interactions between the institutional players and hence low stock of social capital and consequently limited scope of innovation. Perhaps one can understand the dilemma, as players tend to be preoccupied with parochial interests that are marooned by crises of poverty, inequality and unemployment. The quadruple helix (qhx) is more encompassing as it adds the fourth institutional player to the ecosystem; civil societies and communities (Leydesdorff, 2012) (see Figure 2).

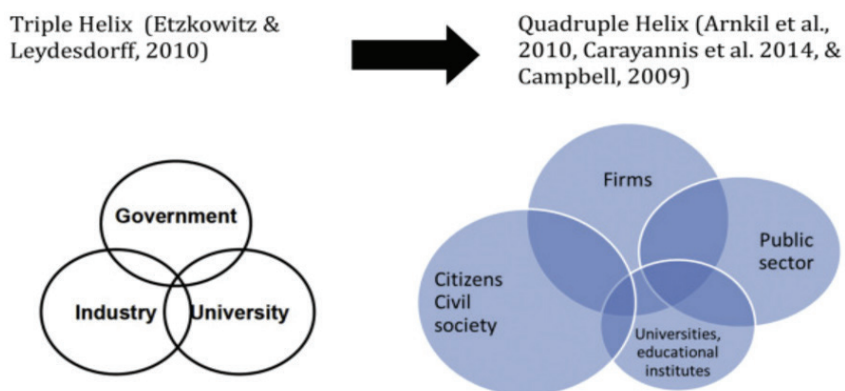


Figure 2: Transformation from triple-helix to quadruple-helix

The fight against DSA requires something more than the triple-helix, to comprehensively address the supply and demand elements at the social and human factor level. For example, even if there is an existing strong university-industry-government collaborative intervention that facilitates a knowledge-oriented triple-helix culture, and generate technological-driven knowledge transfer and creates jobs, its sustainability can still face challenges in the absence of a viable community capital base that directly speaks to the aspirations and experiences of the youth. Although the triple-helix arrangements are key to improving the conditions of an innovation-based society, combatting DSA requires the buy-in from the youths themselves. In fact, at best, no development model, including the quad-helix, has been fully utilised in addressing queer, deviant or crime-related behaviours such as DSA. Such behaviours have often been attacked largely from either a law enforcement, health pathologies or poverty perspective ignoring the interconnectedness of the individual conditions with the wider socio-cultural, political, religious, financial, and environmental factors. Substance abuse and dependence can precede, follow, or occur contemporaneously with co-occurring structural and social preconditions (Howard, Garland & Whitt, 2013, Törrönen, 2023).

## Research problem in the context of related literature

Global social media use grew from 1 million monthly active users in 2004 to over 3.6 billion in 2020, with the figure projected to increase to almost 4.4 billion by 2025 (Rutherford, 2022). Illicit drug use is the highest among 18–25 year olds, an age range shared by most active users of internet / social media (SM) (Kazemi, Borsari, Levine & Dooley, 2017), and largely the dominant group in the university studied.

The large public presence of substance related social media content might have negative influences on attitudes, behaviours and risk perceptions relating to substance use, particularly among adolescents, and young adults, who are the primary users of social media. Furthermore, the increase in social media use has rendered ineffective any possible surveillance systems by authorities.

In Zimbabwe, Matutu and Mususa's (2019) found that prevalence of drug abuse was at 57% among young people, and the most commonly abused drugs and substances were marijuana and alcohol. More recently, there has been an increase in the use of e-cigarettes, psychostimulant, stimulant, inhalant and

novel psychoactive substances (Rutherford, 2022). Other usually abused drugs and substances among the youth in Zimbabwe include sedative tablets, alcohol, heroin, tobacco, cigarettes, *mutoriro*, *hashish* (charas), crystalmeth, glue, and cocaine.

**I**n this article, social media platforms refer to online web-or-application-based platforms that allow users to generate content and interact via ‘liking’, comment or messaging features and surfing blogs. These include but not limited to Facebook, WhatsApp, Instagram, TikTok and Twitter. Although it is a widely revered development to have occurred to humankind, particularly to countries in the global south, it has also co-evolved with a near ‘human-crisis’ in the form of drug and substance abuse (DSA) potentially threatening the well-being of individuals and society at large.

**D**rug and substance abuse is any harmful intake of drugs in ways or quantities hazardous to users or people around them, or both. Excessive drug/substance consumption may lead to substance dependence and consequently addiction. According to Becker and Hu (2008), drug abuse occurs in three stages, first, acquisition or initiation of drug-taking, during which an individual acquires drugs, secondly, an escalation of use when the individual begins to use drugs on a large scale. When this persists, it leads to addiction, during which time the individual begins to depend on drugs, thirdly and finally, relapse because of abstinence.

**W**hile there is evidence of scholarship on the influence of social media on religiosity, political participation and consumer behaviour, similar works assessing the perceived influence of social media on problematic substance use among the youth particularly from the perspective of university students have been limited and if ever these exist, they have been mainly institutional and journalistic. In addition, most of the studies rely on the experiences of the global north.

**A**lthough there seems to be some convergence in both public and academic discourse on the symbiotic relationship between digital technology and substance abuse and disorder, empirical evidence has not been conclusive regarding the direction of association igniting fervent interest in the subject. Furthermore, the excessive consumption of alcohol and (ab)use of drugs such as marijuana and cocaine by the youth especially in universities and colleges has been a worrying trend with potential to threaten the national development agendas. In spite of the perceived risks and perceived disapproval associated

with drug and substance abuse, and disorders, at both community and national level, the scourge has remained a recalcitrant problem to social work practice.

**D**rug and substance abuse have recently attracted intense institutional, public, political and media attention. Digital technology platforms such as Facebook, Twitter, Tiktok, WhatsApp and Youtube have compounded the situation as both proximal factors and enablers to the scourge. Following online substance-related content by college students can be regarded as cyber-deviance (Inderbitzin, Bates & Gainey, 2017), triggered by activating proximal factors. Proximal factors include deviant peers, family, neighbourhoods that individuals have direct contact (Vaughn, 2013). The problem with drug and substance abuse, and problematic social media use, has been well documented in both scholarly and institutional work. In spite of this, there has not been any consensus in research regarding the associative relationship between social media and DSA among the youth. There is a perspective that views both DSA and social media use as largely agentic while another view points to an outcome of structural conditioning in which the individual is passive and constrained. Social media are highly personalised spaces and their effects depend on how people make use of them (Knoll, Matthes & Heiss, 2020). This article contributes to the debate by analysing the perceptions of university students on the influence of social media on the nature and extent of drug/substance among the youth in Zimbabwe.

**T**he rest of the article follows five thematic parts. Firstly, the theoretical orientation of the study is provided. Secondly, the article presents the methodology. Thirdly, it discusses the perceived motivations for DSA and social media use. Fourthly, the interface between gender, social media and substance use is considered. Finally, the article examines the relationship between social media use and, drug and substance use).

### **The integrated systems-based framework**

For a fuller appraisal of the dynamics of DSA in Zimbabwe, deployment of an integrated systems-based framework is preferred. Given the complexity and multi-dimensional nature of drug and substance abuse, the study was informed by ideas drawn from Flora and Flora's (2008) Community Capitals Framework (CCF) (Figure 3).



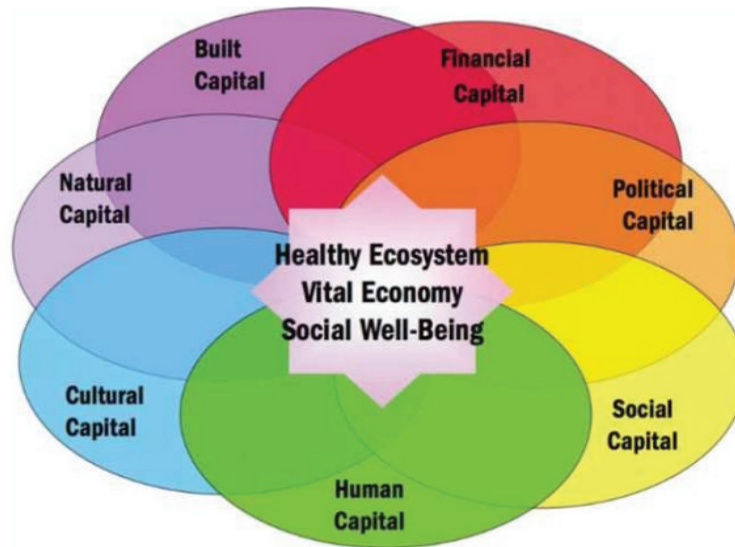


Figure 3: Community Capitals Framework

CCF was developed as an expansion of the systems approach to poverty reduction, effective natural resources management and social equity (Emery, Fey & Flora, 2005). The framework contains seven capitals: human, social, cultural, political, built, financial and natural. Central to the model are social inclusion and empowerment, which are all critical aspects in addressing the possible causal factors of DSA and delineating potential remedies to the problem. In the case of DSA, it was important to identify capitals that were critical for the identification of abusers, their networks and drug suppliers, and possible ways of coping and adaptation at both individual and community levels. For example, the role of socio-cultural and family systems and their interests as social capital in the provision of psychosocial, environmental health and safety may be downplayed, as traditional approaches tend to overemphasise lack of education, financials and unemployment as drivers to the perpetuation of DSA. Flora and Flora (2008) and Pigg, Gasteyer, Martin, Keating and Apaliyah (2013) put a case for understanding the systemic interdependence, interaction and synergy among capitals. It is critical to maintain a balance between the capitals to avoid decapitalisation (Emery et al., 2013). Decapitalisation is the overemphasis of one capital at the expense of others.

In universities and colleges, deviant peers, physical and political environments that facilitate the availability of the drug and opportunities for its supply drive students into DSA and addiction. From a student perspective, drug use, abuse and dependence may not necessarily be a bad thing, as some drugs are regarded as effective psychoactive and performance-enhancing substances, stress and trauma depressants. As Vaughn (2013, p. 42) argued that “an individual cannot become substance dependent if the drug either does not exist or is unavailable.” For example, if an individual was alone on an uncharted island there would be no possibility of becoming addicted to alcohol or drugs. The supply and demand of drugs such as heroin, cocaine and marijuana, dagga (*mbanje*) or the popular crystal meth (*mutoriro*), in the Zimbabwean context, are located at the intersection of proximal and distal environmental antecedents or factors. Proximal factors include deviant peers, family, and neighbourhoods that individuals have direct contact with, while examples of distal factors include the built or physical environment, markets and transportation, natural environment and political economy (Vaughn, 2013).

In many universities, also located in big cities, acute shortage of on-campus accommodation has driven many students into cheap but ‘bad’ neighbourhoods, with high levels of alcohol consumption and a culture of DSA. In addition, studies elsewhere (Centre and Substance Abuse Treatment (CSAT), 2009, cited in Carlson, 2013, p. 201), have observed gender and sexual orientation as key risk factors for alcohol problems, use of marijuana and abuse of prescription drugs. This is insightful in the Zimbabwean case, with rampant cases of university female student abuse and prostitution on both campus and work-related learning environments. Thus, the consequences of substance abuse can be more severe among females than males. A community capital framework allows a transdisciplinary synthesis of the interactions among the various proximal and distal environmental factors in the explanation of causes and management of DSA.

## Methodology

The study, on which this article is based, followed an interpretive qualitative research approach. The choice of interpretivism was motivated by the need to show particular realities that are socially produced and maintained with an emphasis on sharedness and negotiation. Communities in which the youth reside or interact with are culturally and historically unique sites where the

drug suppliers and consumers collectively engage in the construction of a social reality. An interpretivist approach is predicated on a pluralist character of reality in which language and culture are central. Apart from individual key informant-driven case profiling, the investigation focused on both proximal and distal environmental factors (Vaughn, 2013). The choice of the design also emanated from the desire to understand complex social phenomena as they unfolded as a whole (Yin, 2003).

**W**ith a particular focus on the youth in a selected public university in Zimbabwe, two city neighbourhoods where the selected university has campuses, were purposively selected. The neighbourhoods were selected for their proximity to the university in which most students resided. Based on media reports, the areas are also one of those considered potential havens and transit-sheds for marketing drugs. The study utilised elements of a combination of cross-sectional multi-case study, documentary surveys and snippets of ethnographic data. Case studies allow investigations to retain the holistic and meaningful characteristics of real-life events. Ethnographic tools included direct observation of physical or built environments in selected neighbourhoods and go-along unstructured face-to-face and virtual interviews, and focused group discussions. However, given the 'hiddenness' and invisibility of the drug users in the light of the potential consequences of any exposure, the study relied on the experiences and narrations of key informants chosen through purposive, respondent-driven and self-selection sampling strategies.

**T**he initial participants were based on the researcher's previous acquaintances and their expected intimate knowledge about the phenomenon and histories of drug and substance abusers in their communities. Five key informants, including a community leader, social work practitioner, a researcher and business representative, were selected for purposes of case profiling. In essence, drug suppliers, and users, often belong to closed networks under the surveillance of gatekeepers and are difficult to break through. As a way of getting around this challenge, participation invitation notices were posted via digital platforms: Facebook and WhatsApp, and physical noticeboards on campus.

**T**here were 12 interview participants drawn from the following categories each contributing an equal number; students, academic researchers, representatives of work-related learning partners, social work practitioners and social service agency personnel, based on their expert knowledge and experience in assessment, diagnosis and treatment or rehabilitation of drug and substance abusers. One focused group discussion session comprising six undergraduate

social work students was organised based on a voluntary self-selection strategy. The documentary survey included media and official reports on DSA. Overall, the data collection process focused on factors influencing DSA, types of drugs and substance abuse, and dependence, assessment and coping mechanisms. Data was analysed using a combination of illustrative methods (Neuman, 2014) and pattern matching (Yin, 2003). According to Neuman (2014), the illustrative method applies theory to a concrete historical situation or social setting and organizes data based on theory. In this study, CCF was deployed to establish capitals that were critical for the identification of drug and substance (ab) users, their networks and drug suppliers, and possible ways of coping and adaptation at both individual and community levels. The illustrative method was complemented by pattern matching, which considers similarities between the cases and how these develop into patterns to provide explanation to a phenomenon.

The data collection protocol was ethically informed. Participation was voluntary, and confidentiality and protection of information were assured during both data collection and report writing. Methodological rigor was achieved through triangulation of data collection and sampling techniques, and member checking. Triangulation and respondent validation have long been widely revered attempts to validate research findings by generating and comparing different sorts of data, and different respondents' perspectives, on the topic under investigation (Tobin & Begley, 2004; Torrance, 2012). However, one major limitation of this study was the absence of real-life or lived experiences of youths who had abused drugs and substances. The investigation overly relied on case profiling based on narrations of self-selected key informants and responded-driven data collection techniques, which can potentially generate slanted information. This agrees with Latour's (2005) argument that it is no longer enough to limit actors to the role of informers offering cases of some well-known types. It is important to grant actors back the ability to make up their own theories of what the social is made of (Latour, 2005).

## Findings

### *Types of drugs*

Some of the most common substance use disorders are substance abuse, substance dependence, substance intoxication and substance withdrawal. The different manifestations of substance abuse include failure to carry out major obligations at work or school, repeated use of drugs and substances even when physically dangerous to do so, and continued use despite knowing that it has caused or worsened one's health and social or interpersonal problems (DSM-IV-TR, APA, 2000, cited in Manzini, 2013, p. 53).

Key informants and participants in focus group interviews confirm earlier studies (Moyo, 2020), that found that although the majority of youth in Zimbabwean universities abuse alcohol most, they also use marijuana, alcohol, mixture of heroin, bronco cough syrup and mandrax. Other commonly abused drugs, and substances, include those for the prevention of HIV / AIDS and STDs, and pregnancies and performance-enhancing and non-sleeping substances. The choice of drug and substance is also differentially gendered. Male students tend to take marijuana, and *mutoriro* while female substance abuse and dependence are largely restricted to reproductive health and skin therapeutic ones.

### *Drivers of drug and substance abuse*

Understanding the factors that influence youth substance use is not a simple endeavour, given that this involves a complex process that includes several interacting factors (Castro & Gildar, 2013; Moyo, 2020). The studies found out various drivers of drug and substance abuse by the youth that include individual and family, social context, peer influence, community and environmental risk factors. Taylor (2010, cited in Castro & Gildar, 2013, p. 153) defines a risk factor as a variable that increases the likelihood that a person will initiate the use of a substance such as marijuana. At an individual level, the decision to (ab)use drugs and substances, is both rational and irrational. As stated by some key informants (Ki):

*Youth especially adolescents and those in universities take drugs as stress depressants and just for enjoyment. (Ki1)*

*However, others are dragged into drug and substance abuse by external influences including poverty, peers and role models. (Ki2)*



This resonates with Gunning et al. (2009, cited in Bender, Tripodi, Sarteschi & Vaughn, 2013, p. 186; Tschorn, Lorenz, O'Reilly, Reichenberg, Banaschewski, Bokde et al. 2021; Van Ryzin, Fosco & Dishion, 2012) observation that peer substance abuse was the strongest predictor of alcohol (b)use. Although the findings were from a different context, such situations have continued to obtain among the Zimbabwean youth especially in universities and neighbourhoods as they influence each other in taking drugs. Thus, DSA is not necessarily volutaristic as individuals are also influenced by structures such as media. Risk factors or drivers of DSA include associating with deviant peers, poor academic performance and approval of drug use that is communicated from significant others within social environments (Taylor, 2010). In some cases, university students fail to adapt to the new demanding academic tasks and engage in "risky" coping strategies. According to Key Informant 3:

*Many newcomers to university struggle to adjust to the new environment particularly poor academic performance especially in areas perceived to be challenging like engineering and natural sciences (Ki3)*

As a coping strategy, they take alcohol and illegal substances. In the long run, this "escapist" form of substance use (Jouhki & Oksanen, 2021; Martin, Tuch & Roman, 2003, cited in Castro & Gildar, 2013, p. 147) may lead to substance dependence and finally addiction (Törrönen, 2023; Windsor, 2012) This behaviour is prevalent among both males and females. Thus, substance use, abuse and related addictive behaviours are influenced by culture within three domains; individual, interpersonal and environmental. Furthermore, prominent role models such as artists and musicians can inspire the youth to take or not take drugs. Inspiration is an important function of role models when individuals perceive themselves to be similar to their role models. This agrees with Moyo's (2020), findings that the of youths in universities imitate celebrities especially those using chemicals or taking drugs on television and in the movies. In the Zimbabwean context, a case in point is that of a visiting artist who allegedly smoked what was widely suspected to be marijuana, dagga or *mbanje* while performing on stage at a concert in Harare in 2022.

Community and environmental risk factors that include economic stress, built environment and neighbourhoods influence the supply and demand of illicit drugs and substances. Since the turn of the new millennium, Zimbabwe has witnessed an unprecedented economic downturn characterised by hyperinflation and unemployment resulting in the mushrooming of slums

and backyard irregular structures in many cities. This co-evolved with the establishment of new universities creating an acute shortage of on-campus accommodation making students vulnerable as they end up residing in cheap and crowded but criminogenic neighbourhoods. In these neighbourhoods' new values, norms and behaviours that are prevalent or valued within the new environment are promoted. In cities such as Gweru, Harare and Bulawayo suburbs known for facilitating illicit trading in prohibited drugs and substances tend to attract many economically disadvantaged students. For example, during the Covid-19-induced lock-downs students spent more time in neighbourhoods than before creating more opportunities to interact with drug peddlers. This is supported by evidence suggesting a rise in substance abuse due to the Covid-19 pandemic and resultant lockdowns, being labelled an 'impending public health disaster' (Chingono, 2021). The ease of availability of substances, together with a lack of recreational activities for young people during lockdowns have both been cited as potential reasons for the increase (Mukwenha et al. 2021)

Some individuals opt for drugs as a way of dealing with acculturative stress, depending on the ecological environment and the available opportunities and barriers under which change occurs. Acculturative stress occurs when a person faces threats to their well-being in a new community or environment (Amaro, Sanchez, Bautista, & Cox, 2021; Farver, Narang & Bhadha, 2002, cited in Castro & Gildar, 2013, p. 146; Lee, 2013). Such neighbourhoods, which are often working distances from universities and colleges strongly influence the development of sub-cultures that tend to neutralise and naturalise DSA. As Pierre Bourdieu posited in the concept of habitus, actors are structurally conditioned and tend to behave according to 'past experiences' and can be 'modified by new experiences' (Bourdieu, 1992). This observation supports one community leader who stated that;

*These neighbourhoods are death traps. Every year there are newcomers to these places and most of these are university and college students who might have come to the city for the first time straight from high school.*

According to Bourdieu (1992), early experiences are of great importance since the habitus tends to ensure its own constancy and its defense against change through the selection it makes within new information by rejecting information capable of calling into question its accumulated information. In this way, produced dispositions are "durably inculcated by the possibilities and impossibilities, freedoms and necessities, opportunities and prohibitions inscribed in the objective conditions" (p. 60). Consistent with the community

capitals framework, the production and maintenance of DSA lies at the intersection of economic, social, physical and cultural capitals. This can be attributed to a weak dialogue within the triple helix configuration, where government and universities push for massive educational expansion without participation from industry and wider society.

### *Coping mechanisms: towards a quad-helix model*

Consistent with the triple helix industry, the government and universities or colleges should collaborate in the development of strategies and tools for drug and substance use assessment, diagnosis and screening. However, for a more sustainable intervention, engaging civil society agencies and communities becomes a prerequisite. According to Kimatu (2016), the insufficiency of the triple helix in long-term sustainable innovative interactions triggered the inclusion of the fourth component; community and civil society that include non-governmental organisations, and faith-based organisations. This is crucial for the management of drug and substance abuse and disorders. This resonates with the community capitals framework and the precepts of the quad-helix model, anchored on evidence-based interventions that incorporate empirical knowledge generated from community-based innovative and participatory research about risk factors and mechanisms for preventing and managing addiction.

In this study the inclusion of key informants drawn from local communities, universities and stakeholders such as work-related learning providers assists in the design and development of research that give voice to the local communities (D'Ambruso, Mabetha, Twine, van der Merwe, Hove, Goosen et al. 2022; Castro & Gildar, 2013). There is social capital accumulation through cultural diversity. The 'citizen-centred' (Kimatu, 2016) approach enhances the effectiveness of interventions aimed at disrupting drug supply chains and demand associations.

In Zimbabwe, there are some ethnic minority groups like the BaTonga people, whose consumption of marijuana or dagga is culturally controlled. Among the BaTonga people, marijuana is accepted as a basic household commodity and commonly sprinkled around the house, ingested or burnt to drive away evil spirits, therefore there is over familiarisation with the drug by the youth (Moyo, 2015). Perhaps it is this naturalisation and neutralisation within the local people's cosmology that prohibits its abuse and suppresses the youth's excitement in its abuse. Embracing local knowledge and practices is central

to community capitals framework. Their integration into research protocols and program development targeting drug and substance abuse and addiction strengthens local capacity and capability to solve community problems. The infusion of indigenous knowledge systems and practices in conceptualisation, operationalisation and interpretation of research constructs and variables relating to drug and substance (ab) use and disorders, at local level strengthens community capabilities in addressing the pandemic.

University students belong to different communities and networks on-campus and off-campus and facilitated through digital technology. This supports Marsiglia and Booth's (2013 p. 178) assertion that, "partnering with universities and evaluating treatment and prevention outcomes can empirically validate programmes, not only ensuring the success of their clients, but also adding to the existing knowledge about culturally specific evidence –based prevention and treatment interventions." Understanding individual, family and community and environmental level risk factors enhances development of drug and substance abuse control policies. This is very useful when executed within the realm of the quad-helix model.

The quad-helix is a multi-systemic approach that focuses on addressing risk and protective factors associated with the substance use, involving other individuals from wider society such as parents, on-campus and off-campus peers, and often include a common intervention emphasising problem solving and skill development. In the Zimbabwean context, a new university curriculum, the Heritage-based 'Education 5.0' adopted in 2018, is an attempt to address this aspect through the promotion of research, innovation and industrialisation (Togo & Gandidzanwa 2021; World Bank 2020). However, in the absence of a strong quad-helix involving interaction between industry, and communities and civil society, challenges of unemployment and poverty, which are largely considered antecedents of societal ills such as drug and substance abuse will remain.

Education 5.0 in the higher education sector in Zimbabwe, and the competency-based model in the secondary and primary schools anchored on the philosophy of 'ubuntu' allowing problem-based learning and participatory education, which is very critical for improving knowledge on DSA and community-based interventions. This also entrenches responsibility and tolerance particularly with respect to treatment and rehabilitation. Collaborative investment in research and innovation directed at promoting employability and poverty alleviation strengthens community empowerment and capabilities at addressing challenges.

Such interactions that embrace the participation of the youth at community and national levels are central to addressing challenges such as drug and substance abuse.

**T**he youth is the epicentre of the country's development trajectory. Thus, consistent with the both the triple and quad-helix models, all pillars of state and non-state architecture such as traditional, community and religious leaders are expected to pull together in the fight against the scourge of the DSA. Such a strategy strengthens grassroots and local participation in addressing societal challenges. Youth's participation in responsible and moral governance and industrial development programmes in various sectors of the economy including arts and sport, agriculture, mining and manufacturing enhances empowerment. The benefits of the contribution of each party in the quad-helix framework; government, university, industry and civil society, can only be realised through a tight re-configuration of their co-evolutionary collaboration.

**T**he main challenge facing the Zimbabwean situation is that universities, industry and civil society and communities tend to operate in silos. The government through the various ministries such as health, social welfare and education; information and publicity, youth and sport have occasionally rolled out education and awareness programmes. However, these have been either piece-meal or fragmented, lacking support from the industry and often disconnected from university curricula. The recent adoption of the heritage-based Education 5.0, is an attempt to address this mismatch.

**W**hen non-governmental organisations get involved, there is hardly any meaningful collaboration with the industry and they face some resistance from government and communities. For a more sustainable coping mechanism the four strategic quad-helix partners, government, industry, university and civil society need to leverage on the strengths of the community capitals and capabilities while acknowledging the centrality of human agency.

**T**he traditional policing and rehabilitation approaches that tend to treat drug and substance abuse as pathological and criminal are not consistent with the dictates of both quad-helix and community capitals framework. Drug and substance abuse is very complex and a toxic phenomenon that limits efforts at busting the supply and demand chains and networks. Drugs and substance suppliers, and pedlars, are part of illicit networks within and outside communities including universities. Its prevalence and trends cut across social and physical boundaries and classes involving both the elites and subalterns.



Drugs and respective substances are a political and economic resource. Some key informants indicated that there are politicians who use the unemployed and vulnerable youths in the communities and in universities, as campaign personnel especially during election periods. In a number of such cases, it was reported that those preferred or employed for electioneering are those usually under the influence of drugs hired specifically as hitmen against political opponents. Furthermore, illicit trading in drugs is a lucrative and toxic business thriving on very complex supply lines. In countries with fragile and distressed economies such as Zimbabwe, university and college students 'eke out a living' from drug sales. This has had implications to the control of drugs and substance supply chain. There have been reports of campus and off campus prostitution due to economic hardships (Gukurume & Shoko, 2023; Masvawure, 2010; Mugodzwa, Matope, Maruzani & Mugodzwa, 2013). For university students, participation in both poverty-induced political violence and prostitution is stressful and traumatic requiring post-incident depressants. Coping strategies developed collaboratively are expected to assist consumers in achieving their long-term goals and meeting their immediate needs, while respecting their readiness to make changes in their lifestyles regarding substance use (Manzini, 2013).

In line with the principles of community capitals framework, drugs and substance abuse is a threat to sustainable livelihoods. DSA has become a moral panic threatening the social and cultural values binding the system leading to imbalance among capitals. There is, therefore, deviance and irregularity requiring collaborative institutional and community policing. Criminalisation tends to 'create' drugs and substance abusers. Universities and industries, hence, can effectively contribute to the reduction of DSA through collaborative screening, diagnosis and treatment research. Thus, effective coping strategies should foster interaction between and among religion, culture, law, physical and natural risk factors, economics and politics. However, both the community capitals framework and quad-helix model imply an equality of the principal elements; government, industry, university and society / community.

**I**n the Zimbabwean context, transforming the triple to the quad-helix requires some reconfiguration of the political economy architecture. For example, the university or tertiary education sector is overly statist where government plays the lead role, driving academia but also limiting their capacity to initiate and develop innovative transformations critical for employment creation and poverty reduction. The added fourth helix through the inclusion of civil society and empowered communities serves as the voice of the citizen and could make development to be more human-sensitive and in the cultural context of the communities (Kimatu, 2016).

## **Conclusions**

The study on which this article is based primarily examined the drivers of drugs and substance abuse among the university youths in Zimbabwe, and demonstrate the effectiveness of different interventions in the diagnosis and management of the scourge. The study findings corroborate extant literature that indicated the prevalence of multiple proximal, and distal factors that drove the supply and demand of drugs, and substances.

Consistent with the community capitals framework, the article argued that although multiple factors influenced the youths' decision to take drugs and substances, family and community, and environmental level risk factors were most pronounced. Although the collaborative interaction between university, government and industry under the triple helix to some extent served as a useful strategy for addressing the problem, a more sustainable approach that added a fourth component of civil society and community participation under the quad-helix model is strongly recommended. The quad helix model promotes the professional development of social work practitioners at community level through integrated community-based research involving all the four components; university, government, industry and civil society and community.

Drugs and substance abuse, and disorder is a complex, multi-dimensional and layered phenomenon whose treatment and rehabilitation demanded multi-sectoral synergistic interactions among the government, industry, research institutions, civil organizations, and the Zimbabwean community at large.

To build a resilient system that effectively copes with drugs and substance abuse, cluster stakeholders in the quad-helix ecosystem, and beyond, are expected to collectively invest in strengthening the available community capitals; human, social, cultural, political, built, financial and natural.

This article has far-reaching theoretical and methodological implications. Future research may draw from a transdisciplinary scholarship in light of the multifaceted nature of drugs and substance abuse, and disorder, particularly, the associative supply and demand networks. Methodologically, sequential mixed-method research designs predicated on actor-centric philosophies such as phenomenology and supported by surveys are recommended to mitigate the limitations of the current approach that over-relied on informant narrations, literature review and small-scale interviews.

## References

Ahmedani, B. K. and Perron, B. E. 2013. Language of diagnosis. In M.G. Vaughn and B. E. Perron (Eds.), *Social work practices in the addictions* (pp. 73-86). New York: Springer.

Amaro, H., Sanchez, M., Bautista, T., and Cox, R. 2021. Social vulnerabilities for substance use: Stressors, socially toxic environments, and discrimination and racism. *Neuropharmacology*, 188, 10851.

Bender, K., Tripodi, S.J., Sarteschi, C. S and Vaughn, M.G. 2013. A meta-analytic review of interventions to reduce adolescent cannabis use. *Research on Social Work Practice*, 21, 153-164.

Bourdieu, P. 1992. *The logic of practice*. Translated by Richard Nice. London: Polity Press.

Bwititi, K. 2021. "ZANU PF's development plans will leave no one". In *The Sunday Mail* (31 October).

Carlson, B. 2013. Women and families. In M.G. Vaughn and B.E. Perron (Eds.), *Social work practices in the addictions* (pp. 199-212). New York: Springer.

Castro, F.G. and Gildar, N.J. 2013. A framework for integrating culture, diversity, and social justice in addictions. In M.G. Vaughn and B.E. Perron (Eds.), *Social work practices in the addictions* (pp. 139-164). New York: Springer.

Chingono, N. 2021. "We forget our troubles": crystal meth use rises during lockdown in Zimbabwe. *The Guardian*, (16 March) (<https://www.theguardian.com/global-development/2021/mar/16/crysta-meth/mutoriro-drug-use-rises-zimbabwe-1>)

D'Ambruoso, L. et al. 2022. 'Voice needs teeth to have bite!' Expanding community-led multi-sectoral action learning to address alcohol and drug abuse in rural South Africa. *PLOS Glob Public Health* 2(10): e0000323. <https://doi.org/10.1371/journal.pgph.0000323>.

Emery, M., Fey, S., and Flora, C. 2005. *Using community capitals to develop assets for positive community change*. Ames, IA: Community Capitals Framework: Research, Evaluation and Practice Conference.

Etzkowitz, H. and Leydesdorff, L. 1995. The triple helix: University-industry government relations: A laboratory for knowledge-based economic development. *EASST Review*, 14, 14-19.

Etzkowitz, H., Ranga, M., and Dzisah, J. 2012. Wither the university? The Novum Trivium and the transition from industrial to knowledge society. *Social Science Information*, 51 (2), 143-164.

Flora, C. B., and Flora, J. L. 2008. *Rural communities, legacy and change*. Boulder, CO: Westview Press.

Government of Zimbabwe. 2018. *Zimbabwe Vision 2030 Policy*. Harare: Government Printers.

Gukurume, S., and Shoko M. 2023. Policing toxic masculinities and dealing with sexual violence on Zimbabwean University campuses. *HTS Teologiese Studies / Theological Studies*, 79(3), 1-8. doi: 10.4102/hts.v79i3.8625

Howard, M.O, Garland, E.L., and Whitt, A. 2013. Historical and contemporary perspectives. In M.G. Vaughn and B.E. Perron (Eds.), *Social work practices in the addictions* (pp. 3-21). New York: Springer.

Jouhki, H., and Oksanen, A. 2021. To Get High or to Get Out? Examining the link between addictive behaviours and escapism. *Substance Use & Misuse*, 57(2), 202-211. doi: 10.1080/10826084.2021.2002897.

Kimatu, J. N. 2016. Evolution of strategic interactions from the triple to quad helix innovation models for sustainable development in the era of globalization. *Journal of Innovation and Entrepreneurship*, 5, 16:1-7. doi.10.1186/s13731-016-0044-x.

Latour, B. 2005. *Reassembling the social: An introduction to the actor-network theory*. Oxford: Oxford University Press.

Lee, C. 2013. Acculturation stress and drinking problems among urban heavy drinking Latinos in the Northeast. *Journal of Ethnic Substance Abuse*, 12(4), 308–320. doi: 10.1080/15332640.2013.830942

Leydesdorff, L. 2012. The triple helix, quadruple helix, and an N-Tuple of Helices: Explanatory Models for analyzing the knowledge-based economy? *Journal of Knowledge Economy*, 3, 25-35.

Manzini, M. 2013. Assessment strategies for substance use disorders. In M.G. Vaughn and B.E. Perron (Eds.), *Social work practices in the addictions* (pp. 49-72). New York: Springer.

Maraire, T., Chethiyar D.M. S., and Jasni, A.B. M. 2020. A general review of Zimbabwe's response to drug and substance abuse among the youth. *International Journal of Social Sciences*, 6(2), 625-638.



Marsiglia, F.F., and Booth, J. 2013. Empirical status of culturally competent practices. In M.G. Vaughn and B.E. Perron (Eds.), *Social work practices in the addictions* (pp. 165-182). New York: Springer.

Masvawure, T.B. 2010. 'I just need to be flashy on campus': Female students and transactional sex at a university in Zimbabwe'. *Culture, Health & Sexuality*, 12(8):857-70. doi: 10.1080/13691050903471441

Moyo, G. 2020. Substance use and academic performance of university youth students: A case study of Bulawayo Metropolitan Province. *International Journal of Research and Innovation in Social Sciences*, 4(12), 307-309.

Moyo, H. 2015. Pastoral care in the healing of moral injury: A case of the Zimbabwe National Liberation War Veterans. *HTS Teologiese Studies/Theological Studies*, 71(2), 11. <https://doi.org/10.4102/hts.v71i2.2919>

Mukwenha, S., Murewanhema, G., Madziva, R., Dzinamarira, T., Herrera, H., and Musuka, G. 2021. Increased illicit substance use among Zimbabwean adolescents and youths during the Covid 19 era: An impending public health disaster. *Addiction*, 117(4), 1177-8. <https://doi.org/10.1111/add.15729>

Mugodzwa T., Matope N., Maruzani N., and Mugodzwa D. M. 2013. Motivations for Promiscuous Behaviour among Some Female Students in Institutions of Higher Learning in Zimbabwe. *The Dyke*, 7(3), 148-161.

Neuman, W. L. 2014. *Social research methods: Qualitative and quantitative approaches*. Harlow, Essex: Pearson Education Limited.

Pigg, K., Gasteyer, S.P., Martin, K. E., Keating, K., and Apaliyah, G.P. 2013. The community capitals framework: An empirical examination of internal relationships. *Community Development*, 44(4), 492-502.

Rwafa, C., Mangezi, W. O. and Madhombiro, M. 2019. Substance use among patients admitted to psychiatric units in Harare, Zimbabwe. Available at SSRN: <https://ssrn.com/abstract=3449370> or <http://dx.doi.org/10.2139/ssrn.3449370>

Roman, M., Varga, H., Cvijanovic, V. and Reid, A. 2020. Quadruple Helix Models for sustainable regional innovation: Engaging and facilitating civil society participation. *Economies*, 8(2), 48; <https://doi.org/10.3390/economies8020048>

Saad, M. and Zawadie, G. 2011. *Theory and practice of triple helix system in developing countries: Issues and challenges*. New York: Routledge.

Saladino, V., Mosca, O., Petrucci, F., Hoelzlhammer, L., Lauriola, M., Verrastro,

- V., and Cabras, C. 2021. The vicious cycle: Problematic family relations, substance abuse, and crime in adolescence: A narrative review. *Front Psychology*, 12, 673954. doi: 10.3389/fpsyg.2021.673954
- Taylor, O. D. 2010. Predictors and protective factors in the prevention and treatment of adolescent substance uses disorders. *Journal of Human Behaviour in the Social Environment*, 20(5), 601-617.
- Tobin, G.A., and Begley C. M. 2004. Methodological rigour within a qualitative framework. *Journal of Advanced Nursing*, 48(4), 388– 396.
- Togo, M. and Gandidzanwa, C.P. 2021. The role of Education 5.0 in accelerating the implementation of SDGs and challenges encountered at the University of Zimbabwe. *International Journal of Sustainability in Higher Education*, 22 (7), 1520-1535 doi 10.1108/ijshe-05-2020-0158
- Torrance, H. 2012. Triangulation, respondent validation, and democratic participation in mixed methods research. *Journal of Mixed Methods Research*, 6(2), 111–123.
- Törrönen, J. 2023. Analysing agency and identity navigation in addiction stories by drawing on actor-network theory and narrative positioning analysis. *Drugs: Education, Prevention and Policy*, 30 (1), 95-104, doi: 10.1080/09687637.2022.2035684
- Tschorn, M. et al. 2021. Differential predictors for alcohol use in adolescents as a function of familial risk. *Translational Psychiatry* 11 (157). <https://doi.org/10.1038/s41398-021-01260-7>
- Van Ryzin, M.J., Fosco, G., and Thomas J Dishion, T. J 2012. Family and peer predictors of substance use from early adolescence to early adulthood: An 11-Year Prospective Analysis. *Addictive Behaviors*, 37(12), 1314-24
- Windsor, L. C. 2012. From the individual to the community: Perspectives about substance abuse service. *Journal of Social Work Practice in the Addictions*, 12(4): 412–433. doi: 10.1080/1533256X.2012.728115
- World Bank. 2020. *Revitalizing Zimbabwe's tertiary education sector to support a robust economic recovery*. Washington, DC: The International Bank for Reconstruction and Development/ THE WORLD BANK.
- Yin, R. K. 2003. *Case study research: Design and methods*. Thousand Oaks, California: Sage.