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South African Association of Family Ecology and Consumer Science

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Contents

Keynote presenters:

Home Economics Education – An International Perspective on the Reform of Home Economics Curricula

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National curriculum reform, on a large scale, is recognised as a lengthy and complex process (Tikkanen et al., 2017; Priestly et al., 2014; Leithwood et al., 2002). Similar to many countries, Ireland has a national state agency responsible for developing curricula at a national level with a combination of top-down and bottom-up approaches. Key stakeholders in education are involved in all stages of the process, and this approach is promoted as inclusive and iterative. The National Council Curriculum and Assessment (NCCA) are the state body who manage the curriculum policy development process on behalf of the Minister for Education. Developing and advancing human capital has significantly influenced curriculum reform and, for many decades, has been the dominant rationale influencing Irish education (Gleeson, 2022). Furthermore, Lynch et al, (2015) notes that Ireland operated a curriculum heavily influenced by Anglo/Saxon-American practices and is focused on subjects and 'means-end' approach. This has resulted in an overreliance on performance related outcomes as a measure of success and can have a negative influence on how students choose what subjects to study. However, the work of the NCCA in curriculum policy reform is notable. As a statutory body, the important role they have played in Irish education and curriculum policy reform cannot be underestimated. It is widely accepted that since the establishment of this statutory body, there has been significant involvement of a wide range of stakeholders in curriculum reform. The process of national Junior Cycle reform commenced in 2015; and Senior Cycle commenced in 2022.

In secondary schools in Ireland, the subject Home Economics is available on the curriculum at both junior (ages 12-15) and senior (ages 16-18) cycle. Junior Cycle comprises the first three years of post-primary school which culminates in students sitting the Junior Certificate examination. Senior cycle is the final two years of school when, on completion, students take the Leaving Certificate examination. Home Economics, in various name guises, has been part of the curriculum from the 1800s and was once an established subject at primary school, although this is no longer the case (McCloat & Caraher, 2018).

In 2017, a new curriculum policy for Junior Cycle Home Economics, the first reform in twenty-eight years, was launched in Ireland. Home Economics is a very popular subject choice among junior students, and the reform of the curriculum was much awaited by teachers and students who had clearly articulated the need for a curriculum that was current, practical and interesting for the student of today. The new Junior Cycle Home Economics curriculum aimed to "develop students' knowledge, attitudes, understanding, skills and values to achieve optimal, healthy and sustainable living for every person as an individual, and as a member of families and society" (DES, 2017). Underpinned by a practical approach to learning, the new curriculum focuses on developing essential skills, knowledge and dispositions to facilitate the empowerment of students to "make informed decisions that positively impact their health and wellbeing as individuals as well as within their families and society" (DES, 2017).

Using Basil Bernstein's theory of 'Pedagogic Device', integrated with the work by Stephen Ball on policy enactment, this research looked at the macro policy level of curriculum development and the interpretation of this policy at the micro level of the school and classroom (McCloat & Caraher, 2020). It was evident that Home Economics teachers broadly welcomed the much-anticipated reformed policy and outlined it presented enhanced opportunities for Home Economics education to contribute in a more meaningful way to food and health policy agendas. However, it was interesting to note that they felt a lack of confidence in the philosophical basis and pedagogical approaches that are espoused in the reformed Junior Cycle Home Economics Specification and were very clear in a call for enhanced professional development in this area.

In September 2024, the process of reform of Senior Cycle Home Economics commenced and is still ongoing as of March 2026. A Background Paper, setting out the context and purpose of Home Economics education has been produced. This Paper also sets a brief for the development of Senior Cycle Home Economics specification (NCCA, 2025). A draft Specification is currently (March 2026) out for public consultation among all stakeholders. Senior Cycle Home Economics aims to "equip students with the knowledge, skills, values and dispositions needed to achieve healthy, sustainable and optimal living" (NCCA, 2026). Once this consultation period concludes, a final specification will be produced, and it is anticipated that it will be implemented in schools in September 2027. However, in order for senior cycle reform to be enacted as was imagined, it requires multiple changes at a systems level, including certification, entry requirements to third level, and flexible transition out of senior cycle. It is a much more complex process because of the means-end impact on a student's transition out of formal secondary schooling.

In conclusion, change can occur at a curriculum policy level, but research demonstrates how that is enacted at a meso and micro level can vary significantly (Bernstein, 1990; Ball et al., 2012). Interestingly, the NCCA (2022) have identified a number of what they refer to as "conducive conditions for educational change" following curriculum reform, including assessment, engagement of all stakeholders, leadership style and culture in a school, professional development of teachers and leaders, societal influences, peer support and collaboration. And whilst curriculum policy at a macro level may be reformed, it is the realisation and enactment of this policy; its purpose, principles and vision at the micro level of the classroom that does not always result in sustainable change as envisioned. However, having a process of reform implementation which is both a top-down and bottom-up approach has delivered a certain amount of success in Irish curriculum policy reform. Further research on the development and implementation of senior cycle reform will be interesting and will provide a comprehensive view on curriculum reform from junior to senior cycle over a 15-year period in Ireland.

Nuclear techniques in nutrition: Advancing evidence for better health

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Malnutrition in all its forms, including undernutrition, micronutrient deficiencies, overweight, obesity, and diet-related non-communicable diseases, remains a persistent public health challenge across the African continent. Addressing these complex and co-existing burdens will benefit from more precise tools to understand nutrient intake, metabolism, and utilisation beyond what traditional dietary assessment methods can offer. Nuclear techniques applied in nutrition research provide highly accurate and sensitive methods for evaluating nutrient status at both the individual and population level. In particular, stable isotope techniques offer a safe and non-invasive means to quantify biological processes such as nutrient absorption, and metabolism, energy expenditure and body composition, thereby enabling more accurate diagnosis of deficiencies and assessment of intervention effectiveness

This conference presentation highlights the added value of nuclear and stable isotope methodologies in advancing evidence-based nutrition research and policy. Stable isotopes are naturally occurring, non-radioactive forms of elements that can be used as tracers within biological systems due to their identical chemical but different physical properties. When measured using highly sensitive techniques such as mass spectrometry, these tracers allow researchers to investigate physiological outcomes that are otherwise difficult or impossible to measure using conventional methods,

Applications discussed include the assessment of body composition through deuterium dilution, measurement of energy expenditure using doubly labelled water, estimation of human breast milk intake via the deuterium oxide dose-to-mother method, and evaluation of micronutrient absorption, bioavailability and status, particularly for iron and vitamin A. In addition, stable isotope approaches to assess protein digestibility and amino acid absorption contributing to understanding dietary quality in vulnerable populations, are also discussed.

Importantly, these techniques have demonstrated significant utility in monitoring and evaluating the impact of public health nutrition interventions such as food fortification, supplementation, dietary diversification, and breastfeeding promotion programmes. For example, retinol isotope dilution has been used to assess total body vitamin A stores and evaluate the safety of overlapping intervention programmes in South Africa, while iron isotope techniques have informed improvements in food fortification strategies by quantifying long-term iron absorption in Morocco.

Beyond research applications, nuclear techniques play a critical role in strengthening nutrition programme evaluation and informing precision nutrition strategies tailored to local needs. By enabling the investigation of biological mechanisms at tissue level, these methods support more rigorous longitudinal and experimental studies assessing the relationships between diet, health outcomes, and changing food environments. As such, they contribute directly to the development of effective policies and interventions aimed at improving nutrition security and reducing the burden of malnutrition across the life course.

Training students and researchers in these advanced methodologies fosters innovation in nutrition science and builds capacity to address pressing public health challenges. Ultimately, integrating nuclear techniques into nutrition research frameworks offers a powerful pathway for generating high-quality evidence to guide interventions, enhance programme effectiveness, and improve population health outcomes in low- and middle-income settings.

Financial Literacy as a Collaborative Science: Empowering Families and Consumers in a Digital Era

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Financial literacy has evolved from a narrow focus on individual knowledge to a broader, systemic framework that emphasizes financial well-being as the ultimate outcome. In an increasingly complex and digital financial environment, individuals and families are expected to make critical decisions related to saving, borrowing, investing, and managing risk. However, financial challenges today are multidimensional, shaped not only by personal capability but also by institutional practices, technological change, policy environments, and socio-economic conditions. This presentation advances the concept of financial literacy as a collaborative science, arguing that sustainable financial well-being can be achieved only through coordinated efforts among multiple stakeholders within a comprehensive ecosystem.

At the core of this framework is the recognition that financial literacy should not be understood merely as the ability to perform financial calculations or recall financial concepts. Rather, it represents a dynamic capacity that enables individuals and families to make informed decisions, manage financial stress, plan, and adapt to economic uncertainty. The presentation emphasizes a critical shift in perspective—from measuring literacy through tests and knowledge indicators to evaluating success based on real-life outcomes such as reduced financial anxiety, increased savings, improved planning behavior, and greater financial resilience. Financial well-being, therefore, is defined as the ability to live a secure, less stressful life, supported by confidence and long-term stability.

Families are positioned as the central unit within this ecosystem, as financial behaviors, attitudes, and decision-making patterns are largely shaped within the household context. Families influence financial socialization, intergenerational knowledge transfer, and collective financial planning. Strengthening family-level financial capability is therefore essential for building resilient households that can withstand economic shocks and seize opportunities. When families are financially stable and confident, broader societal and economic stability is enhanced.

The presentation also highlights the transformative role of digital finance as the new operating environment for financial decision-making. Digital banking, mobile payments, online lending, and fintech innovations have increased access to financial services but have also introduced new risks, including fraud, over-indebtedness, data misuse, and behavioral manipulation. Consumers must therefore develop not only traditional financial knowledge but also digital financial capability, including awareness of cybersecurity, data privacy, and responsible use of digital financial products. Importantly, the responsibility for digital safety should not rest solely on consumers; financial technologies must be designed ethically to empower users rather than exploit behavioral biases.

Given the complexity of these challenges, the presentation proposes a financial literacy ecosystem model built on collaboration among key stakeholders. Government serves as the foundation by establishing regulatory frameworks, protecting consumers from predatory practices, and providing leadership through national financial literacy strategies. Effective regulation ensures transparency, fairness, and accessibility in financial markets, thereby creating an environment that enables responsible financial behavior.

Financial institutions function as an engine within the ecosystem. Their influence extends beyond product provision to shaping consumer outcomes through product design, pricing structures, and communication practices. Ethical product design, transparent disclosure of terms and costs, responsible lending practices, and investment in consumer education are essential to align commercial objectives with consumer well-being. Additionally, the ethical use of customer data and fair algorithmic decision-making are increasingly important in the digital era.

The education sector plays a critical role in building financial capability across the life course. Effective financial education should move beyond the transmission of factual knowledge to include practical skills, critical thinking, life planning, and confidence building. Integrating digital finance literacy, long-term goal setting, and real-life financial decision-making into formal and informal education can empower individuals to navigate increasingly complex financial landscapes.

Community organizations and non-governmental institutions serve as bridges between formal systems and underserved populations. These organizations possess contextual knowledge, cultural sensitivity, and community trust, enabling them to reach vulnerable groups that may be excluded from mainstream financial services. Through financial coaching, outreach programs, and localized interventions, they ensure that financial literacy initiatives are inclusive and relevant.

Researchers serve as the compass guiding the ecosystem by providing evidence-based insights into what works and what does not. Their role includes developing measurement tools for financial literacy and well-being, evaluating program effectiveness, exploring innovative approaches, and translating research findings into policy recommendations. Strong collaboration between researchers and practitioners ensures that interventions are both scientifically grounded and practically applicable.

The presentation identifies stakeholder integration as a critical pillar for achieving widespread financial well-being. Fragmented initiatives often produce limited, short-term results, whereas coordinated strategies enable shared data, aligned incentives, and complementary interventions. Financial challenges are systemic, risks are shared across society, and responsibility is collective. Therefore, collaboration is not optional but essential.

The desired outcome of this ecosystem is a future in which financial well-being is accessible to all segments of society. This vision includes resilient households capable of managing economic uncertainty, financial institutions that prioritize customer well-being, inclusive financial systems that serve marginalized populations, and digitally confident consumers who can engage safely and effectively with financial technologies. Sustainable financial well-being ultimately supports broader quality of life, social stability, and economic development.

In conclusion, financial literacy should be understood as a systemic and collaborative endeavor rather than as an individual responsibility. Families remain at the center of financial behavior, digital transformation must be guided by ethical principles, and long-term progress depends on coordinated action among government, industry, educators, communities, and researchers. When these actors work together within a well-integrated ecosystem, financial well-being becomes an achievable and sustainable goal. This collaborative science approach offers a strategic pathway to empower families and consumers in the digital era and to build resilient, inclusive, and financially healthy societies.

The Relevance of Indigenous Knowledge, In Particular Ethnobotany, for Consumer Sciences

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The Latin phrase, Respice Prospice, meaning 'looking back, looking forward', forms the leitmotif of this paper, in which the author draws parallels between Consumer Sciences as a discipline, and ethnobotany as part of Indigenous Knowledge Systems. Consumer Studies are located at the intersection of specializations such as food and nutrition, clothing and textiles, housing and interiors, family and community wellbeing, consumer behaviour and markets, entrepreneurship and education. The author views ethnobotany as a "living laboratory" of consumer problem solving. Indigenous knowledge holders are self-directed learners, who look for workable solutions to authentic, everyday problems. They are problem identifiers (What hurts? What spoils?); experimenters (trial-and-error interventions); evaluators (observing the success of the interventions); sharers and teachers within a community of practice; ethical stewards (living in harmony with the environment, and sustainable harvesting); and entrepreneurs. The paper will explore plant use of especially the Khoisan people in the area of the Square Kilometer Array (SKA) radio telescope in the Carnarvon area in the Northern Cape Province of South Africa, although other South African cultures' ethnobotany will also be celebrated. The focus will be on plant use in the categories of food and drink, health and beauty (including medicinal plant use, dental care, perfumes and repellents, and soaps and cosmetics) and plant use in skills and crafts (including dyes and tans, timbers, basketry, etc). The focus will be on how everyday problems are solved as self-directed learners.

The traditional use of Elytropappus rhinocerotis, the 'renosterbos', to treat foot odour, perspiration, and itchy and burning feet, serves as a classic example. Most Khoisan people in the Northern Cape live on isolated farms, far from pharmacies. Over many years they experimented with plants that could be used as a natural 'foot powder', and through such trial-and-error, they realised that the renosterbos is highly effective.

Ethnopharmacological studies have shown that the essential oils in the plant are highly effective against Brevibacteria, which cause foot odour. This is but one example of ethnobotanical knowledge that holds economic promise. Another example is the use of Lippia javanica, the fever tree or musukudu (Setswana), to prevent malaria. The harmful effects of insecticides such as DDT to combat malaria is well studied. The holders of indigenous knowledge in Giyani in the Limpopo Province, a high-risk malaria area, developed an environmentally friendly solution to address the threat of malaria. Clinical studies have shown that Lippia javanica is highly effective as a mosquito repellent. The South African Council for Scientific and Industrial Research (CSIR) signed a benefit-sharing agreement with indigenous knowledge holders in Giyani, and built a factory where the essential oils are extracted from the plants. It is then used to make insect-repellent candles, which are sold. Royalties made from the candle sales are used in projects that benefit the entire community, such as health, educational and recreational facilities.

The author is a science educator, so the paper will conclude by looking at what lessons Consumer Studies education could possibly learn from indigenous knowledge holders. Do we as educators provide a problem-based and cooperative learning context in the classroom, that provide an opportunity to culturally diverse learners to solve an authentic problem? Do we utilise engaging pedagogies that foster the development of critical thinking skills and an entrepreneurial mind-set? Do we teach affective outcomes, such as living in harmony with the environment? By looking back at the (often unrecognised) First Nation People of South Africa, the Khoisan, we might get insights that will enhance Consumer Studies education in the future.

Clothing Textiles and new technologies

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Development of a Hand-Feel Meter for ready-to wear clothing textiles for online retailing

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Keywords: Perceived, Self-Reported, Body Types/Shapes, Ready-to-Wear, South African Men

There is a growing demand for well-fitting ready-to-wear (RTW) apparel for men in today's fashion retail environment. However, the industry continues to use an assumed 'ideal' male body type within target markets as a guide for producing well-fitting garments. The industry 'ideal' male body type is often represented by the lean and muscular trapezoid shape, characterised by broad shoulders and chest, a narrow waist, and proportionate hips (Wilson, 2016; Hogans & Seock, 2022). This garment design approach overlooks diversity in men's actual body types and fit preferences that may differ from the 'ideal'. Reported studies on perceived body shapes, apparel fit preferences and related challenges in South Africa have primarily focused on women (Phasha, 2017; Pandarum et al., 2017; Makhanya & Mabuza, 2020). Existing male perception studies in South Africa have focused on the online shopping method (Correia et al., 2024) and on functional, aesthetic, and socio-psychological expectations of RTW business apparel (Lundie et al., 2024). Currently, literature on male consumers' self-perceived body types, preferred shopping methods, and garment fit issues remains limited. Hence, this study investigates a cohort of South African male consumers' perceptions of their body types and garment fit preferences. The aim is to generate insights that can be integrated with anthropometric measurements to inform a more inclusive sizing system.

Due to the restrictions on human movement resulting from the COVID-19 pandemic, this exploratory study adopted a non-probability purposive and convenience-sampled approach using a secondary anthropometric dataset (Tabo, 2020). The dataset was collected at the University of South Africa (UNISA), Florida Campus, under ethical clearance numbers 2021/CAES_HREC/058 and 2018/SSR-ERC/023. It consisted of a demographic and psychographic questionnaire for 270 men aged 18 to 56 years residing in Gauteng. The body weight and height were measured using a calibrated scale and stadiometer, respectively. Descriptive quantitative statistical analysis, including means, frequencies, percentages and standard deviations, was used to analyse the data using SPSS Version 27.

The findings indicated that the sample was predominantly Black African men (74%), followed by Coloured (12%), White (11%) and Indian (3%) ethnic groupings. Their average body weight was 70 kg and their average height was 172 cm. The dominant self-reported body types among the male subjects were Rectangle (59%), followed by Rhomboid/Trapezoid (21%). The majority of the subjects described their upper bodies as having a flat abdomen (60%), average chest (43%) and average waist (43%), while the most common lower and full body perceptions included normal calves (44%) and normal posture (36%). Physical retail stores were the most preferred shopping method (74%), with only 12% indicating a preference for online shopping. Exact and Markham were the most favoured brands for purchasing long-sleeve shirts (44% and 31%) and trousers (32% and 34%), respectively. In terms of fit preferences, slim-fitting (36%) and figure-hugging (27%) styles were favoured for shirts, while semi-fitted (34%) and slim-fitting (33%) styles were preferred for trousers. Common fit issues reported for shirts included at the collar (9%), shoulders (9%), chest (7%), and sleeve length (7%). For trousers, was excessive length (14%), while crotch tightness of (5%) was the least common problem.

These findings highlight the need for the fashion industry to evaluate male consumers' perceptions of their body types and fit preferences, integrating these insights into apparel design and marketing strategies. Such an inclusive approach may help address apparel fit-related challenges beyond the non-standardised notion of an 'ideal' body type. The study contributes theoretically to fashion education and practically to apparel design and marketing by emphasising the role of self-perceived body types and shopping behaviours in shaping male apparel fit. Further studies could be conducted in other provinces to determine whether similar apparel behaviours are observed.

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SAAFECS26-077

FOMO in Fashion: How Ultra-Fast Trends Undermine Youth Well-Being

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Keywords: Ultra-Fast Fashion Fear of Missing Out (FOMO)Social Factors Psychological Factors Well-Being

In recent years, the emergence of ultra-fast fashion model has dominated social media platforms, with brands like Shein and Temu promoting their fashion outfits on social media platforms like TikTok and Instagram. The ultra-fast fashion industry has strategically leveraged the fear of missing out (FOMO) as a powerful purchase trigger, using "commercial FOMO marketing appeals" to exploit consumers' intrinsic anxiety about exclusion (Argan et al., 2022). These tactics encourage individuals to make impulsive purchases by framing consumption as a shared social experience in which participation affirms belonging, while non-participation signals exclusion. This trend has had a negative impact on the well-being of consumers, especially the youth, as they are constantly driven to have an excessive appetite for new clothes that leads to overconsumption, and potentially has a negative impact on their well-being.(Bläse et al.,

2024). The theoretical framework is informed by three theories: the social comparison theory (Festinger, 1954), FOMO theory (Przybylski et al., 2013), and Pressman's theory of wellness (Pressman et al., 2020).

The study aims to: To investigate the role of FOMO on consumers' well-being when purchasing ultra-fast fashion. To test a proposed conceptual model that analyses the relationship between consumer's social (extrinsic) and psychological (intrinsic) environment and consumers' levels of FOMO when buying ultra-fast fashion. To test the mediating role of FOMO between social and psychological factors and consumers' well-being when purchasing ultra-fast fashion.

The study adopts a positivism research philosophy, using a quantitative research design and applying a deductive approach. By means of online surveys, Google forms were used, and the questionnaire was developed using existing scales adapted to suit the context of this study. The sample comprises consumers between the ages of 18 – 44 who resides in South Africa, although the majority is likely to reside in Johannesburg as the University of the Witwatersrand is used as an entry point to access the younger participants. Participants were invited to complete the questionnaire by clicking on the survey link.

The questionnaire comprises about 30 questions and will take the participants 10-15 minutes to complete. Ethic clearance has been obtained from the University of the Witwatersrand (Ethics protocol number: H25/02/12). Data is currently being collected as the invitation to participate was disseminated to students in July 2025. Therefore, the results of the study are currently inconclusive. Once the data collection is complete an exploratory factor analysis (EFA) will be undertaken to identify underlying relationships between measured variables without imposing a predefined structure, and a confirmatory factor analysis (CFA) will be used to test the hypotheses, while assessing the fit between observed data and theoretically grounded models, (Watkins, 2018) and (Pacewicz et al., 2024). Thereafter, the analysis will be conducted using Structural Equation Modelling (SEM) to test the hypotheses, model fit and path coefficients. The measurement scales will be assessed for reliability and validity using tests like the Cronbach alpha and composite reliability. To assess the validity of the instrument, convergent validity and discriminant validity will be tested. The model fit will be tested using a number of different indices such as Chi-square (χ^2), Normed Fit Index (NFI), Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), (Barendse and Rosseel, 2020).

The study is significant and will contribute to the marketing industry both in theory and practice. From a practical perspective, this study aims to provide marketing practitioners with insight on the fashion buying behaviour of young consumers, the role of FOMO when making buying decisions and the potential negative effect it has on consumers' wellbeing. Against the backdrop of the raising environmental concern that the fashion industry poses, drastic action is required to combat conspicuous consumption. Theoretically, this study tests a unique conceptual model that contributes to literature in the field of ultra-fast fashion, a trend that has only recently emerged with the introduction of brands like Shein and TEMU.

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SAAFECS26-031

Innovation Ecosystems in the CTLF Sector: A Review of the Journal of Consumer Sciences

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Keywords: Innovation Ecosystems, Consumer Sciences, Triple Helix, Quadruple Helix, Quintuple Helix, Diamond Helix Model

Innovation ecosystems are widely acknowledged as critical drivers of economic growth and socio-economic development worldwide (Matt et al., 2021). Scholarly engagement with this field (innovation ecosystems) has expanded considerably, leading to a notable increase in related journal publications. Theoretical frameworks, such as the Triple Helix (Etzkowitz & Leydesdorff, 1995), Quadruple Helix (Carayannis & Campbell, 2012), and Quintuple Helix (Carayannis, Campbell, & Grigoroudis, 2022), have been widely applied in shaping the innovation ecosystems literature. Within the South African context, the emerging Diamond Helix (Mbatha, 2021) offers an additional perspective for studying innovation ecosystems. The Diamond Helix offers innovation ecosystem lenses that can be used to examine national, regional, and sectoral innovation ecosystems.

Despite this growing body of scholarship, the Journal of Consumer Sciences' (JCS) contribution to innovation ecosystems research remains underexplored. This paper reviews JCS publications to assess the extent to which innovation ecosystems have been examined within the clothing, textiles, leather, and footwear (CTLF) sector. The paper focuses on the JCS because it serves as the primary publication channel for SAFECS to achieve its objectives. The study holds value for SAAFECS delegates, who contribute to the journal publications through, among others, this conference.

Articles (n = 37) about the CTLF sector published in JCS between 2015 and 2025 (26 issues) covering African countries (mainly South Africa) were systematically reviewed. Articles of the JCS were of particular interest to the paper because JCS papers offer a window into the debates taking place at SAAFECS. The study employed the PRISMA framework for Systematic Review and Meta-Analysis (Yang & Ng, 2025) to identify relevant contributions, and thematic analysis guided by the Diamond Helix model was used to structure the results. This research is compliant with ethical requirements (2025/CAES_HREC/9998).

The results indicate that CTLF-related publications in JCS remain limited, reflecting a relatively small knowledge base. Furthermore, discussions of innovation ecosystems are scarce, with minimal engagement with established global and interdisciplinary innovation models. The paper recommends that future research prioritize innovation ecosystems in CTLF, particularly through contributions from SAAFECS members.

This identified gap underscores a neglected research area within the journal. Addressing it would enhance JCS's role in advancing knowledge production from a Global South perspective and strengthen its contribution to regional socio-economic development. The paper encourages SAAFECS members and JCS contributors to reflect on their involvement in innovation ecosystems and to publish more on this theme.

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SAAFECS26-064

Perceived consumer value: influence on the decision to purchase fashion products in Nigeria

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Keywords: Consumer Value, Purchase Decision, Nigerian Fashion, Economic Value, Social Value, Psychological Value, Environmental Value

Fashion is a global phenomenon that plays an economic, social and psychological role in the lives of fashion consumers. This is evident in the fact that the fashion industry in Nigeria has grown to be a competitive industry (Adedapo & Adedeji 2021) and the growth can be particularly attributed to the values that consumers place on fashion products (Agu & Onuoha 2016). A positive perception of fashion products has a significant influence on the purchase decision, specifically for locally produced fashion products (Ozo et al. 2018). The value consumers attribute to fashion product purchase has been under-researched within the Nigerian and emerging market context. Therefore, it is important to explore and describe the influence of perceived consumer value on the decision to purchase fashion products from a Nigerian fashion consumer perspective. The aim of this study is to understand the influence of perceived consumer value on the purchase decision of fashion products.

A qualitative exploratory research design was applied to understand the value that Nigerian consumers attribute to fashion products and how it influences their fashion purchase decisions (Awasthy 2020). Purposeful sampling as well as convenience sampling was used to recruit 15 participants from the Ojo Alaba International Market in Ojo local government area (LGA) of Lagos State Nigeria. Ojo was selected because it is a strategic business area due to its location within Lagos, Nigeria's commercial hub. In-depth interviews were used as the main data collection instrument for this study and were conducted by means of open-ended questions that addressed the objectives of the study. Content analysis was applied to the transcribed data and open coding was used to assign labels or codes to the data. In this regard an inductive approach was applied to sort the raw data (Assarroudi et al. 2018). Ethics clearance was obtained from the College of Agriculture and Environmental Science Health Research Ethics committee with reference number 2018/CAES/092 before the study was undertaken.

The findings suggest that economic value remains a highly valued attribute of fashion products. Consumers study the price, label and brand information of the product before purchasing. The functional value of fashion products is particular to longevity and the sustainable nature of fashion products. Extending the life of garments by holding on to them (as opposed to discarding) or handing down to family members, featured prominently among the participants. The psychological value of fashion products speaks to the importance of the value resemblance of the social standing of the wearer. The findings reiterated the wearing of fashion products with the purpose to impress.

Fashion retailers should capitalise on the psychological, economic and functional aspects that are important to the Nigerian fashion shopper when applying marketing strategies and merchandising of locally produced fashion products in Nigeria. The study contributed to a better understanding of the important aspects fashion resembles, which retailers may use to improve fashion marketing strategies. More research on fashion values needs to be done to add to the body of knowledge generated by this study. Future research can repeat the study in different areas of Nigeria. Further studies similar to this study, should be conducted in other countries to allow comparisons between countries and fashion consumers.

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Exploring daily tasks to understand the clothing needs of children with sensory hyperreactivity

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Keywords: Children, Clothing Taskscape, Daily Tasks, Sensory-Friendly Clothing, Sensory Hyperreactivity

One in six children experiences sensory sensitivity, which includes sensory hyperreactivity (Kong & Moreno, 2018). Children with sensory hyperreactivity can exhibit overresponsive behaviour to sensory stimuli, such as tactile or auditory input provided by clothing. Therefore, they may exhibit sensory hyperreactive responses to certain textures and fabrics, ultimately influencing the child's interaction with clothing (Kong & Moreno, 2018). Children's hyperreactive responses to clothing may create a barrier for children's engagement with daily tasks (Williams, Kirby, Watson, Sideris, Bulluck, & Baranek, 2018). When children experience sensory hyperreactive responses, this typically results in irritability and anxiety, leading to fight-or-flight reactions such as meltdowns and emotional outbursts (Kong & Moreno, 2018; Kyriacou et al., 2021). Due to the challenges described, it is imperative to identify children's clothing needs with sensory hyperreactivity to minimise overreactive responses caused by clothing. To map this interaction between the child with sensory hyperreactivity, clothing and daily tasks, the clothing taskscape, coined by Tullio-Pow and Strickfaden (2015), was utilised as a theoretical framework. The clothing taskscape captures the interaction of individuals with activities while engaging with clothing in various environments (Tullio-Pow and Strickfaden, 2020). Therefore, the study aimed to map the clothing taskscape to identify the needs of children with sensory hyperreactivity.

The mother plays a significant role in interacting with a child with sensory hyperreactivity and their clothing and daily tasks. Therefore, mothers of children with sensory hyperreactivity between the ages of three and seventeen residing in Gauteng, South Africa, were approached to participate in a five-day online diary study. The research employed a qualitative, phenomenological research design, including a diary study. The diary study was completed through Qualtrics with open-ended questions. The diary study entry also required mothers to submit a photograph of the clothing worn by their child during each day (excluding underwear) for each activity executed during the day. Before commencing the five-day diary stay, a cognitive interview was conducted with a participant who is both an occupational therapist and a mother of a child with sensory hyperreactivity, to ensure the diary study questions would be feasible in achieving the study's aim and that there were no technical difficulties with the uploading of photos. After finalising the measuring instrument and obtaining ethical clearance (reference: NAS180/2024), invitations to participate were distributed with the assistance of occupational therapists and special needs schools in Centurion and Pretoria, Gauteng. The Touch Inventory for Elementary School-Aged Children (TIE) was used as a screening method to ensure that the children of the participants do not struggle with sensory hyperreactivity (Brown & Brown, 2006). This was distributed as a questionnaire hosted on Qualtrics. The five-day diary study questions were then shared with the mothers (N = 5) via an online Qualtrics link. The first step in this process was for the mother to complete a consent form. Step two included a five-day diary study, where mothers reported on their child's interaction with clothing during daily tasks, including dressing, undressing, schooling, and playing. Step 3 included the mother completing a shopping task with a R300 Menlyn Mall voucher, as shopping represents another dependent task and a challenge for children with sensory hyperreactivity.

After data collection, the data were exported from Qualtrics and coded in Atlas. ti followed by thematic analysis. Aspects of clothing, including textiles, design features, and construction, were highlighted as contributing to discomfort. Soft textiles and clothing designs with minimal irritations, such as labels and irritant seams, are preferred. These aspects were reported to influence the children's participation in daily tasks. Dressing was identified as the task where clothing plays the most significant role. Mothers reported that their children became upset when dressing, and even just the idea of dressing, with severe fight-or-flight reactions, making the task more time-consuming and frustrating.

This study suggests that clothing can significantly influence daily tasks, and when clothing causes discomfort for a child, they tend to overreact or avoid the task. It furthermore sheds light on the specific aspects of clothing that trigger the hindrance. The insight gained from the data collected and analysed can assist mothers in selecting sensory-friendly clothing and developing strategies to mitigate the negative impact that clothing has on daily tasks. This is not only valuable for families, but also for those interacting with and assisting the child, such as educators and health care workers (specifically occupational therapists).

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Basotho Cultural Dress Practices in Rites of Passage: From Pregnancy to Toddlerhood

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Keywords: Basotho Cultural Dress, Rites of Passage, Pregnancy Rituals, Toddler Stage, Symbolism of Dress, Cultural Identity.

Across societies, birth and early childhood are marked by symbolic rituals that communicate identity, belonging, and spirituality (Van Gennep, 1960; Wojtkowiak, 2020). Among the Basotho, cultural dress and adornments such as selapa, shawls, beads (mathapo, khoetsa, khoso), and blankets have historically played central roles in signifying stages of separation, transition, and incorporation. Rituals such as ho bipa (covering the belly), koroso (home sending), and ho bolla (first shaving of infant hair) exemplify the cultural value of dress. However, modernization, Christianity, and globalization have weakened daily attachment to traditional practices, limiting them largely to ceremonial use (Pheto-Moeti, 2005; Mokorosi, 2017). This study therefore explores the meaning and symbolism of Basotho cultural dress practices in rites of passage from pregnancy to toddlerhood.

The study employed an explanatory sequential mixed-methods design (Creswell, 2014). A quantitative survey was first conducted using questionnaires distributed through random sampling. The population comprised 200 LCE staff in Maseru, Lesotho and a sample of 132 was used. The student population was 590 and the sample was 233 students. Findings from this phase informed the qualitative stage, which involved purposively selected focus groups and open-ended interviews. For the focus group discussions, 5 staff members and 7 students were engaged and for the interviews, 11 and 13 elderly people from the districts of Quthing and Botha-Bothe respectively were engaged. This design allowed the integration of both numerical and narrative data, with qualitative insights clarifying trends revealed in the quantitative phase (Ivankova, Creswell & Stick, 2006). For the quantitative data, univariate and multivariate statistical procedures were employed for analysis while, the qualitative data was analysed manually through a note-based approach (Barbour 2018:126 and Kruger & Casey 2000:131). Artifacts were photographed and visually analysed.

Findings indicate that Basotho cultural dress during rites of passage carries profound protective, symbolic, and identity-related meanings. Pregnancy practices such as the use of selapa and red ochre (letsoku) reflect concerns for maternal and infant safety, warmth, and spiritual protection. Early childhood rituals, including the preservation of the umbilical cord, ho bolla, and bead adornment, communicate clan identity, transition into community life, and health safeguarding (Dubin, 2006; Damhorst, 2008). Generational differences emerged, with older participants strongly valuing traditional symbolism, while younger participants often regarded practices as superstitious or outdated. This reflects broader cultural transformations influenced by Christianity and Western modernity, which encourage individual expression and preference for Western clothing (Workman & Freeburg, 2009). Despite this, ceremonial contexts remain important spaces for reaffirming identity and continuity of tradition.

The ethical clearance was provided by the Ethical Clearance Committee of the faculty of Natural and Agricultural Sciences and the number is UFS-HSD2017/1235.

This research highlights how Basotho cultural dress continues to shape identity and spirituality, despite generational shifts and cultural erosion. It demonstrates that Basotho cultural dress practices retain significant cultural, spiritual, and protective value during rites of passage from pregnancy to toddlerhood. While generational and societal shifts challenge the everyday use of these practices, they remain vital for marking life transitions and sustaining Basotho identity. The resilience of cultural dress highlights its role as a medium for negotiating modernity and tradition.

It is therefore recommended that there be integration of knowledge of Basotho dress symbolism into schools and community programs to foster appreciation among youth as part of cultural education. Oral traditions should be preserved through research, publications, and digital archiving. In addition, the relevant ministry should facilitate intergenerational dialogue, with elders sharing cultural knowledge through engagement with the community. Furthermore, there must be facilitation of modern integration by incorporating elements of traditional dress into contemporary fashion and ceremonies. Government should support development of policies that encourage funding of cultural institutions and projects that safeguard ritual dress and adornment. In order to further develop the discipline, national institutions of higher learning should undertake comparative research of Basotho practices with those of other African and global cultures to explore shared values and unique adaptations.

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Listening to children: Lessons from a study on clothing comfort and discomfort

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Keywords: Artefact Analysis, Children's Voices, Clothing Comfort, Probing, Tactile Hyperreactivity

Research on children's perceptions often relies on adult proxies such as parents, teachers, or health practitioners to collect data (Miller, Fuller, & Roetenberg, 2014). While this approach can be informative, it may miss the details of children's own lived experiences. There is an increasing move toward centring children's own voices (Sudarsan, Hoare, Sheridan, & Roberts, 2022). Actively incorporating children's perspectives can generate more effective strategies and interventions that directly support their well-being (Nilsson et al., 2015). This main study aimed to explore children with tactile hyperreactivity perceptions of clothing comfort and discomfort, listening to the child's voice. This specific abstract aimed to report on lessons learnt from interviewing children.

This study used a qualitative design combining interviews and material artefact analysis. Eleven children (ages 5–9) with tactile hyperreactivity, living in the Pretoria region of South Africa, were purposively recruited via occupational therapists. Screening with the Touch Inventory for Elementary-School-Aged Children (Brown & Brown, 2006) ensured sample validity. Before the interviews, parents helped children select the three most comfortable and uncomfortable garments (excluding underwear/swimwear) in the child's wardrobe. These garments served as probes during the interviews. Ethical clearance (NAS033/2024), parental consent, and child assent were secured, with parents present during interviews. Sessions were recorded, and probing questions explored sensory comfort and discomfort. Garments were photographed for artefact analysis. Interviews were transcribed using Otter.AI and coded in Atlas.ti for thematic analysis.

The study highlighted four key themes in interviewing children. First, the environment and context played a central role in shaping the quality of responses. Conducting interviews in the home created a sense of security, and sitting on the floor made the interaction feel playful rather than formal. Timing was also important, as children interviewed on a Saturday morning were more alert and engaged than those spoken to after school, when fatigue and hunger sometimes limited participation.

Second, parent involvement proved to be both supportive and challenging. While a parent's presence reassured children and contributed to a safe atmosphere, clear boundaries were necessary to prevent parents from answering on behalf of the child. The two interviews where the parents were present but busy with something else were the richest; it was as if the child felt that the parent allowed him/her to say whatever he/she wanted.

Third, building rapport and reducing anxiety emerged as essential to successful engagement. Beginning with a fun activity, playing with the "Dress Me Please" dolls was an effective icebreaker and eased children into the conversation. However, in some cases, the participants were so intrigued by the ice-breaker activity that it was difficult to get their focus back on the interview. Reassuring children that the interview was not a test and using active affirmation strategies such as nodding and praise further helped to reduce anxiety and sustain focus.

Finally, the theme of child communication and expression was pertinent. Data analysis showed that children typically provided brief responses, unlike adults, who may elaborate in paragraph-length narratives. Despite this, the responses were rich with meaning. When given space to express themselves, children communicated frustration, preferences, and sensory discomfort candidly and emotionally authentically. While the findings broadly align with existing literature on sensory sensitivity and clothing (Kyriacou, Forrester-Jones, & Triantafyllopoulou, 2023; Roy, Ghosh, & Bhatt, 2018), the direct engagement with children provided a layer of emotional insight often absent in adult-reported data. Using actual garments from their cupboards (artefacts) as tangible prompts proved especially effective in drawing out detailed and meaningful explanations of preferences, frustrations, and sensory discomforts. Although children lacked the technical terminology and industry jargon of textiles and clothing construction, having the physical item in hand enabled them to demonstrate their experiences directly by saying, for example, “this irritates me” or “this scratches me”, thereby overcoming the limitations of their vocabulary.

Although common for an exploratory, qualitative study, the small sample size (N=11) is a limitation. This study underscores the value of listening to children directly and offers practical strategies for researchers seeking effective and empathetic interviews with young participants. These lessons learnt can assist researchers in various fields to listen to the voice of the child.

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Investigating Lesotho mohair medullation prevalence

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Keywords: Lesotho Mohair, Mohair Quality, Medullation, Objectionable Medullated Fibres, Mohair Production, OFDA, Mohair Analysis

The total value of the Lesotho mohair clip is influenced by both the quantity and quality of the fibre produced, with supply and demand also playing an important role in determining the auction price. Cavanagh (2014) reported that, in 2014, a strong interest and an increase in fashion demand for mohair, coupled with a world shortage of mohair, increased mohair prices, to the benefit of the fibre producers. Lesotho ranks second globally in mohair production, following South Africa, and has recently experienced notable price increases—signalling growing competitiveness in international fibre markets. However, the fibre is exported in its raw state with no value addition, furthermore; the exports of Lesotho mohair are done in South Africa together with the South African mohair posing a challenge of identification of final destination. Additionally, the country's mohair sector remains constrained by limited documentation on fibre quality, particularly regarding medullation, which undermines benchmarking, quality assurance, and strategic improvement efforts. Medullation—especially the presence of objectionable medullated fibres such as kemp—poses a significant challenge to textile processing inclusive of dyeing as medullation affects dye uptake negatively and marketability since medullation is not a preferred characteristic in the mohair fibres. Medullated fibres are coarse, brittle, and visually disruptive, often leading to substantial price discounts and reduced yarn quality.

This study investigated the prevalence and nature of medullation in Lesotho mohair using Optical Fibre Diameter Analyzer (OFDA 100) technology (Lupton, & Pfeiffer, 1998). Recent studies introduced Artificial Intelligence in the measurement of medullation (Giovannini, et, al., 2025). The objectives of this study were to: (1) measure the extent and types of medullated fibres, (2) assess contributing factors and these included follicle development, animal age, and farming practices, and (3) propose strategies to mitigate medullation and improve fibre uniformity. This study employed a quantitative, descriptive-correlational research design within a laboratory-based observational framework aimed at characterizing and analyzing Lesotho mohair fibre properties, particularly medullation. The design facilitated statistical description and correlation of fibre traits without experimental manipulation, aligning with ASTM D2968–95 and IWTO testing standards. Mohair samples from Lesotho clip were collected from the Wool Testing Bureau (WTB) with permission from the National Wool and Mohair Growers Association in Lesotho. The research team did not come in contact with the animals (goats), as a result no ethical clearance was sought. A total of 194 samples representing all the geographical regions were taken from the lot submitted for auction in 2014, for purposes of this study samples were sourced from WTB. The OFDA 100 was used for the measurement of the mohair snippets. It is an automated microscope designed to measure using image analysis, fibre snippets spread over a glass slide, at upwards of 4,000 measurements/minute (SGS Wool Testing services 2011). One slide from each of the 194 samples, at least 4,000 snippets per slide, was tested for mean fibre diameter MFD, standard deviation of fibre diameter (SD), coefficient of variation (CV) of fibre diameter, mean opacity, number of medullated fibres, number of objectionable medullated fibres, number of flat medullated fibres, mean medulla diameter, fibre curvature, as well as the percentage of fibres coarser than 30 µm. Findings revealed that Lesotho mohair exhibits a relatively high incidence of medullation—ranging from 1.9% to 8.8%—with objectionable fibres reaching as high as 10.43% in some samples. These levels far exceed international acceptability thresholds and compromise fibre style and dye uniformity. This level of medullation prevalence attracts notable discounts in the mohair market.

Importantly, the study highlights that shearing goats only once per year, as it is a practice in Lesotho; often happening when the goats are older and larger, the practice may contribute to increased medullation. This is likely due to the dominance of primary follicles in older animals, which produce coarser, medullated fibres. The recommendations made based on the results accentuate the need for selective breeding as medullation is more hereditary than physiological, this is in agreement with Allain, & Roguet, (2006). Improved nutritional regimes are also recommended as they also contribute directly to the size of the animal and fibre forming follicles, and revised shearing schedules to ensure that goats are shorn before they are one (1) year old thus reducing medullation and enhance global competitiveness of Lesotho's mohair clip. Snyman & Olivier, (2025) suggested that age of goats has a notable impact on medullation.

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Wool Beneficiation Pathways in Lesotho: From Farm to Export

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Keywords: Lesotho Wool, Beneficiation, Value Addition, Wool Exports, Community and Seasonal Processing, Fibre Blending

Lesotho's wool sector presents a strategic opportunity for economic diversification and rural empowerment through beneficiation and fibre blending. This paper synthesises

global literature on wool processing and export competitiveness, contextualising it within Lesotho's evolving textile ecosystem. It proposes a structured pathway from farm-level production to export-oriented value addition, aligned with national development goals and international market trends.

Historically reliant on raw fibre exports, Lesotho's wool industry is undergoing a strategic shift toward value addition through processing and blending. This transformation is driven by domestic policy initiatives and global market dynamics favouring ethically sourced, blended wool products. The Wool and Mohair Value Chain Competitiveness Project (WAMCoP) signals national commitment to upgrading production and integrating rural producers into export markets (MAFS & IFAD, 2023). This paper explores global literature on wool beneficiation and outlines a pathway for Lesotho's fibre sector to transition from raw exports to processed, blended, and branded products.

The global wool market is projected to grow from USD 11.25 billion in 2024 to USD 21.6 billion by 2032, driven by rising demand for sustainable, blended textiles (FibreTrade Analytics, 2025). Blending wool with silk, cotton, and recycled synthetics enhances product performance, affordability, and market reach (Textile Futures Institute, 2025). Processing innovations such as automated scouring, carding, and eco-friendly dyeing are reshaping competitiveness, with countries like Italy and Germany leading in premium textile exports (TechTextile Research Group, 2025).

UNCTAD (2024) emphasises that domestic value addition is essential for commodity-dependent economies seeking structural transformation. Beneficiation fosters industrial upgrading, job creation, and resilience against global price volatility. In the textile sector, this translates to investments in spinning, weaving, dyeing, and finishing infrastructure. Afreximbank and UDS (2025) highlight Africa's potential to build regional value chains and brand ethically sourced products, positioning wool blending as a strategic entry point for youth-led innovation and SME development.

Lesotho produces high-quality wool, primarily from Merino sheep, and exports raw fibre through South African brokers. This model limits domestic value capture and exposes producers to market fluctuations. WAMCoP aims to reverse this trend by investing in shearing infrastructure, breeding programmes, and market-linked cottage industries (MAFS & IFAD, 2023). The introduction of Merino sheep to small breeders and support from the International Trade Centre's Ethical Fashion Initiative reflect readiness for deeper beneficiation (ITC, 2024). Lesotho's ethical fibre reputation and proximity to processing hubs offer strategic advantages for export-oriented value addition.

This study employs a systematic review of recent literature (2023–2025) on wool processing, fibre blending, and export competitiveness, drawing from international reports, market forecasts, and policy frameworks. In addition, the author's immersion in the textile and fibre sector—as a diagnostic coach, academic researcher, and stakeholder in national transformation initiatives—provides grounded insights into Lesotho's wool ecosystem. Observational data were gathered through participatory diagnostics with over 500 enterprises, including longitudinal engagement with one enterprise over two years. This triangulated approach ensures both academic rigour and contextual relevance.

A structured wool beneficiation pathway is proposed, integrating global best practices with local realities. It unfolds across five interconnected stages, each supported by targeted strategic enablers. At the farm level, activities include breeding Merino sheep, ensuring animal health, and conducting efficient shearing—supported by extension services and veterinary care. Primary processing involves scouring, grading, and baling, enabled by infrastructure investment and training. Secondary processing introduces carding, spinning, dyeing, and fibre blending, facilitated by machinery access, SME incubation, and green technologies. Product development focuses on fabric finishing, design, and prototyping, driven by creative hubs, youth innovation, and ICT support. Finally, export and branding encompass certification, packaging, and market linkage, underpinned by ethical branding, trade facilitation, and regional partnerships. This pathway aligns with UNCTAD's emphasis on policy coherence and infrastructure investment (UNCTAD, 2024), and with Afreximbank's call for regional integration and youth-led innovation (Afreximbank & UDS, 2025).

In conclusion, Lesotho's wool sector stands at a pivotal moment. By embracing beneficiation and blending, the country can unlock new export markets, empower rural producers, and build a resilient textile ecosystem. Strategic investment in processing infrastructure, SME development, and ethical branding will be essential to realising this vision.

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SAAFECS26-118

The Perception of Enrolment in Fashion and Fabrics by Secondary Schools: A Case Study of Kitwe District

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Keywords: Enrolment, Fashion and Fabrics, Learning Materials, Limited Funding, Perception, Secondary Schools

This study examined the perception and enrolment of Fashion and Fabrics (F&F) in government secondary schools in Kitwe District, Copperbelt Province, Zambia, within the framework of educational reforms aimed at enhancing vocational and skills-based learning. The Zambian education system has undergone significant policy transformations, notably the Education Reforms of 1977, Focus on Learning (1992), Educating Our Future (1996), the Education Act (2011), and the Zambia Education Curriculum Framework (2013). These reforms collectively sought to promote curriculum diversification and align education with national development goals (Ministry of Education, 2013). The Education Act (2011) further emphasized the integration of vocational and technical subjects in secondary schools to promote skills acquisition (Ministry of Education, 2011). The vocationalisation of secondary education has been widely regarded as a strategy for addressing youth unemployment and promoting economic productivity (Lauglo, McLean, & Thuen, 2012). However, despite these reforms, youth unemployment in Zambia remains persistently high (World Bank, 2013), suggesting gaps between policy intentions and implementation. Scholars argue that vocational education in Africa continues to suffer from low status and negative perceptions, which undermine enrolment and effectiveness (McGrath, 2015). Similarly, vocational education is often undervalued compared to academic pathways, despite its importance for democratic participation and economic development (Clarke & Winch, 2007). The purpose of the study was to analyze how Fashion and Fabrics is perceived in Kitwe secondary schools, the extent of enrolment, and the adequacy of institutional support structures. These objectives were framed within the broader vocationalisation policy that seeks to equip learners with employable skills and reduce over-reliance on

purely academic education (Konayuma, 2014). Research has shown that vocational subjects such as Fashion and Fabrics can enhance student motivation and entrepreneurial potential when adequately supported (Kasoma & Kanyama, 2019).The study employed a descriptive survey design integrating both quantitative and qualitative approaches, consistent with established educational research methods (Cohen, Manion, & Morrison, 2010). Data were analyzed using SPSS to generate descriptive statistics, while qualitative data were thematically analyzed to capture stakeholder perceptions and experiences (Babbie, 2013).

Findings revealed that Fashion and Fabrics continues to be strongly perceived as a gendered subject, primarily suited for females. Such gender stereotyping has been identified in other African contexts as a major barrier to vocational subject uptake (Dube & Moyo, 2018). Low enrolment was further compounded by structural challenges, including shortages of qualified teachers and inadequate facilities—issues that have been widely documented in vocational education implementation studies (Mkandawire, 2010). The absence of sufficient laboratories, equipment, and materials undermines effective teaching and skill development (Gaz, 2008). Although guidance and counseling personnel were present in schools, their role in promoting vocational pathways was limited. Studies suggest that effective career guidance is essential in improving student interest and enrolment in vocational education (Omolo, 2019). Without proactive promotion and institutional support, vocational subjects remain marginalized despite their potential to contribute to self-reliance and youth empowerment (Uko-Aviomoh, 2015).

The study concluded that unless deliberate interventions are implemented to change perceptions and strengthen institutional support, Fashion and Fabrics will continue to face low enrolment and underutilization. It recommended increased funding, improved facilities, enhanced teacher training, and targeted sensitization campaigns to address gender stereotypes and elevate the status of vocational subjects. By highlighting gaps between policy and practice, the study contributes to ongoing debates on curriculum diversification and vocational education reform in Zambia.

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Food and nutrition

SAAFECS26-002

Effects of Floods on Food Availability, Accessibility and Stability in Hamakuya village in Thulamela Local Municipality, Limpopo Province, South Africa

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Keyword: Food Availability

Floods effects jeopardise food and nutrition security by affecting food availability, accessibility and consumption, and food supply stability (Phalkey et al., 2015). According to Smith and Frankenberger (2018), floods account for 40% of the global losses caused by natural disasters. Floods also damage infrastructure, which leads to a poor supply of food, thereby affecting food availability, accessibility and stability of the food in the household (Olanrewaju et al., 2019). Aim: The primary aim of the study is to investigate the effects of floods on food accessibility, availability, and stability in Hamakuya village in Thulamela, a local municipality in Limpopo province.

Cross-sectional and exploratory design was used. The study employed quantitative and qualitative techniques. An interviewer-administered questionnaire was used for quantitative data. Four focus group discussions were employed with 28 participants and six in-depth interviews were conducted for the qualitative step. Quantitative data was captured in Microsoft Excel and transferred to a statistical package for social sciences for data analysis. Qualitative data was recorded, transcribed, and translated into English and analysed using thematic analysis.

A total of 407 households participated in the quantitative Component. About two-thirds (60,2%) of the participants were females. The participants were 45 - 64 years (41%) followed by 36 - 44 years (23,8%). Almost one-third (28,5%) of the total participants were employed. Most households depend on South African Social Security Agency grants, which include child grants (59,2%), old age grants (52,6%) and social relief of distress grants (55%).Household data in 2023 showed that more than two-thirds (66,3%) indicated that they had insufficient food quality, including households unable to eat preferred foods, with three-quarters (70,3%) who experienced mild or moderate or severe food insecurity. The focus group and in-depth interview participants indicated they had experienced floods in 2020/2021 and 2023. Participants indicated that the food that they produced was washed away by the floods, resulting in no harvest during that period of floods. Participants indicated that floods affected food availability because the roads they used to go to town were washed away, and the public transport or any other transport was not able to go in or out of the village. The floods led to damaged infrastructure, which includes roads and bridges. Subsequently, the transport could not go in and out of the area due to this damage, ultimately affecting the supply side of the food, further decreasing the food stability in the area. Ramakrishna, Gaddam and Daisy (2014) indicated that the effects of floods on infrastructure were severe; the loss of infrastructure, including roads and bridges, rendered the area impassable. Floods affect food availability by causing crop loss, fisheries and livestock, while changes in rainfall patterns affect both crop quantity and quality (Reddy et al., 2019). In the current study, participants indicated that floods had decreased crops and low harvest; the rainfall washed away all the crops they had planted, mainly on the land/fields away from home. Flooding impacts access to food and the ability to secure food as determined by purchasing power and affordability (Echendu, 2022). People lost their jobs, lost income and purchasing power reduced. The food prices increase due to more demand. The drop in income and increased food prices make it difficult to access food (Reddy et al., 2019).

The study found that floods had effects on food availability, accessibility, and stability since there was reduced production of food and household purchasing power. Future research must focus on the mitigation and adaptation strategies for the effects of climate change (Floods) on food availability, food accessibility, stability, and how to cope with periods of food shortages.

SAAFECS26-004

Socio-demographic factors, anthropometric status and infant feeding practices of infants and young children (0-24 months) living in the maize-subsistence areas of the Eastern Cape Province, South Africa: a situational report

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Keywords: Infant and Young Child Feeding, Malnutrition, Socio-Demographic, Stunting.

Globally, an estimated 149 million children under 59 months of age were stunted and 45 million children were wasted in 2020 (WHO, 2024), with approximately 27% of children stunted in South Africa (UNICEF, 2020). The Eastern Cape Province experiences a high burden of undernutrition and is one of three rural provinces with the highest prevalence of stunting in South Africa (Massyn et al., 2017; Said-Mohamed et al., 2015).

Poor infant and young child feeding practices, including lack of exclusive breastfeeding, early introduction of solid foods, and the provision of monotonous and/or poor nutrient-dense complementary foods, are some of the direct causes of stunting (Khan & Islam, 2017; Kubeka & Modjadji, 2023). Low exclusive breastfeeding rates (46.9%) and the early introduction of solid foods have previously been reported in the Amathole District in the Eastern Cape (Osborne et al., 2013).

This study aimed to determine the socio-demographic factors, anthropometric status, and infant and young child feeding practices, including the dietary diversity of infants and young children (0-24 months of age) in the rural Amathole District, Eastern Cape Province.

A cross-sectional quantitative study included 178 mother/caregiver and child pairs. A closed-ended socio-demographic questionnaire was used to collect socio-demographic data from the mothers and caregivers. A 24-hour dietary recall questionnaire was administered to mothers/caregivers to obtain information on the feeding practices of infants and young children. Anthropometric measurements were performed on infants and young children 0-24 months old. Measurements included weight, height/length, and mid-upper arm circumference. Data collection was conducted after obtaining informed consent.

The prevalence of stunting (20.9%) was high, with being overweight (14%) also being a concern. Exclusive breastfeeding rates were low (30%), early introduction of solids was common (58%), and only 3.7% of the 6–24-month-olds met the minimal dietary diversity. Most mothers/caregivers in the present study were unmarried, had not completed high school, and were unemployed. The household income was low, with limited access to safe water and sanitation.

The present study provides an overview of the most recent situation regarding the socio-demographic status, anthropometric profiles, and infant feeding practices, including dietary diversity of children 0-24 months of age, from the Amathole District in the Eastern Cape. Stunting is high in the rural areas of the Eastern Cape Province, with sub-optimal reported infant and young child feeding practices. The high maternal unemployment rate, low household income, lack of maternal education, and sub-optimal water and sanitation could explain this. The findings of this study highlight a need for infant and young child feeding education and targeted interventions to improve the underlying socio-demographic factors.

The findings of this study highlight the need to provide IYCF education and targeted interventions to improve the underlying socio-demographic factors. Furthermore, the findings suggest a need for more IYCF research in under-resourced regions of South Africa.

Ethical approval was obtained from the Health Research Ethics Committee (HREC) of North-West University Faculty of Health Sciences (NWU-00207-14-A1)

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SAAFECS26-010

Smartphone-based assessment of food-away-from-home and non-communicable disease risk among young adults in Johannesburg

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Keywords: Mobile Health (Mhealth), Dietary Behaviour, Urban Nutrition, Young Professionals, Chronic Disease Prevention

Globalization, urbanization, and technological advancement have reshaped dietary behaviours, especially in urban settings where convenience drives food choices. Traditional diets rich in grains, legumes, vegetables, and fruits are increasingly replaced by energy-dense, nutrient-poor foods such as processed items, sugar-sweetened beverages, and food away from home (FAFH) (Branca et al., 2019; Turner et al., 2018). These shifts, along with low intake of fruits and whole grains, contribute to rising non-communicable diseases (NCDs) (Saxena et al., 2021). Young working adults are particularly affected due to busy schedules and social lifestyles (Howse et al., 2018; Larson et al., 2011). Conventional dietary tools like 24-hour recalls and food frequency questionnaires (FFQs) are limited by recall bias and lack contextual detail (Liu et al., 2011). This study therefore used “FoodLog,” a validated smartphone app enabling real-time logging of food intake, location, cost, and type. It examined determinants of FAFH consumption and its association with NCD risk among young working adults in Johannesburg, South Africa.

A case-control study was conducted among 442 adults aged 25–45 years in Johannesburg, including 146 cases (self-reported NCDs) and 296 controls. Data were collected via a semi-structured questionnaire and the FoodLog app. Statistical analysis included unadjusted and adjusted odds ratios (ORs and AORs) to assess associations between FAFH and NCD risk. Key variables included sociodemographic factors, alcohol use, physical activity, and dietary preferences. Health outcomes were based on self-reported diagnoses of hypertension, diabetes, and cardiovascular disease.

Over 33% of participants consumed FAFH in the week prior to the survey. Females were 1.52 times more likely to consume FAFH than males (AOR = 1.52, CI: 1.01–2.30), and those with postgraduate education were 2.05 times more likely than undergraduates (AOR = 2.05, CI: 1.16–3.61). One-third reported at least one chronic condition—most commonly hypertension (39.7%), diabetes (24%), respiratory disorders (12.3%), hypercholesterolemia (8.2%), and heart disease (6.2%). Adults aged 36–45 had higher odds of chronic conditions than those aged 25–35 (AOR = 1.07, CI: 1.03–1.66). Physical inactivity was associated with a 1.19 times higher likelihood of chronic conditions (AOR = 1.19, CI: 1.07–1.85), and non-vegetarian diets were linked to a 1.78 times greater risk (AOR = 1.78, CI: 1.21–4.85). FAFH showed a modest association with NCD risk (AOR = 1.12, CI: 0.51–1.22). These findings suggest that frequent FAFH may contribute to poor dietary quality and increased chronic disease risk. FoodLog offered valuable insights into real-world eating behaviours, reinforcing the role of digital tools in dietary surveillance and public health planning. Ethics approval number: REC-01-06-2021

Dietary behaviour significantly influences health outcomes among urban young adults. As FAFH becomes more common, its role in increasing NCD risk warrants attention. Modest associations observed highlight the need for targeted interventions promoting healthier food environments and informed choices.

- Introduce policy incentives for restaurants to offer healthier FAFH options.

- Expand mHealth tools like FoodLog for real-time dietary monitoring and personalized nutrition guidance.

- Develop urban nutrition programs tailored to young professionals, emphasizing long-term health impacts.

This study demonstrates the utility of smartphone-based dietary tracking in assessing FAFH and its health implications. It offers actionable insights for public health strategies and supports integrating digital tools into nutrition interventions. Future research should explore policy frameworks leveraging mHealth technologies to promote sustainable, health-conscious food environments.

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Development and Validity Testing of Community-Based Nutrition Education Material for a Maize-Subsistence Community of the Eastern Cape Province

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Keywords: Cultural-Specific, Education Material, Health Belief Model, Infant and Young Child Feeding, Mothers and Caregivers, Nutrition Education, Peer-to-Peer

Nutrition education is defined as a systematically planned set of activities or programmes aiming at reinforcing informed nutrition-related practices. Nutrition education can contribute to improving knowledge, practices and perceptions of mothers/caregivers towards infant and young child feeding (IYCF) (UNICEF, 2021; WHO, 2016). The FAO's key point for nutrition education is to help people access and prepare healthy foods, and to make food choices that can ultimately improve overall health and well-being (FAO, 2023). Nutrition education can be facilitated in different contexts and levels such as individually, at educational institutions or community level (Contento, 2010). Community-based IYCF education programmes support behavioural change and help communities use locally available food thus improving dietary habits and quality of life (Majamanda et al., 2014; Mogre, Dery & Gaa, 2016; FAO, 2023).

Culture-specific education targets a specific group of people with similar characteristics and focuses on being sensitive to local norms and practices (Mogre, Dery & Gaa, 2016).

There is no know literature revealing IYCF education material that address the cultural-specific challenges unique to the rural and maize-subsistence areas of the Amathole District. The aim of this study was therefore to develop and validate (content and face validity) culturally specific, community-based IYCF education material based on the current knowledge, practices, and perceptions of mothers/caregivers in the Amathole District, Eastern Cape Province, South Africa. This education material can then be used in the implementation of a peer-to-peer, community-based nutrition education intervention or programme that is focused on improving infant and young child feeding knowledge, practices, and perceptions.

An exploratory study was conducted by 4 research team members using a literature review, secondary quantitative and qualitative data, and focus group discussions (FGDs). The Department of Health's Road-to-Health booklet was used as a basis for the education material development. The Health Belief Model was used to formulate a conceptual framework to guide the development of a cultural-specific IYCF education material. Photo sessions were undertaken by the researchers to produce visual aids to be included in the education material. Scaled-down versions of the education material were produced as prototypes and sent to the experts for validity testing.

Content and face validity testing on the educational material was done by an expert committee of 15 members after signing an informed consent form. The committee included 8 Xhosa-speaking women with experience in local traditional norms, 6 IYCF experts (2 academics and 4 provincial and national nutrition experts) with experience in IYCF policy implementation. One expert in digital production was recruited to format the education material. The committee members participated voluntarily and provided their critical input and feedback via electronic mail and FGDs.

This study produced two culture-specific IYCF educational materials. The education manual contained four themes i) breastfeeding (exclusive breastfeeding, initiation of breastfeeding, the use of colostrum, continued breastfeeding and family support), ii) complementary feeding (type of foods/dishes, timing of initiating complementary feeding, reasons for initiating complementary feeding, family support and hygiene related to complementary feeding), iii) traditional and cultural factors (provision of traditional medicines and herbs, and reasons for providing traditional medicine and herbs) as well as iv) health care system (support of the healthcare personnel).

A tablecloth was developed depicting easy-to-understand, Xhosa information and photographs regarding breastfeeding, complementary feeding, cleaning utensils, oral rehydration solution, and safe preparation of formula milk.

Validated community-based, culture-specific IYCF material based on the Health Belief Model was developed using breastfeeding, complementary feeding, traditional and cultural factors, and the health care system as the main themes. The educational material is in the format most suitable to the community, it is in the local language, in an easy-to-read and understandable format and of high quality. The education material has the potential to contribute to the improved knowledge, practices, and perceptions of mothers and caregivers regarding IYCF to ultimately lower the high stunting and obesity rates in the community.

This study demonstrated the need to develop tailored intervention programs that bring sustainable education to the local context, to improve IYCF knowledge, practices, and perceptions of mothers/caregivers. The use of experts who represent the community, as well as the academics and policymakers, is recommended in future studies.

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SAAFECS26-038

Hygiene practices of vendors selling fruits and vegetables on streets of Gqeberha, South Africa

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Keywords: Keywords: Food Safety Practices, Public Health, Microbiological Risk, Post-Harvest Handling, Cross-Contamination, Foodborne Pathogen.

Street vending of fresh produce contributes significantly to food accessibility and is widespread in developing nations such as South Africa (Chauke & Tabit, 2022; Wegerif, 2024). In South Africa, street vendors purchase approximately 60% of fruit and vegetables sold in the various municipal fresh produce markets, contributing over R3.9 billion per year in fresh produce sales (Daily Maverick, 2021). Notwithstanding the nutritional benefits of street-vended food, poor hygiene practices persist as a notable issue (Oguttu, 2015; Khuluse & Deen, 2020; Mbombo-Dweba et al., 2022). While available evidence shows that unhygienic methods used in food preparation, handling, and storage, foster the growth and spread of pathogens that cause disease such as bacteria, viruses and other food-borne pathogens (Akabanda et al., 2017), a review of existing literature suggests a significant gap in research on hygiene practices among fruit and vegetable vendors. Previous studies have predominantly focussed on street vended chicken (Oguttu, 2015), cooked ethnic food, food in general and prepared vegetable salads (Mbombo-Dweba et al., 2022; Khuluse & Deen, 2020; Brooks, 2014).

This study investigated the food hygiene practices of informal vendors selling fresh produce (fruits and vegetables), in the informal markets in Gqeberha, so as to highlight public health issues within the sector.

A cross-sectional study design was adopted to investigate food hygiene practices among street vendors in Gqeberha, South Africa. Due to the relatively small population of fruit and vegetable street vendors in Gqeberha, all vendors (n=150) in the study area were invited to participate in the study. Quantitative data were collected through structured interviews and observational checklists. Data was analysed using descriptive statistics in SPSS version 29.0.

A 100% response rate was achieved, with all 150 street vendors invited to participate in the study agreeing to compete the consent form and the questionnaire. The majority of vendors were female (n=145; 96.66 %), and about half (n=75; 50 %) had not completed high school. Consistent with findings by Lim and Ong (2018), the lack of formal education and food safety training was widespread, with almost all vendors (n=141; 94 %) reporting having had no prior training. Observations showed that vending operations took place in temporary plastic-covered structures or on uncovered tables.

Most vendors (74%; n = 111) disinfected their vending spaces twice daily, a practice aligned with the WHO's Five Keys to Safer Food Manual (WHO, 2006). However, the observed frequency may be inadequate for open environments. A critical concern was that 92% lacked access to potable water and the same proportion did not wash their hands before handling food.

Although all vendors had dustbins, none were appropriately covered, and over a quarter (n = 41, 27.33%) disposed of waste in plastic bags kept on the vending site for later disposal. These results highlight significant gaps in hygiene practices, particularly regarding access to portable water, hand hygiene, and waste management, and underscore the urgent need for targeted interventions to protect public health.

The ethical clearance was obtained from the Ethics Review Committee of the College of Agriculture and Environmental Science, University of South Africa before data collection commenced (Ethics clearance reference number: 2024/CAES_HREC/2641). The researcher also obtained gatekeeper permission from the City of Gqeberha. The participants who consented to take part in this research project were required to officially endorse an agreement of consent. Participants were made aware that participating in this research was voluntary and that they were free to quit at any point during the study.

Vendors knowledge and effort towards cleanliness was demonstrated, however infrastructural limitations such as access to portable water, waste management, storage facilities hinder consistent hygienic practices.

The study reports for the first time the hygiene practices among the informal vendors selling fresh produce, and offers a vital baseline understanding of the current state of food safety in informal markets. Future research: Investigate pesticides residues on street-vended fruit and vegetables sold at Gqeberha.

Government and Policy Makers: Public health authorities, municipal regulators, and community organisations must collaborate to provide targeted hygiene training, improve infrastructure for safe water access, and enforce waste management standards. Addressing these challenges is critical for reducing public health risks and ensuring the safety of food sold in the city's informal markets.

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SAAFECS26-062

Indigenous Food Systems as Catalysts for Nutrition and Food Security: A Comprehensive Framework for Utilisation and Accessibility

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Keywords: Health Outcomes, Dietary Diversity, Policy Integration, And Knowledge Transfer

Globally, over 820 million people remain undernourished, with sub-Saharan African countries disproportionately burdened by food insecurity and malnutrition (Cloete & Idsardi, 2013). South Africa faces a triple burden of diseases, such as hidden hunger, undernutrition, and overweight. However, it is also home to indigenous foods that are nutrient-dense and offer environmental benefits, including drought tolerance, as well as social, cultural, and economic advantages (Kamga et al., 2013). Despite South Africa's rich diversity of indigenous foods, their role in combating malnutrition remains underexplored, raising urgent questions about their visibility and integration into national food and health strategies (Okop et al., 2019; Mbhenyane, 2017). To address this paradox of abundance and underutilisation, the study aimed to develop a practical framework that strengthens indigenous food accessibility, utilisation, and stability while improving health outcomes.

A sequential exploratory mixed-methods design was employed across three phases: i) a systematic review of indigenous food utilisation in Southern Africa; 2) a quantitative household survey (n=407) to assess indigenous food utilisation, dietary diversity and food

insecurity (HFIAS), complemented by qualitative methods such as focus group discussions, talking circles, and interviews with elders, youth, farmers, traders, and local government officials to explore perceptions, knowledge transfer and utilisation practices; 3) designing, developed, and validated the Promotion of Utilisation of Indigenous Foods Framework (PUIFF) through participatory workshops with experts and end-users.

Findings showed that while indigenous food knowledge and awareness were high (98%), barriers limited their consistent use. These included lack of access to seeds and land, weak preservation skills, limited market opportunities, and negative perceptions among youth who associated indigenous food with poverty. Quantitative analysis revealed moderate dietary diversity and irregular, seasonal consumption patterns of these foods. Qualitative insights emphasised the erosion of indigenous knowledge transmission and inadequate policy recognition.

The PUIFF positioned policymakers, industries, academia, communities, and media as key actors, with farmers, traders, schools, hospitals, and households as end-users. The framework highlights pathways such as strengthening knowledge systems through education and curricula, improving preservation and preparation skills, enhancing access to land, seeds, and farming resources, incentivising product innovation to appeal to younger generations, and embedding indigenous foods within institutional feeding programmes (schools, hospitals, and prisons).

The study was approved by the Health Research Ethics Committee of Stellenbosch University (Ref: S21/03/053) and the Eastern Cape Department of Health. Informed consent was obtained from all participants, and the intellectual property rights of indigenous knowledge holders were respected in accordance with the principles of Ubuntu and relevant legislation governing indigenous knowledge systems.

The study shows that indigenous foods can be repositioned as catalysts for nutrition and food security. However, their revitalisation requires systemic support by addressing access barriers, changing perceptions, investing in preservation and farming skills, and mainstreaming indigenous foods into policies and markets. The validated PUIFF offers a roadmap for action across sectors and levels. Therefore, indigenous foods should be mainstreamed across policies, education, media and industries.

This study's contributions: 1) it generates empirical evidence on indigenous food availability, accessibility, utilisation and perceptions in a rural South African context; 2) it delivers a validated, implementable framework (PUIFF) that guides stakeholders in promoting indigenous foods to achieve dietary diversity, improved health outcomes and sustainable livelihoods. The research bridges indigenous knowledge and nutrition-sensitive approaches, offering a scalable model for low-and middle-income settings.

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SAAFECS26-074

Women Empowerment and its Role in Household Food Security: A Case Study of Urban Agricultural Households in Ekurhuleni, South Africa

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Keywords: Food Consumption Score, Food Insecurity, Household Nutrition, Gender and Agriculture, Women Empowerment

Food insecurity and gender inequality are the major threats to achieving the United Nations Sustainable Development Goals (SDGs) 2 and 5. Women are faced with systemic barriers which disproportionately affect their access to productive resources, resulting in a gendered food insecurity gap (Haque et al., 2024). These barriers hinder inclusivity and equity in agriculture, thus limiting women's agricultural participation, productivity, economic development and decision-making capabilities (Quisumbing et al., 2023). Although women in urban areas are deemed to have greater resources and opportunities, their experiences are not homogeneous. The persistent gender-based access to

agricultural resources including land ownership has been inextricably linked to food insecurity among urban women as they are not able to cultivate diversified crops (Nchanji et al., 2023). This highlights how structural, institutional and cultural factors affect women across all societies, with women in urban areas not being an exception. Previous studies, both internationally and within South Africa have assessed the relationship between women empowerment and food security, with a focus on rural women (Sharaunga et al., 2015; Murugani & Thamaga-Chitja, 2019; Tesafa et al., 2025). This study explores the relationship between women empowerment and food security among women in urban agricultural households in the City of Ekurhuleni Metropolitan Municipality, Gauteng Province, South Africa. Recognising the pivotal role women play in agricultural production and household nutrition, the research aimed to assess how access to resources, decision-making power, education, and participation in agricultural activities influence food security outcomes.

A cross-sectional, quantitative study was conducted among 216 women crop farmers in the urban areas of Ekurhuleni. The Food Consumption Score (FCS) was employed to measure food security, the Women's Empowerment in Agriculture Index (WEAI) was used to determine the empowerment of women in agriculture, and the ordered logistic regression model was employed as an analytic model. The results showed that over half of the women (57.9%) were empowered. Purchase, sale or transfer of assets (15.3%), leisure (34.3%) and access to and credit decisions (35.2%) were major contributors to the disempowerment of women. The majority of the households (89.4%) had an acceptable FCS, 9.3% had a borderline FCS and only 1.3% had a poor FCS. The findings revealed that age (coefficient=-0.05; p=0.052), educational level (coefficient=3.06; p=0.006), employment status (coefficient=1.37; p=0.051), business (coefficient=2.14; p=0.016), garden size (coefficient=-0.51; p=0.086), autonomy in production (coefficient=-2.85; p=0.022), access to and credit decisions (coefficient=0.78; p=0.94), control over use of income (coefficient=2.43; p=0.085) and workload (coefficient=1.70; p=0.089) were significantly associated with food security. Ethics clearance for this study was granted by the College of Agriculture and Environmental Sciences' Ethics Committee (Ref #: 2024/CAES_HREC/2583). The study sheds light on how barriers such as workload, and lack of access to land ownership and credit disproportionately affect women in the agriculture and food security paradigms.

This study contributes to proper policy recommendations to strengthen the gender lens in agriculture as a strategy to enhance food security in urban communities. Recommendations include gender-inclusive initiatives that are targeted to improve empowerment of women to positively influence food security.

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SAAFECS26-075

Knowledge Towards Pulses and Their Consumption: A Case Study of Agricultural Households in Ngqushwa Municipality

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Keywords: Pulses, Agricultural Households, Knowledge, Nutrition Benefits, Promotional Strategies

Pulses play a key role in household food security by advancing nutrition security (Nekesa *et al.*, 2024). Kebede, (2020) indicates that pulses contribute to income, food, and animal feed. Globally, pulses are regarded as a meat alternative because of their high protein content for human nutrition (Figueira *et al.,* 2019). The importance of pulses has been further emphasized by several interventions that have been implemented to increase their uptake on both local and international levels. This includes declaring 2016 as the year of pulses (Barners, *et al.,* 2021) and 10 February as world pulse day (FAO, 2023). However, despite the widely publicized benefits of pulses, pulses continue to be underutilized (Mfikwa & Kilima, 2014; Wihnham *et al.,* 2020). Research shows that knowledge plays a crucial role in adoption and could inform marketing strategies of pulses (Mfikwa & Kilima, 2014; Berhanu *et al.*, 2017). Data on knowledge of consumers towards pulses can guide future interventions aimed at increasing awareness and its consumption. Yet, studies on knowledge and attitudes towards pulses are limited (Yetnayet *et al.,* 2019), making it difficult for policymakers and other stakeholders to design and implement strategies to improve the uptake of pulses. Therefore, this paper aims to assess knowledge of pulses' consumption among agricultural households in Ngqushwa Local Municipality and identify factors that determine knowledge.

A cross-sectional, quantitative data was collected from 359 agricultural sampled households. Data was collected using a semi-structured questionnaire. Descriptive statistics and binary logistic regression model were employed to analyse data. A total of 18 questions were used to assess the knowledge. To determine the knowledge level, a mark of "1" was awarded for responses answered correctly while a mark "0" was awarded for incorrect answers. All correct answers were summed up and a score of 70% was regarded as adequate knowledge while less than 70% was regarded as inadequate knowledge as described by Kainga *et al.*, (2022); Berhanu *et al.,* (2017). Results revealed that majority of respondents (47,3%) were aged between 51 – 70 years, predominantly female (71,3%), and mainly single (44,8%). Majority of households (65,7%) comprised 1 to 4 members. More than half (56%) had completed high school, while only 10,3% had attained tertiary education. Majority (72,4%) were breadwinners, unemployed (69,6%), while household income was generally low with 65,6% respondents earning less than R6 000 per month. With regards to consumption knowledge, most respondents 58,2% knew that pulses can be used as meat alternatives and meat extenders (66,9%). Majority (96,7%) knew that consuming pulses with cereals provides complete protein, 96,9% identified pulses as a good protein source, 73,0% associated them with weight management, 50,4% with anti-cancer benefits, 54,0% with nutrient loss due to dehulling and 61,8% with flatulence and cramps. However, fewer respondents (49,3%) knew that pulses can be used as complementary foods, 37% knew that they can be cooked in bulk and kept in a freezer and only 2,5% identified pulses are part of meat and meat alternative food group. With regards to knowledge level, 61,3% of households demonstrated inadequate knowledge of pulses while 38,7% had adequate knowledge. Binary regression analysis revealed variables; land size and agricultural training showed a statistical significant influence at p=<0.001 on knowledge of pulses, household size (p=0.05), number of income earners (p=0.05), membership of agricultural group cooperation (p=0.010), farming experience (p=0.010), source of seeds from previous produce (p=0.010) and assistance from agricultural departments (p=0.05).

Ethical approval number: 2023/CAES_HREC/2402. Despite awareness of some nutritional benefits, overall knowledge of pulses among agricultural households in Ngqushwa Municipality remains limited. The findings align with previous studies which revealed that knowledge towards pulses is limited (Teshome *et al.,* 2020; Whinham *et al.,* 2020). Therefore, factors such as land size, training, farming experience, and institutional support play a critical role in shaping knowledge. Therefore, strategies aimed at increasing the knowledge towards pulses should focus on these factors.

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SAAFECS26-084

Household dietary patterns and nutrition in urban informal settlements: a case in Gompo Village in South Africa

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Keywords: Food Insecurity, Malnutrition, Informal Settlement, Social Grants

The rapid urbanisation in developing countries has given rise to pressing issues: the correlation between household food insecurity and the surge in overweight and obesity, particularly among children (FAO, 2023). This study, which sought to establish the prevalence of household food insecurity and acute malnutrition in children aged 6-60 months in informal settlements, underscores the urgent need for immediate attention and action.

A cross-sectional quantitative approach was employed. The Household Food Insecurity Access Scale (HFIAS) questionnaire, a validated tool for gauging the prevalence of food insecurity in households, was used to assess household food insecurity (Coates et al., 2007). The World Health Organisation (WHO) (2023) Anthro Survey tool, a widely accepted tool developed by the WHO for determining the nutritional status of children, was used in the analyses of the nutritional status of children. These tools were chosen to ensure the validation and reliability of the study findings. To further bolster the research's validity and reliability, moderate Acute Malnutrition (MAM) is defined as <-2 standard deviations (SD) and Severe Acute Malnutrition (SAM) is defined as <-3 SD. (WHO,2006)

Results showed that most households in the informal settlements were affected by poverty and unemployment, with many households relying on social grants or low-paying jobs. The high food prices have affected families' income, as they rely on the market for food. While rural communities depend on the land for consumption, urban communities have limited access to land, preventing them from supplementing their diets.

The findings show that while most households faced food insecurity due to reliance on low-income and government grants, their dietary patterns were characterised by a high intake of fats, starchy staples, protein and low consumption of vegetables and fruits. The mean household dietary diversity score was 5.12, indicating poor dietary diversity below the recommended level of above 6 and a lack of variety in their diets.

The household consumption relates to children's obesity by showing a high consumption of energy-dense, nutrient-poor foods. The high incidence of obesity in children is consistent with the household's dietary patterns, which are rich in fats, oils, and staples but lacking in fruits and vegetables. This is a concerning trend as early childhood obesity can lead to a range of health issues in later life. More boys than girls were overweight, aged 12-23 months. Moreover, households borrowed money and food from their social networks to address their dietary needs.

The findings underscore the critical need for comprehensive policies beyond income support to tackle the complex nutritional malnutrition challenges faced by informal settlement communities. Therefore, government policies must be formulated to empower caregivers in low-income households to reduce malnutrition in children, especially in low-income families. Intervention programmes should target women and low-income households, particularly in informal settlements. These intervention programmes should address dietary quality and stress the importance of nutrition while providing skills training that is urgently needed to improve the employment rate in Africa. Ethical approval number: UFS-HSD2019/1353/1703

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SAAFECS26-099

Navigating Nutritional Choices: Key Factors Influencing Food Preferences Among Office Workers in Tshwane Municipality, South Africa

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Keywords: Food Choices, Office Workers, Nutritional Awareness, Health Consciousness, Institutional Factors

Workplace environments significantly influence food consumption. In South Africa, a standard eight-hour workday, including one lunch hour, requires careful dietary planning. Research has shown that the amount of time workers spend in a day at work or in a work environment can affect their food consumption (Clohessy, Walasek and Meyer, 2019). While the National Guide for Healthy Meals, published by the Department of Health of South Africa, advocates for workplace health promotion, there remains a critical gap in understanding how workplace conditions influence employee food choices and their subsequent health outcomes. Employees' health and well-being can have a positive impact on the workplace; therefore, employers should create an environment that enables employees to choose healthy meals (National Department of Health, 2016).

A quantitative cross-sectional survey was conducted using a self-administered online questionnaire with 37 items. The study explored demographic factors, nutritional awareness, and institutional influences on food choices. Convenience sampling was employed.

Results revealed that most participants were young adults in their 20s and 30s, many of whom had completed higher education and were working full-time. The majority indicated that taste and convenience mainly influence their food choices. Despite participants' nutritional awareness, most did not prioritise nutritional value when purchasing food. A lack of consumption of fresh produce, with many participants never buying vegetables or fruits at work was observed. However, several employees demonstrated meal planning by bringing lunch from home.

Food choices among R21 Corporate Park employees are influenced by age, convenience, taste, cost, and time, despite high nutritional awareness. These findings underscore the need for integrated individual and institutional strategies to promote sustainable, health-conscious food practices in corporate settings as recommended by the United Nations Sustainable Development Goal 3 to promote good health and well-being (Hales and Birdthistle, 2023). The study received ethical clearance from the Human Research Ethics Committee (HREC) at Stellenbosch University (S23/11/316).

This study highlights the multifaceted nature of food choices among office workers at R21 Corporate Park, shaped by demographic, environmental, and behavioural factors. Despite high levels of nutritional awareness, taste, convenience, cost, and time were the dominant drivers of food selection, outweighing health and religious considerations.

While most companies lacked formal food policies, the presence of supportive infrastructure indicates potential for promoting healthier eating environments. These findings underscore the importance of integrating both individual and institutional strategies to foster sustainable, health-oriented food practices in corporate settings.

To support healthier food choices among office workers at R21 Corporate Park, both individual and institutional actions are essential. Employees are encouraged to make informed dietary decisions by opting for home-cooked meals, incorporating more nutrient-dense options, and advocating for improved food offerings in the workplace.

Company management should implement formal food policies and workplace nutrition education programmes, as the study found a positive link between education and healthier food choices. Policymakers also have a role in incentivising businesses to adopt workplace food standards and minimum environmental requirements that promote employee health.

Future research should expand to other corporate parks and adopt longitudinal designs to assess the long-term impact of interventions. Evaluating the nutritional quality of available food options would also provide deeper insights into how workplace food environments influence health and productivity.

Clohessy, S., Walasek, L. and Meyer, C. (2019) "Factors influencing employees' eating behaviours in the office-based workplace: A systematic review," Obesity Reviews, 20(12), pp. 1771–1780. Available at: https://doi.org/10.1111/obr.12920.

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SAAFECS26-101

Gendered decision-making dynamics and dietary diversity among farming households in Lesotho

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Keywords: Men’s Dietary Diversity, Women’s Dietary Diversity, Farming Households, Resource Allocation, Decision – Making, Nutrition-Sensitive Agriculture

High levels of malnutrition and food insecurity are common across developing countries, and Lesotho is no exception (FAO et al., 2024). Women and children are widely acknowledged as being among the most vulnerable groups (World Bank, 2023). As a result, existing research predominantly concentrates on their dietary diversity, with limited attention to men’s dietary patterns and their interaction with those of women within the same household (Otekunrin et al., 2023; Ochieng et al., 2017). As nutrition-related illnesses increasingly undermine adult productivity, it is essential to prioritize men's nutritional health—recognizing their vital role in driving economic development (Sangroula et al., 2020). Thus, this study sought to assess men and women’s dietary diversity and further explores the decision making dynamics within the farming households and their potential influence on the dietary diversity differences in men and women.

Farming households are generally expected to exhibit higher levels of both individual and household dietary diversity, owing to their engagement in food production and the income earned from selling agricultural outputs, which facilitates access to foods they do not produce themselves (Mkandawire and Hendriks, 2019). The study focused on smallholder farming households in Lesotho and a quantitative approach was employed. There are ten districts in Lesotho, and the sample size was drawn from four districts: Mafeteng, Berea, Thaba-tseka and Quthing. Each district represents the four agroecological zones in the country: Lowlands, Foothills, Mountains and Senqu River Valley, respectively (Bureau of Statistics (BOS), 2019). A questionnaire was used to collect quantitative data from 236 farming households. Ethical clearance was obtained from the University of the Free State Research Ethics Committee (UFS-HSD2021/1888/21).

Dietary Diversity Score was employed as a proxy for food and nutrition security (Batame, 2024). This score measured the diet diversity for male adults (> 18 years). The Individual Dietary Diversity Score measures micronutrient adequacy and indicates dietary quality. The score was used to assess the variety in diets for adult males as used in a similar study

(Otekunrin et al., 2023). The score is computed from 10 food groups: 1) Grains, white roots and tubers, and plantains 2) Pulses (beans, peas, and lentils) 3) Nuts and seeds 4) Dairy 5) Meat, poultry, and fish 6) Eggs 7) Dark green leafy vegetables 8) Other vitamin A-rich fruits and vegetables 9) Other vegetables 10) Other fruits. The minimum Dietary Diversity for Women (MDDW) was used to measure the dietary diversity for women which is based on similar food groups (Otekunrin et al., 2023; International Food Policy Research Institute, 2021).

The dietary diversity scores and household decision making variables were analysed using descriptive statistics. The findings indicated that majority (84.8%) of the male adults had low dietary diversity with a mean of 2.43, as they consumed less than five food groups and were vulnerable to nutrient inadequacy. The overall men's dietary diversity variety (mean = 3.21) is below the recommended intake of a minimum of 5 food groups. Only 20.6% of the women of reproductive age from farming households had consumed a recommended minimum of five out of ten food groups with a mean dietary diversity of 5.63. While the women are indeed more vulnerable, the low dietary diversity observed among men is concerning. For about half of the households both men and women jointly decide on farm production, non-farm income, farm income and food expenditure. Food purchases and food preparation are mainly done by women. The findings indicate that half of the households embrace joint decision making for resource allocation while the other half rely on one member of the household to decide.

The study concludes that men are also vulnerable to food insecurity and malnutrition, as indicated by the low dietary diversity, which highlights the urgent need for targeted and inclusive interventions. It is unexpected that the individuals from farming households are vulnerable to malnutrition when agriculture is a pathway to improving food security and nutrition. Food insecurity challenges may stem less from resource allocation decisions and more from the limited nutrition-sensitivity embedded within agricultural production systems. Thus, interventions that target both men and women are recommended and must include nutrition education on the importance of the production and consumption of diverse diets. Furthermore, nutrition-sensitive agricultural interventions remain critically important and deserve sustained emphasis in both policy and practice. To ensure more comprehensive findings, future research should incorporate additional indicators of individual food and nutrition security.

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Proximate Composition, Sensory Evaluation and Acceptance of Soft Sorghum Porridge (Lesheleshele) Fortified with Soybean Flour.

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Keywords: Sorghum, Porridge, Staple, Basotho, Soybean.

Sorghum (Sorghum bicolor) is a staple food crop in Lesotho, valued for its cultural, nutritional, and agronomic significance (Nkhabutlane et al., 2019). It is widely consumed as porridge ("lesheleshele"), bread, and traditional beer ("joala") and as weaning foods (Kazungu, 2023). Sorghum is recognized as a drought-resistant crop, essential for food security in rural communities (Schober & Bean, 2008, and Adebo, 2020) Despite its prominence, sorghum is limited in nutritional quality, particularly due to deficiencies in essential amino acids (Rashwan et al., 2021), which may contribute to malnutrition and diet-related health conditions among Basotho populations. Over-dependence on sorghum-based porridges as weaning foods and staple meals for both children and adults further exacerbates this nutritional gap. In contrast, soybean (Glycine max) offers substantial potential to enhance nutrition because of its exceptionally high protein content (45–55%), oil (28–34%), and dietary fibre (20–24%) (Funduluka, et al., 2023). It provides a complete amino acid profile and is a major global source of protein and edible oil. Incorporating soybean flour into traditional sorghum porridges has the potential to improve protein quality and overall nutrient density, thereby addressing malnutrition, especially among vulnerable groups such as breastfeeding mothers, children under five, and the sick or convalescent (Qin & Wang, 2022 and Adelakun et al., 2013). This study was undertaken to determine the nutritional, sensory, and consumer acceptance of sorghum porridge fortified with soybean flour, with the aim of improving the dietary quality of a culturally important Basotho food.

This research employed a mixed-method design combining laboratory based quantitative analysis with qualitative consumer evaluations. Sorghum flour was composited with soy flour at two substitution levels: 10% and 25% soybean flour. The nutritional composition of the fortified samples and control (100% sorghum) porridges was analyzed for moisture, protein, fat, fibre, ash, and carbohydrate content using standard procedures of the Association of Official Analytical Chemists (AOAC, 2010). To assess sensory qualities and consumer acceptance, focus group discussions were held in five districts of Lesotho (Butha-Buthe, Leribe, Mafeteng, Mohale's Hoek, and Quthing). These districts were selected to reflect the rural–urban and North–South variations of the country. Participants were community members (men and women aged 35–70 years) with experience in consuming sorghum-based traditional foods. Group sizes ranged from 9–15 individuals. The focus groups evaluated the fortified porridges in terms of colour, texture, taste, and overall acceptability. Agricultural extension officers assisted with mobilization and meeting logistics, ensuring culturally appropriate engagement.

The proximate composition analysis showed that protein content increased significantly with soybean substitution. Control sorghum porridge contained 9.9% protein, while 10% and 25% soy-fortified samples contained up to 14.6% and 21.4% protein respectively. On the other hand, the carbohydrate content was reduced from (67.3% in control to 60.3% and 55.8% respectively in fortified samples), while fat, fibre, and ash content increased modestly. Sensory evaluation revealed that fortified porridges were well accepted by consumers, with participants describing them as having a "beany", "buttery" and "milky" flavour. All participants expressed a preference for the fortified porridges, because of the improved taste, texture, and richness compared to traditional sorghum porridge. Importantly, acceptance was consistent across both rural and urban groups, suggesting that soybean has potential for application in Lesotho traditional dishes.

The study concludes that fortification of sorghum porridge with soybean flour significantly improves its nutritional and sensory qualities without compromising consumer acceptance. This innovation represents a culturally appropriate, affordable, and sustainable strategy to combat protein-energy malnutrition in Lesotho. The contributions of this research include: Scientific Contribution where it provides empirical evidence on nutrient enrichment of sorghum porridges with soybean, a relatively underutilized crop in Lesotho, cultural Contribution in which it demonstrates that fortification can be integrated into traditional Basotho diets without loss of cultural identity and practical Contribution in which it offers a food-based intervention model for rural households, schools, and feeding programmes.

It is recommended that the research be scaled up to examine the shelf-life, safety, and cost implications of soy-fortified porridges and to integrating nutrition education to improve community awareness and acceptance of soybeans. Ethics Approval: This study received ethical clearance from the National University of Lesotho (NUL) Research Ethics Committee. Approval Number: NUL-REC/2024/09/15.

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SAAFECS26-112

Healthy food choices: the relationship between consumer health consciousness and food-related information sources

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Keywords: Food Selection, Health Awareness, Information Channels, Information Search, Misinformation, Source Credibility

The rapid increase in non-communicable diseases impacts consumers worldwide, including lower-income countries where unhealthy dietary habits are prevalent (WHO, 2024). Consequently, consumers have become more aware of the impact of their food choices on their health, especially following the COVID-19 pandemic (Aksoy et al., 2021). However, consumers are challenged in making healthy lifestyle choices owing to the abundance of unhealthy foods and their personal knowledge limitations (Hunter-Adams & Battersby, 2020). Therefore, they require clear and accurate food-related information to enable them to make healthier food choices (Meijer et al., 2023).

Health-conscious consumers primarily rely on the nutritional information on food labels when making choices (Van der Merwe et al., 2024). However, they are also exposed to an abundance of other information sources which may include misinformation. Therefore, this study aims to describe the importance that consumers attach to different food-related information sources and how this relates to their health consciousness.

We conducted a quantitative survey using social media advertising and purposive sampling to recruit South African adult consumers involved in household food decision-making. Interested consumers (N = 419) provided informed consent before completing the online questionnaire. Based on Likert scales, the questionnaire included adapted versions of a health consciousness scale (Kraft & Goodell, 1993) (1 = not at all; 5 = a great deal), and respondents' reasons for specific food choices (Choi & Kwon, 2020; Dutta-Bergman, 2005) (1= strongly disagree; 5 = strongly agree). Additionally, we developed a scale measuring the importance they attach to various food-related information sources (1 = not at all; 5 = a great deal). Data analysis was performed using SPSS version 28 and included descriptive statistics, exploratory factor analysis, and Spearman's rank-order correlations.

Respondents were predominantly female (81%), Black (61%), and aged 30-49 years (53%). They were generally quite health-conscious (M = 3.9), agreeing with concerns about sugar and carbohydrate intake (M = 4.0), weight, nutrient, and ingredient control (M = 3.81), and fat and salt consumption (M = 3.6) as reasons for their food choices. They viewed both marketing efforts and the social environment (M = 3.9), along with formal, science-based information sources (M = 3.7), as quite important food-based information sources. Traditional mass media (M = 3.5) and social media and internet sources (M = 3.2) were of lesser importance. Health consciousness correlated with all information sources ($r \geq 0.55$) but was stronger with formal and science-based sources. Thus, the more health-conscious respondents were, the more they consulted diverse types of food-related information, not only formal or science-based sources. Ethics approval number NWU-00180-23-A1

Our findings identified a group of health-conscious respondents who cited health-related reasons for their food choices. Their strong interest in formal and scientific information sources is reassuring; however, this interest did not surpass the influence of social and marketing environments. Additionally, correlations between health consciousness and information sources suggest that even health-conscious consumers may be at risk of consuming misinformation. Therefore, it is crucial to educate consumers on selecting appropriate sources and evaluating the legitimacy of health-related food information. Furthermore, urgent attention to policy regarding the availability of credible information sources within marketing and social contexts is necessary, deserving further investigation.

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The Effectiveness of School Health Nutrition Programme to School Children Aged Between 11 To 13 Years: A Case Study Of Mutende Combined School in Luapula Province, Mansa District-Zambia

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Keywords: School Health and Nutrition (SHN), Feeding Program, Academic Performance, Retention, Hunger, Community Participation

This study assessed the effectiveness of the School Health and Nutrition (SHN) program for school-going children at Mutende Combined School in Mansa District, Luapula Province. Schools are widely recognized as effective platforms for promoting health and nutrition interventions among children (Bundy et al., 2011). The SHN program is considered a cost-effective strategy, particularly in resource-constrained countries, as it provides preventive health support and improves learners' cognitive development and academic performance (Galloway, 2019).

Globally, efforts to reduce hunger and poverty were emphasized under Millennium Development Goal 1, which aimed to eradicate extreme hunger and poverty (United Nations, 2012). School feeding initiatives have been promoted as both social protection measures and educational support mechanisms (Food and Agriculture Organization of the United Nations, 2014). Evidence suggests that school feeding programs function not only as nutritional interventions but also as long-term investments in human capital development (Gilligan, Adelman, & Lehrer, 2018). Research further shows that such programs enhance school participation, reduce dropout rates, and improve concentration among learners (Finan, 2010). According to Galloway (2019), well-implemented school feeding programs positively influence attendance and learning outcomes. However, implementation challenges often arise in low-income countries due to resource limitations and weak policy coordination (Neuman, 2010). In Zambia, limited empirical documentation exists regarding the effectiveness of SHN programs, despite national data highlighting educational performance trends (Central Statistical Office, 2012). Stakeholder participation is critical in ensuring the success and sustainability of school-based interventions (Patton, 2010). Their perceptions help identify implementation gaps and inform program improvements (Saunders, Lewis, & Thornhill, 2012). This study therefore sought to bridge the knowledge gap by evaluating the effectiveness of the SHN program at Mutende Combined School.

The study was guided by four objectives:

(i) to identify the benefits of the SHN program for learners;
(ii) to examine the effectiveness of program delivery;
(iii) to explore implementation challenges; and
(iv) to suggest strategies for improvement.

A mixed-methods approach was employed, combining questionnaires with Likert-scale items and structured interviews, consistent with social science research methods (Babbie, 2013; Creswell approach implied via Neuman, 2010). Data were presented using tables, charts, and graphs. The sample consisted of 100 respondents: one head teacher, nine teachers, 60 learners, and 30 parents. Random sampling was applied to teachers and the head teacher, while purposive sampling was used for learners and parents. Findings revealed that the SHN program significantly improved academic performance and school attendance. Most respondents confirmed that learners were healthier, more attentive, and more motivated to learn—outcomes consistent with previous findings on school feeding effectiveness (Bundy et al., 2011). However, challenges such as inadequate food supplies and limited review meetings were reported. Despite these constraints, the program was largely perceived as effective: 90% of parents, 80% of teachers, and 72% of learners reported positive impacts. The study therefore concluded that the SHN program contributes meaningfully to improved learning outcomes and child welfare. It is recommended that the program be strengthened and expanded to other schools within the district to maximize its educational and social benefits.

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Consumer behaviour and decision making

SAAFECS26-024

The logbook: a reliable tool for quantifying household food waste

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Keywords: Food Waste, Consumers, Measurement, Money Value, Prevention

Food waste (FW) is a critical global issue, significantly contributing to greenhouse gas emissions, ecological degradation, and resource inefficiency (UNEP, 2024). According to recent estimates, 60% of food waste originates from households, followed by 28% from food service establishments and 12% from the retail sector (UNEP, 2024). Consumer behavior in Western countries plays a substantial role in driving food waste generation. For instance, in Canada alone, 2.2 million tonnes of edible food are discarded each year, representing an economic loss exceeding 17 billion dollars (RECYC-Québec, 2025).

To ensure accurate monitoring of the situation's evolution, it is essential to implement reliable methods for measuring food waste, particularly at the consumer level. The first objective of this study is to evaluate the validity of food waste measurement using a self-reported logbook. To enhance public awareness, assigning a monetary value to discarded food would help individuals grasp the tangible impact of their actions. Accordingly, the second objective is to quantify food waste in economic terms, making the problem more concrete and actionable.

During the summer of 2020, 39 adult participants (Province of Quebec, Canada) completed the logbook, reporting a total of 1,264 wasted food items. In the first step, participants completed a short questionnaire on socio-demographic characteristics and estimated their food waste frequency by category, using a standard grocery bag as a reference. In the second step, participants recorded food waste over one week. For each discarded item, they took a photo and provided a brief description. Items were considered wasted if diverted from human consumption. Participants estimated quantities using a hand-based reference tool (e.g., a finger = 15 mL, a fist = 250 mL), allowing consistent volume estimation without a weighing device. A dietetic technician converted volumes using the Canadian Nutrient File. A big data expert then calculated the monetary value using a 2022 price list of over 350 North American food items, provided by a global firm specializing in audience measurement, data collection, and analytics.

Preliminary results indicate that fruits and vegetables are the most frequently discarded, consistent with findings from previous studies. Some variation was observed across food categories, particularly when comparing participant-reported estimates with those assessed by the dietetic technician. Statistically significant differences emerged for certain categories; however, no significant difference was found when considering the total volume of food waste. The use of a logbook appears to be a reliable and user-friendly method for compiling household food waste data. Monetary value analyses are still underway (ethical review at Laval University, certificate # 2019-364/24-01-2020).

Reliable measurement of food waste is essential to assess its magnitude. To balance data validity with participant feasibility, the logbook method yields realistic estimates. However, recording waste over seven consecutive days is demanding. Future research should explore whether shorter durations can maintain data quality. These findings are particularly relevant for researchers operating under budget constraints. Collaboration with a dietetic technician and a big data analyst enabled accurate quantification and full utilization of collected data. Maximizing the analytical value of such data is crucial for deepening understanding of food waste dynamics. Finally, assigning a monetary value to food waste enhances consumer awareness by illustrating its direct financial impact.

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Exploring consumer perspectives and decision-making of Generative Artificial Intelligence tools in higher education: A qualitative study

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Keywords: Consumer Behavior, Technology Adoption, Digital Literacy, Decision-Making

Consumers have always had an impact on the development and implementation of digital products over time (Ratchford, 2019). This time around, they have engaged with Generative Artificial Intelligence (GAI) products in higher education (Yusuf et al., 2024; Bobula, 2024). GAI products are known as AI technology that has the ability to generate new outputs such as text, images, and videos (Bahroun et al., 2023). It has been noted that in education, consumer responses to GAI are influenced by factors such as trust, privacy concerns, emotional reactions, and expectations of performance (Granić, 2025; Mutanga et al., 2024). The researchers argue that GAI tools in education should be understood not just as technologies, but as consumer products that consumers actively engage with, evaluate, and adopt. This study explores AI tools as consumer products within the higher education context. It aims to understand how lecturers perceive and engage with these tools, what decisions they make regarding their use, and what shape their behaviour. This is important because the voices of the consumers in education have an impact on how GAI products are designed, marketed, and adopted in education.

The study used a qualitative data collection method through semi-structured interviews. This method allowed for in-depth exploration and understanding of the perspectives of GAI products in higher education. The selected participants were the professionals who have experience with GAI tools in the academic space. For this study, face-to-face interviews were conducted in the University of the Free State (UFS) Bloemfontein campus, in South Africa. The researcher scheduled appointments with the participants. Thematic Analysis was used to analyse the interview transcripts. The study was approved by the University of the Free State's General and Human Research Ethics Committee (Approval number: UFS-HSD2023/0744), and written consent was provided by the participants. The data was anonymous to protect the identity of the participants. The qualitative approach was particularly suitable for this exploratory study, as it allowed the researcher to capture the nuanced and context-specific insights of participants, thereby contributing to a deeper understanding of AI adoption in educational settings.

The main themes that were identified were perceived value and use, ethical concerns and responsible use, digital skills and learning curve, access and institutional support. The results of the study reveal that the consumers in education are familiar with GAI products, and they are extensively using them. The products they use the most are ChatGPT, Grammarly, Quilbot, and Copilot, and they expressed that the tools are useful for productivity, but they are also sceptical because of the unknown risks of the products, and it's potential to undermine academic integrity. The study also reveals that lecturers, as consumers of GAI tools, engage in a difficult decision-making process that is shaped by their needs, ethics, skills, and institutional context. Their experiences are reflective of broader patterns in technology adoption, where perceived value must be weighed against responsible use and academic integrity.

The research emphasises that GAI tools should not be seen as just technical products, but they also form part of people's social, ethical, and institutional systems. Understanding how consumers interact with these products can inform better design, governance, and integration strategies in higher education.

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SAAFECS26-057

Fashion Sustainability: How South African Consumers Translate Knowledge into Action

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Keyword: Fast Fashion Objective Knowledge Subjective Knowledge Consideration of Future and Immediate Consequences

Fashion consumption reflects identity and lifestyle (Roster, 2024:4), yet the rise of fast fashion has normalised frequent, low-cost purchases at the expense of environmental, social, and economic sustainability (Bick *et al*, 2018). This pattern of short-lived satisfaction and rapid disposal contributes to waste and unsustainable consumer behaviour (Magwegwe & Shaik, 2024). Contrariwise, informed decision-making, grounded in reliable knowledge, is essential to promote more sustainable fashion practices (Patwary *et al,* 2023:5) and long-term consumer well-being.

Against this backdrop, this study examined South African consumers' knowledge (subjective and objective knowledge) of sustainability, sources of knowledge and its influence on fashion-related decision-making, with particular attention to how they balance immediate gratification against future consequences.

A quantitative research design was employed, using an online questionnaire to collect data from a convenience sample of South African consumers (N = 368) ≥18 year who had previously purchased fashion products. The study obtained ethical approval from the ethics committee (XXX-00101-24-A1).

More than half of the sample was young (18-35 years), predominantly female respondents. Nearly all respondents having attained at least grade twelve education. Data were analysed using descriptive statistics (frequencies and means), t-tests, ANOVAs, exploratory factor analysis, cross-tabulations and correlations to identify trends, associations and effect sizes.

Knowledge was found to be a critical factor influencing sustainable consumption. Respondents' subjective knowledge indicates a false sense of confidence in their own knowledge with mean factor scores measuring neutral (m = 3.040) regarding *Self-perceived fashion insight* and agreeing (m = 3.640) towards *Self-perceived fashion mavin* on the Likert scale. However, only half of respondents (56%) measured to have some objective knowledge about fashion sustainability. An indication that South African consumers are still unsure regarding the fashion industry. Notably, the correlation between objective knowledge and future consequences ($r = 0.283$) and immediate consequences ($r = -0.315$) indicated that respondents with higher levels of objective knowledge were more likely to consider long-term consequences and engage in more sustainable fashion behaviour. Education emerged as a decisive variable: the effect sizes of respondents holding bachelor's ($d = 0.73$) or postgraduate ($d = 0.59$) degrees achieved significantly higher knowledge scores than those with lower levels of education ($d = 0.30$). This suggests that increased fashion knowledge, often tied to higher education, can foster more sustainable consumer shopping behaviour.

Demographic differences additionally revealed age-related differences in fashion behaviour. Younger consumers (18–35 years) are more inclined to shop for personal gratification, prioritising immediate pleasure, while older consumers (36+) display more future-oriented behaviour, purchasing primarily when necessary and showing greater consideration for long-term consequences. Older respondents were also less likely to shop online, suggesting potential concerns about trust, payment security, or a preference for physically evaluating garments before purchase. Across age groups, friends and family remain the most trusted sources of fashion information, underscoring the continued importance of interpersonal networks in consumer decision-making.

A real-life scenario choice question presenting the respondents with three T-shirt options, varying in price, quality, and production location, showed that nearly 50% selected the higher-priced, organic, locally produced option. This finding suggests that quality and brand may outweigh cost considerations for many consumers. However, when asked directly which factors they consider most important when making fashion purchases, price was still the most frequently reported criterion. This apparent inconsistency highlights the complex interplay between what consumers say they do and what they actually do.

This study confirms that South African consumers lack objective sustainable fashion knowledge which is fuelled by a false sense of higher/ misplaced subjective knowledge. The results highlight the need for targeted educational and awareness campaigns to strengthen consumers' objective knowledge and confidence, enabling them to make more sustainable choices that reduce immediate gratification and leave room for more future oriented decisions. Additionally, South African consumers are still largely influenced by traditional shopping methods, preferring brick-and-mortar shopping and valuing advice from friends and family. Trustworthy and accessible sources of information are essential to shift towards sustainability. The findings further suggest opportunities for policymakers, educators, and the fashion industry to promote local, ethically produced products, thereby contributing to economic empowerment, environmental protection, and long-term consumer well-being. By foregrounding the role of knowledge and education in shaping sustainable fashion consumption, this research provides both theoretical contributions to consumer behaviour studies and practical insights for fostering responsible, future-orientated consumption practices in South Africa.

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Demographic differences in consumers' perceptions of clothing retailers' corporate social responsibility: evidence from South Africa

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Keywords: Corporate Social Responsibility (CSR), Consumer Perceptions, Demographics, Clothing Retail, Emerging Market Context, Purchase Intention

The textile and clothing industry ranks among the world's most significant contributors to environmental degradation, a problem that continues to worsen as global resource use surpasses the planet's ability to sustain it (Leal Filho, Dinis, Liakh, Paço, Dennis, Shollo & Sidsaph, 2024; United Nations, 2021). The rise of fast fashion, which promotes frequent, low-cost purchases and accelerated consumption-disposal cycles, further exacerbates the crisis (Niinimäki, Peters, Dahlbo, Perry, Rissanen & Gwilt, 2020). Beyond its ecological burden, fast fashion is often associated with exploitative labour practices, low wages, and unsafe working conditions (Ting & Stagner, 2021). In South Africa, the influx of cheap imports has further weakened the local clothing sector, resulting in significant job losses (Wood & Bischoff, 2020).

In response to the above challenges, many retailers have adopted Corporate Social Responsibility (CSR) frameworks, aligning their strategic agendas with the triple bottom line framework, which emphasises social (people), economic (profit), and environmental (planet) imperatives (Hourneaux Jr, Gabriel & Gallardo-Vázquez, 2018; Urošević, Vuković

& Dobrosavljević, 2019). Although CSR adoption is increasingly common, the effectiveness of these initiatives varies. Evidence from developed markets demonstrates that demographic factors significantly influence consumers' perceptions of CSR and their associated purchasing behaviour (Furman, Maison & Sekścińska, 2020). Yet, these dynamics remain underexplored within emerging economies, particularly in South Africa's clothing retail industry. To address this gap, the current study examined demographic differences in consumers' CSR perceptions of South African clothing retailers and their purchase intentions.

A quantitative cross-sectional survey research design was employed. A sample (N=1632) consisting of male and female respondents aged 18 years and older were recruited through non-probability convenience and snowball sampling. A structured questionnaire, distributed via online platforms, was used to collect the data. Items measuring CSR perceptions and purchase intentions were adapted from established scales (Alvarado-Herrera, Bigne, Aldas-Manzano & Curras-Perez, 2017; Diddi & Niehm, 2016; Öberseder, Schlegelmilch, Murphy & Gruber, 2014).

Exploratory factor analysis (EFA) identified the underlying structure in the consumers' CSR perceptions. Independent samples t-tests and one-way analysis of variance (ANOVA) were done to determine differences across demographic groups concerning CSR perceptions and purchase intent. Post hoc Bonferroni tests were performed to pinpoint the specific differences.

The EFA yielded six distinct factors reflecting consumers' CSR perceptions: (1) supplier and other stakeholder relationships, (2) support of environmental and social causes, (3) quality customer services, (4) recycling, (5) pricing policies, and (6) economic performance. While these factors did not exactly resemble the dimensions identified by Öberseder et al. (2014), they broadly aligned with the triple bottom line framework. Factors relating to supplier and stakeholder relationships, quality customer services, reasonable pricing, and economic performance achieved high mean scores, indicating strong consumer approval. Conversely, recycling scored the lowest, suggesting consumers comparatively less valued this initiative.

The independent t-tests showed significant gender-based differences concerning support for environmental and social causes, as well as quality customer services. The ANOVAs showed significant age-based differences in perceptions of supplier and other stakeholder relationships and recycling initiatives. Educational level was associated with significant differences across four factors, though not in supplier and other stakeholder relationships or pricing policies. Income level differences emerged across supplier and other stakeholder relationships, quality customer services, recycling initiatives, and pricing policies. In contrast, no significant differences existed across population groups for any of the six factors. Furthermore, purchase intention varied significantly only by gender and education level.

The study concludes that demographic variables, particularly age, education, gender, and income, play a role in South African consumers' perceptions of clothing retailers' CSR and their purchasing intentions. The findings offer valuable managerial implications by enabling retailers to refine marketing strategies and emphasise specific CSR initiatives for different consumer segments. Theoretically, the findings extend existing CSR literature by providing insights from an emerging market context, particularly within the clothing retail industry. Future research should adopt a qualitative approach to further explore the underlying motivations driving demographic differences across the CSR perceptions, thus enhancing understanding in this area. Ethics approval number: Reference number: 180000004

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The hidden cost of change: How changing store layouts exhaust rather than engage employed female shoppers

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Keywords: Consumer, Challenges, Employed Females, Retail Environment, Store Layout

Despite the stimulation, impulse purchases and increased profits resulting from store layout changes (Gul *et al.,* 2023), frequent in-store layout changes may complicate the shopping experiences of employed female (EF) consumers who often carry the dual burden of professional and household responsibilities. This discrepancy stems from the difference between profit-driven and consumer-centric retail strategies, highlighting a significant market gap that adds to stress and frustration for EFs. This research study investigates the specific challenges and coping strategies of South African EFs within the retail environment, aiming to contribute indigenous knowledge and provide insights to retailers to support this significant consumer segment by highlighting the overlooked

implications of disconnection between retailer goals and consumer needs, such as the unintended consequences of changing store layouts.

Globally, women represent a dominant consumer segment, responsible for 70–80% of consumer spending and influencing over 85% of purchasing decisions (Forbes, 2024). In Africa, 71% of women are responsible for grocery shopping and 60% are identified as primary household purchasers (IOL, 2019). In South Africa, EFs work an average of 42 hours per week, 33% higher than the European average, despite household responsibilities, resulting in acute time scarcity and the adoption of coping strategies that shape purchasing behaviour.

A qualitative research design was employed using purposive and snowball sampling. Four focus group discussions (N=26) explored the shopping challenges and coping strategies of EF consumers. An interview guide facilitated structured yet flexible discussions, and data were analysed using content analysis with themes, categories, and sub-categories coded. Ethical clearance was obtained from the Health Research Ethics Committee (HREC) (XXX-00003-19-S1).

Time scarcity emerged as the most significant challenge for EF participants, exacerbated by long workhours, caregiving responsibilities, and rising living costs. Within the retail context, frequent store layout changes emerged as a key source of frustration, intensifying cognitive and emotional strain. As one participant noted, *"There is no time to stand around and look for things"*.

Rather than seeking novelty, participants valued in-store familiarity as a crucial coping strategy. Consistent layouts, precise product placement, and efficient checkout processes were perceived as time-saving and stress-reducing, with many participants being willing to pay more for features representing in-store familiarity.

Findings align with the existing literature, which highlights modern consumers' increasing constraints of time and money (Stulec *et al.*, 2016), as well as the higher cognitive load and reduced processing fluency associated with visually complex store environments (Kalantari *et al.*, 2023). Consequently, reinforces the detrimental impact of constant layout changes on overstretched consumers.

This study highlights a critical mismatch between retailer strategies and consumer realities. For EFs, novelty can be more exhausting than engaging. Retailers are therefore encouraged to limit unnecessary store layout changes and prioritise consistency and predictability. They should also introduce navigation aids (e.g., signage, in-store maps, or mobile apps) when changes occur and adopt women-centric retail strategies, acknowledging the pivotal role of EF consumers in household purchases and market growth in South Africa.

This study was limited to a small urban sample of South African EFs, restricting generalisability, however, future research should explore diverse consumer groups, and compare rural and urban experiences.

By centering on the intersection of gender, employment, and retail design, this study contributes to indigenous knowledge of South African consumer behaviour. It offers insights for retailers, and educators to design sensory appealing consumer environments that reduce stress and support one of the most influential emerging consumer groups, the “she-conomy” (Entrepreneurs’ Organization, 2024).

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Household food waste drivers in a South African semi-urban township

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Keywords: Food Wastage, Food Insecurity, Consumption Patterns, Storage Practices

Household food waste remains a critical global and national challenge, with South Africa generating an estimated 10.3 million tonnes annually despite persistent food insecurity (Bega, 2021; Oelofse, Polasi, Haywood & Musvoto, 2021; Stats SA, 2023). Research highlights that households are significant contributors to food wastage, influenced by factors such as poor storage, limited food management skills, leftovers, and socio-cultural practices around food preparation (Schanes, Dobernig & Gözet, 2018; Herzberg, Schmidt & Schneider, 2020; Oelofse et al., 2018; Andrews et al., 2018; Van der Werf, Seabrook & Gilliland, 2019).

This study focuses on a semi-urban township surrounded by significant informal settlement areas, where high unemployment, poverty, and environmental concerns intensify the impact of household food waste. The study aimed to determine the factors contributing to household food waste and evaluate household-level mitigation practices in a semi-urban township in South Africa. The study followed a quantitative, non-experimental research design, employing a non-probability random sampling technique, resulting in 426 participants giving informed consent. Ethical approval was obtained, and the piloted questionnaire included seventy closed-ended questions focusing on socio-demographic information, reasons for food wastage, the most common foods wasted, and any preventative measures or practices applied by the participants.

The socio-demographic profile of participants revealed that the majority were women (77.5%), with the largest proportion falling within the 18 – 30-year age group (72.0%). Although 76.6% reported having a certificate or diploma, a substantial proportion (68.1%) were unemployed. Household sizes were predominantly consisting of 3 to 4 members (66.7%), while a notable proportion reported larger households with seven or more members (28.9%).

Food preparation practices indicated that nearly all households prepared food daily (92.9%), with 43.3% preparing meals three times per day. Most of the food was consumed at home (89.0%), and electricity was the primary source of energy for cooking (90.6%). Despite widespread access to storage facilities, 87.8% for dry storage and 78.4% for refrigerator storage, food wastage was commonly attributed to products expiring (65.8%) or being stored for extended periods without consumption (54.6%). Food purchasing patterns revealed that many respondents (63.1%) conducted grocery shopping monthly, with walk-in shopping being the predominant method (n=407; 93.3%). Public transport was the most frequently used mode of travel for shopping (62.6%). The responsibility for food shopping was primarily assumed by mothers (78.7%), highlighting the central role of women in household food procurement. Concerns regarding food waste were linked to storage-related challenges, with 20.6% of participants reporting that they "always" checked grocery cupboards for rodent damage and a further 25.2% doing so "very often." In terms of food preparation, meals were predominantly cooked and consumed immediately (54.6%), although 24.1% of respondents indicated preparing food in advance for one to two days. Among the strategies adopted to mitigate food waste, the most frequently reported was maintaining an organised grocery cupboard (51.1%). Recycling and sustainable practices were less common, as only 36.7% of respondents maintained a fruit or vegetable garden, and 25.0% reported using leftover food for composting. In terms of food categories, dairy products emerged as the most frequently wasted, particularly milk (28.7%), followed by vegetables and fruits, which are highly perishable.

The high wastage of nutrient-dense and perishable foods, particularly milk, vegetables, and fruits, underscores both nutritional and economic consequences of household-level food loss. Findings indicate that household food waste is shaped by behavioural practices such as bulk monthly purchasing, immediate consumption with limited leftover use, and inadequate recycling, as well as structural and contextual challenges, including unemployment, reliance on public transport for food access, and rodent-related storage issues. Addressing these drivers requires evidence-based awareness campaigns complemented by behavioural and infrastructural interventions, such as food literacy training, resilient and affordable storage solutions, and strengthened community support systems. Given that women, particularly mothers, are central to household food procurement, interventions should be tailored to empower female food managers with sustainable practices. Policies and programs should be sensitive to local customs while promoting food literacy, sustainable household practices, and infrastructure development to reduce preventable losses. By targeting the socio-demographic and contextual root causes, interventions can contribute to reducing food waste, improving household food security, and advancing progress towards Sustainable Development Goal 12.3.

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Investigating the KAP principles regarding Single-Use Plastics (SUPs) products in Johannesburg: Perspectives on the 9R Framework

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Keywords: Consumer, Plastic, Knowledge, Practices, Johannesburg

Growing concerns about climate change and unsustainable consumption have drawn urgent attention to the need to transition from a linear to a circular economy (Ghisellini et al., 2016). Plastic, while inexpensive, versatile, and beneficial in many sectors such as packaging, construction, and medical devices, has become a significant environmental challenge due to the prevalence of single-use plastic (SUP) products and inadequate waste management (Sereda & Flores-Sahagun, 2023). In South Africa, the scale of plastic consumption is substantial, with 1,568 kilotons of virgin polymer consumed in 2023, nearly half of which was used in packaging (Plastics SA, 2024). While some progress has been made in recycling, high rates of plastic pollution persist, raising questions about consumer awareness, knowledge, and practices related to SUPs. Johannesburg, as one of South Africa's largest urban centres, provides a critical context for examining consumer behaviour and its environmental consequences (Fortunov, 2024). Previous international studies have revealed an attitude–behaviour gap in sustainable consumption, where consumers express environmental concern but fail to consistently translate it into action (Salas-Zapata et al., 2018). However, limited research has been conducted in South Africa using frameworks that capture consumer perspectives holistically. This study addresses this gap by applying the Knowledge, Attitudes, and Practices (KAP) model alongside the 9R circular economy framework to explore Johannesburg consumers' behaviours toward SUPs.

This study adopts an interpretivist paradigm to capture the multiple realities that shape consumer decision-making and behaviour. A qualitative research design will be employed to provide in-depth insights into consumer knowledge, perceptions, and practices related to SUP products. Semi-structured interviews will be conducted with adult consumers (18+ years) in Johannesburg, allowing participants to reflect on their lived experiences and behavioural choices regarding plastic use, disposal, and sustainable alternatives. Thematic analysis will then be applied to identify recurring patterns, with coding guided by the principles of the 9R framework (Refuse, Rethink, Reduce, Reuse, Repair, Refurbish, Remanufacture, Repurpose, Recycle, Recover) (Ritchie et al., 2023). The KAP framework will structure the analysis to examine not only levels of knowledge and awareness but also attitudes toward sustainability and the practices adopted in everyday life (Paço & Lavrador, 2017). A reflexive approach will be applied throughout, ensuring that researcher subjectivity and contextual factors were critically acknowledged.

This research contributes to the body of knowledge by integrating the KAP and 9R frameworks within a South African urban context, offering a nuanced understanding of consumer engagement with SUPs. It is envisioned that multi-level interventions be supported, namely for policymakers, stricter regulations on SUP production and greater investment in waste management infrastructure; for industry, the prioritisation of affordable, accessible alternatives alongside transparent sustainability communication; and for consumers, targeted education campaigns to enhance understanding of the 9R practices and the long-term benefits of adopting them. Importantly, this study should highlight the need to bridge the gap between consumer concern and action through collaborative efforts involving government, businesses, and civil society. By identifying the specific challenges and opportunities within Johannesburg, the findings can inform national strategies and broader regional efforts to transition toward circularity.

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From dissatisfaction to action: Developing a taxonomy of consumer complaint intentions for South African clothing retailers

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Keywords: Consumer Complaint Intentions, Consumer Complaint Behaviour Taxonomy, Clothing Retailing, Customer Dissatisfaction, Clothing Product Failures, Service Recovery

The global clothing retail industry continues to grow, accompanied by intensified competition driven by aggressive pricing and marketing strategies. This dynamic environment shifts power towards consumers, compelling retailers to prioritise customer satisfaction as a pathway to loyalty, profitability, and enduring relationships (Kuhn & Mostert, 2015). While satisfied customers reinforce positive outcomes, dissatisfied consumers can engage in negative post-purchase behaviours that undermine profitability and reputation (Lamb, Hair, McDaniel, Boshoff, Terblanché, Elliott, & Klopper, 2015).

Although customer complaints are often perceived negatively, they offer valuable insights into service or product failures, providing opportunities for retailers to enhance offerings and strengthen relationships. Effective complaint handling, also referred to as service recovery, can transform dissatisfaction into satisfaction, loyalty, positive word-of-mouth (WOM), and long-term profitability (Blodgett, Bakir, Mattila, Trujillo, Quintanilla, & Elmadağ, 2018).

The digital marketplace, characterised by technological advancements and the widespread use of social media, transforms consumer complaint behaviour. Consumers now possess unprecedented ability to disseminate negative word-of-mouth, amplifying the reputational risks for retailers when complaints are not adequately addressed (Lee & Cude, 2012).

Scholars have developed multiple conceptualisations, typologies, and taxonomies to suggest consumers' complaint paths in response to dissatisfaction. Pioneering typologies include Day and Landon's (1977) taxonomy, which distinguishes between no action and action-oriented responses, with the latter categorised as private or public. Singh (1988) differentiates complaint behaviour into voice, private, and third-party responses. Later refinements consider the proliferation of complaint channels. Mattila and Wirtz (2004) introduce interactive and remote channels, while Clark (2013) and Zaugg (2006) recognise social media as a semi-interactive channel.

Despite these advancements, researchers have made little progress in developing an integrated consumer complaint behaviour taxonomy specific to clothing retail in South Africa, where multichannel retail environments and consumer dissatisfaction present unique challenges. Addressing this gap is critical, as such a taxonomy enhances understanding of how product and service failures trigger consumer complaint intentions or behaviours in this context. Therefore, this study aimed to develop an integrated taxonomy of consumer complaint intentions for South African clothing retailers.

This study adopted a cross-sectional survey design, employing a self-administered online questionnaire, with items developed from existing scales and some self-developed, tailored to a complaint scenario, and distributed using Qualtrics software. The study was exploratory and descriptive, following a quantitative approach. The unit of analysis comprised clothing consumers who resided in South Africa and were 19 years and older at the time of the study. Trained fieldworkers recruited a diverse sample of respondents (1814, n1) using non-probability quota, convenience, and snowball sampling, of which 1448 (n2) respondents were willing to take complaint action.

Exploratory factor analysis (EFA) identified, and confirmatory factor analysis (CFA) confirmed, four distinct complaint factors: (1) electronic complaints, (2) switching intention, (3) remote complaints directed to the retailer, and (4) negative word-of-mouth. These findings culminated in the development of a comprehensive, integrated taxonomy of consumer complaint intentions within the South African clothing retail context.

Overall, the taxonomy highlights that the distinction between private action (where retailers remain unaware of consumer dissatisfaction) and public action (where dissatisfaction is visible to retailers) is less clear-cut than in earlier consumer complaint behaviour (CCB) taxonomies. Contemporary consumers rely heavily on electronic channels to voice dissatisfaction to retailers, family, and friends, thereby blurring the boundary between private and public complaint behaviour.

The research makes two key contributions. First, it enriches the academic literature by extending existing frameworks on consumer complaint behaviour to the underexplored South African retail landscape. Second, it provides practical implications for clothing retailers, offering insights into how consumers are likely to express dissatisfaction and which complaint channels are most salient. Understanding these patterns can inform more effective complaint-handling strategies, minimising reputational risks while fostering long-term consumer trust and loyalty.

The study's taxonomy is grounded in legitimate consumer complaint intentions. However, future research should address illegitimate complaint behaviour, such as false or exaggerated claims (Arora & Chakraborty, 2020), which remains difficult to investigate given consumer reluctance to disclose such actions. Innovative methodologies, such as projective techniques (Donoghue, 2000), combined with in-depth interviews, may provide a promising avenue for exploring this complex phenomenon in the South African emerging market context. Ethics approval number: The research received ethics approval from the University of Pretoria's Ethics Committee. Reference number: NAS169/2019.

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Shopping Interrupted: Understanding the influencing factors driving female consumers' online clothing shopping cart abandonment

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Keywords: Online Shopping Cart Abandonment, E-Commerce, Online Shopping Practices, South Africa, Online Clothing Shopping

Technological advances over the last few decades have resulted in the continuous growth of e-commerce globally (Rubin, Martins, Ilyuk, & Hildebrand, 2020). As a result of this worldwide growth, South African e-commerce has also rapidly expanded (Makhitha & Ngobeni, 2021). Clothing has become one of the most significant categories within this expansion (Bashir, 2025). Despite its popularity, retailers are still combating "tremendous loss caused by online shopping cart abandonment" (Tang & Lin, 2018: 533).

Online shopping cart abandonment (OSCA) occurs when consumers fail to complete transactions despite adding items to their online cart (Sondhi, 2017). This behaviour results in sales losses due to unconverted purchase intentions (Song, 2019). While OSCA research is limited (Wilson & Ndoro, 2023), even fewer studies address the clothing e-commerce sector in South Africa. This study explored the influencing factors driving female consumers' OSCA behaviours.

The study adopted a cross-sectional survey design with a quantitative, exploratory-descriptive purpose. Data were collected via an online self-administered questionnaire developed in Qualtrics. Items were adapted from existing scales and measured on a five-point Likert-type agreement scale. Female respondents aged 18 years and older, residing in South Africa and purchasing clothing online, were recruited using convenience and snowball sampling techniques (N = 243). Before data collection commenced, the questionnaire was pre-tested to refine the items and enhance clarity. Ethics approval was granted (NAS022/2023).

Descriptive statistics indicated that female consumers are most likely to abandon online shopping carts due to high shipping fees, product quality and fit concerns, and perceived risks to personal or financial information. Website navigation, lack of reviews, and low visual appeal further contributed, underscoring the importance of secure, user-friendly, and visually engaging platforms.

Inferential statistics included an exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). A five-factor solution was retained: Factor 1: User interface; Factor 2: OSCA; Factor 3: Online store policy; Factor 4: Entertainment; and Factor 5: Research and Information. A subsequent CFA confirmed the factorial structure, with the measurement model accepted based on satisfactory fit indices.

Multiple regression modelling tested the influence of the independent variables (user interface, online store policy, entertainment, and research and information) on the dependent variable, OSCA. The results revealed that entertainment and research and information were statistically the most significant predictors ($p < 0.001$). User interface was also statistically significant ($p < 0.05$), while online store policy was statistically insignificant ($p = 0.807$), suggesting this factor does not influence female consumers' decisions to abandon online shopping carts. The model achieved an R^2 of 0.311, indicating that 31.1% of the variability in OSCA can be explained by the identified independent variables.

The findings highlight that female consumers who use online shopping carts for entertainment or product research are more likely to abandon them. Similarly, user interface elements such as design, functionality, and navigation significantly affect abandonment behaviour. Conversely, online store policy (e.g., privacy or refund policies) does not appear to affect cart abandonment, potentially due to increased consumer familiarity with online shopping practices.

This study provided valuable insights into the factors influencing OSCA among South African female consumers. However, the reliance on convenience and snowball sampling produced a sample skewed towards younger generations (Gen Z and Millennials) and white females. Future research should therefore employ broader recruitment strategies to ensure greater demographic representation.

Despite these limitations, the study contributes to the limited body of South African research on e-commerce behaviour by identifying significant predictors of OSCA, explaining just over 31% of variance. This highlights the need for future studies to adopt mixed or qualitative approaches that can capture broader behavioural, psychological, and contextual influences.

The findings not only enrich the academic discourse on consumer behaviour in emerging markets but also provide practical recommendations for e-tailers. Strategies to minimise OSCA should prioritise improving website design and functionality, ensuring accurate product information, and recognising that many consumers use online shopping carts as tools for browsing and research rather than immediate purchasing.

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SAAFECS26-119

Factors Influencing Maternal Nutrition Among Pregnant Women In Three Selected Peri-Urban Areas In Kitwe District-Zambia

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Keywords: Maternal Nutrition, Cultural Influences, Socioeconomic Factors, Nutritional Deficiencies, Kitwe Peri-Urban, Public Health Interventions, Dietary Habits

This study investigated the factors influencing maternal nutrition among pregnant women in Kitwe peri-urban, Zambia. Maternal nutrition plays a crucial role in ensuring the health and well-being of both the mother and her unborn child, as adequate nutrient intake during pregnancy is directly linked to fetal growth and development (Manore, Thompson, & Vaughan, 2015). Poor maternal nutrition has been associated with adverse birth outcomes and long-term developmental challenges (World Health Organization [WHO], 2011). The nutritional status of pregnant women is influenced by a complex interplay of cultural practices, socioeconomic factors, and access to healthcare services. According to the Social Determinants of Health (SDH) Theory, broader social and economic conditions significantly shape health behaviors and outcomes (Neuman, 2010). In Kitwe District, like many other regions in Zambia, maternal malnutrition remains a public health concern despite national efforts to improve maternal and child health outcomes (Central Statistical Office, 2012).

Cultural practices surrounding food taboos, dietary habits, and traditional beliefs often shape the nutritional choices of pregnant women. Studies on nutrition in developing

contexts show that cultural food restrictions may contribute to micronutrient deficiencies when essential foods are avoided (Galal, 2012). Such restrictions can limit dietary diversity and increase vulnerability to deficiencies in iron, folate, calcium, and vitamin A (Barikmo, 2004). Socioeconomic factors such as income level, education, and employment status also determine access to nutritious foods and health services. Research has consistently demonstrated that poverty and food insecurity are strongly associated with poor dietary intake and health inequalities (United Nations, 2012). Furthermore, inequalities in access to healthcare services reinforce maternal nutritional challenges in low-income settings (WHO, 2011). Understanding these cultural and socioeconomic influences is essential for designing evidence-based interventions. Effective public health strategies require a systematic assessment of social and behavioral factors affecting health outcomes (Cohen, Manion, & Morrison, 2010). Mixed-methods approaches are particularly useful in capturing both measurable trends and deeper sociocultural influences on nutrition (Babbie, 2013).

A multistage sampling method was employed to select 90 participants from different peri-urban communities. Both quantitative and qualitative methods were used for data collection. Structured questionnaires captured demographic and socioeconomic information, while focus group discussions explored cultural beliefs and practices influencing maternal nutrition, consistent with qualitative inquiry approaches (Lincoln & Guba, 2015).

Findings revealed that dietary habits among pregnant women were significantly influenced by socioeconomic and cultural factors. Low income, food insecurity, and limited healthcare access were strongly associated with poor dietary diversity and higher prevalence of nutritional deficiencies. The most common deficiencies identified were iron, folate, vitamin A, and calcium, which align with patterns observed in other developing country contexts (Galal, 2012). Cultural restrictions—such as avoidance of certain animal-based foods—were linked to iron deficiency and adverse nutritional outcomes (Barikmo, 2004).The study established a strong relationship between socioeconomic disparities, restrictive cultural practices, and poor maternal nutritional outcomes, supporting the SDH framework that health inequities are rooted in structural social and economic conditions (Neuman, 2010).The study concludes that there is urgent need for comprehensive public health interventions addressing both socioeconomic and cultural barriers to maternal nutrition. Programs integrating economic empowerment with culturally sensitive nutrition education are essential to improve maternal and child health outcomes in low-resource settings such as Kitwe peri-urban (Manore et al., 2015; WHO, 2011).

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SAAFECS26-121

Design Inquiry as a Capability for Transdisciplinary Practice

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Keywords: Deweyan Pragmatism, Design Synthesis, Reflexivity, Structural Logic, Meaning-Making, Wicked Problems.

The work before you emerges against a backdrop of inquiry within the field of Design into Design Thinking and Transdisciplinarity, and together, what they bring to bear in response to the complex, wicked problems of our time (Rittel & Webber, 1973). Resonating closely, parallel developments can be observed in Consumer Science, where the indeterminate nature of contemporary consumer ecosystems increasingly calls for transdisciplinary approaches capable of navigating such problem / solution ecologies (Solomon, 2018; Buchanan, 1992).

This research aims, firstly, to contribute to Consumer Science, and its adjacent disciplines, a more profound understanding of the relationship between design's ways of thinking and knowing (Cross, 2011), and Transdisciplinary Research and Practice, when considered within the philosophical paradigm of Pragmatism, in particular the work of John Dewey. Secondly, it seeks to provide a conceptual and practical outline for a Design Research Practice Framework for Consumer Science. This framework draws on design inquiry as both a cognitive and structural capability, informed by pragmatist notions of inquiry as experiential and meaning-forming (Dewey 1938), and is aimed at advancing Consumer Science's capacity to engage with indeterminate systems of practice.

This research unfolds in two parts. Part 1 – The Study develops a multi-phase conceptual synthesis integrating Design Thinking (DT), Transdisciplinary Research and Practice (TDR/TDP), and Deweyan Pragmatism (DP) as foundations for Consumer Science (CS). Part 2 – Findings herein, extends and tests this synthesis through reflective application to disciplinary practice.

The study follows a qualitative, argumentative-hermeneutic methodology structured as a multi-phase conceptual synthesis. Each phase applies triangulated reasoning and conceptual mapping to surface, test, and integrate relationships between DT, TDR, and DP. Reflexive validation checkpoints punctuate the process, ensuring cumulative coherence (Schön, 1983).

Phase 1 – Framing and Orientation. A broad review triangulates Design and Design Thinking (framing, abduction, synthesis; Brown, 1994; Cross, 2012), TDR (complexity, wickedness, collaboration; Nicolescu, 2002; Pohl & Hadorn, 2007), and Deweyan Pragmatism (inquiry as transformation of indeterminate situations). The aim is to reveal the depth of Design's penetration into CS and locate conceptual compatibilities and tensions. A first checkpoint validates the hypothesis that a shared pragmatic–constructivist foundation can exist.

Phase 2 – Mapping and Relevance Building. The authors' prior contributions are re-examined and mapped against the evolving triangulation. DT's generative practice (ideation, iteration, resolution; Simon, 1996) and TDR's boundary work (translation and systemics; Pohl & Hadorn, 2007) are aligned with CS needs to demonstrate the relevance of design-led inquiry. This stage identifies Design Research as a bridging mechanism and tests whether Deweyan Pragmatism still provides the philosophical coherence needed to integrate design and transdisciplinarity.

Phase 3 – Deep Synthesis and Validation. Key elements of Dewey's philosophy - experiential inquiry, the continuity of means and ends, and consequence as verification - are connected to DT's synthetic cognition and TDR's reflexive integration (Nicolescu, 2002). Reviewing literature and gaps, the phase validates the DT - Dewey -TDR triangulation, consolidating a high-level pragmatic-transdisciplinary landscape in which reasoning, making, and reflection form a single synthetic process. Ethics Approval Not required.

The methodological review confirms the legitimacy of continuing the synthesis: the argumentative-hermeneutic approach mirrors Dewey's view of inquiry as reflective transformation (Dewey, 1938). Mapping key ideas across DT, TDR, DP, and CS exposes recurring structural patterns: abduction and iteration in DT; integration and reflexivity in TDR; experiential continuity in DP; and contextual application in CS (Solomon, 2018). Synthesising Phases 1–3 proceeds through patterning these relationships, producing a structural logic for an outline of a Design Research Practice Framework for Consumer Science.

The emerging framework rests on three linked principles:

1. Synthetic Cognition: the capacity to hold and re-compose indeterminate situations through abductive reasoning and ideation. (DT and Dewey relations)
2. Synthetic Resolution: the integration of divergent knowledges into coherent, actionable propositions. (DT and TDR relations)
3. Synthetic Integrity: the reflexive alignment of reasoning, making, and consequence within the ethical and social realities of CS. (Dewey and TDR relations)

Together these describe a pragmatic–constructivist engine for meaning-making and knowledge creation in complex consumer contexts. Deweyan Pragmatism provides the epistemic grammar; Design Thinking provides the operational logic; and Transdisciplinarity supplies the ecological field of translation. Patterning and mapping thus become semantic mechanisms binding structure - how knowledge is organised, to meaning - how it becomes usable and shared.

The study demonstrates that an argumentative–hermeneutic synthesis can extend Consumer Science beyond disciplinary boundaries without loss of rigour. Meaning-making emerges as the unifying capability linking understanding, action, and transformation. The proposed Design Research Practice Framework outline stands to find extensibility in interfaces designed for and across multiple organisational schemes: by audience (researchers, practitioners, policy actors); by setting (academic, commercial, societal); by mode (conceptual, methodological, applied), and so on. These interfaces form the framework's semantic formation, where structure meets use and knowledge becomes actionable.

Ultimately, Consumer Science is positioned as a transdisciplinary design praxis grounded in Deweyan inquiry, enacted through design's synthetic reasoning, and validated through transdisciplinary reflexivity, advancing the field toward a coherent, ethically grounded, and contextually responsive future.

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SAAFECS26-122

Generative, provocative and correspondence: Three creative design research approaches for inquiry into, and with, user-communities

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Keywords: Transdisciplinary Practice, Design Research, Generative Methods, Provocative Methods, Correspondence Methods

Transdisciplinary practice is fundamentally concerned with the integration of knowledge and methods of various disciplines in the act of problem solving (Jahn, et al., 2012, p. 2). However, a distinguishing characteristics is the importance it places on the inclusion of other stakeholders in the definition of “real-world problems” (Wickson, et al., 2006, p. 1048). Over the last 25 years, Design has transformed from a practice that emphasised product aesthetics, to a discipline that is inherently transdisciplinary in character (Buchanan, 1992, p. 12), focused on empathetically, sustainably and effectively improving the lived experience of consumers. Over this period, and particularly within the domain of human-centred design, many research methodologies and methods have been developed to inquire into the needs and lived experiences of consumers. While ethnographic research techniques adapted from the social sciences were formative sources for design research, Design's own methods premised on collaborative acts of creative making have become highly valued in their own right, and adapted in many other fields including Anthropology and Futures. Accordingly, the initial point of departure of our paper is that Design Research (in which we include related Design, Anthropology and Futures approaches), as a fundamentally transdisciplinary-orientated field, has a range of established methods for involving various stakeholders, including end users, i.e. consumers in research inquiry. As we argue, these creative methods provide viable, alternative approaches to traditional ethnographic research techniques and, as such, can contribute to Consumer Science's growth in this area.

In particular, this paper presents a conceptual framework outlining three foundational approaches for practicing creative Design Research. These approaches are generative (Sanders and Stappers 2016), provocative (Candy & Dunagan, 2017) and correspondence (Gatt & Ingold, 2013; Jahn, et al., 2012). By doing, so this paper suggest how transdisciplinary researchers can conceptualise and design their engagement with stakeholder to co-generate understanding.

The method of this paper is qualitative, consisting of the three short case studies that in turn provide a conceptual framing of an individual approach citing existing secondary research, an example/s of the approach applied in design research practice and a summative outline of the key steps of the approach. As is customary in case studies, each of the approaches will be discussed in the narrative, which will include a critical reflection of the selected approach. The three case studies will be followed by a broader discussion outlining a summative framework that discusses the value and limitations of the individual approaches, how the individual approaches can be integrated, as well as, briefly, reflecting on the role of design synthesis in interpreting data and drawing insights from creative design research. Ethics clearance from the University of Pretoria (EBIT/259/2021).

This study initially introduces and describes the value of creative design research with in the broader framework of transdisciplinary practice, thereafter it presents and exemplifies three distinct approaches to creative design research. From a methodological perspective these approaches are not novel, however, the summative framework does provide an original contribution in that it presents a foundational conceptual structure for considering the various approaches for creative design research. Additionally, by providing original examples of how the individual approaches can be applied, the study contributes contextualised, practical and local knowledge of what could otherwise be abstract explanations. These contribution are valuable for transdisciplinary research seeking to meaningfully engage with stakeholders and in particular, the consumer, in order to explore aspects of their livid experiences. The key limitations of this study is that while we suggest these approaches are of value to a broader disciplinary audience, they are primarily design orientated. Consequently, there may well be a number of assumptions embedded in the work that may prove to be barriers for other researchers. Consequently, future work could explore the application of creative design research in contexts, such as, but not limited to Consumer Science.

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SAAFECS26-123

Consumers' attitudes towards green initiatives in the Hotel Industry in South Africa

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Keywords: Hotel, Attitude, Environment, Degradation, Green Initiatives, Guest

Environmental degradation, defined as the unbalanced use and destruction of natural resources caused by human activity (Mishra & Schuster, 2021), is a global concern (Burke, 2021). Since 1970, the demand for natural resources has tripled, contributing to approximately 400 million tonnes of annual waste production and the destruction of 22%

of coral reefs (United Nations, 2023). Air pollution, particularly fine particulate matter (PM2.5), now affects 99% of global land areas, primarily from soot, vehicle emissions, biomass stoves, and sulphate aerosols from power generation (Liu, 2023). The hotel industry contributes significantly to this problem through high energy consumption, water usage, and waste generation (Zhang & Chen, 2019). In South Africa, land degradation affects nearly 75% of the country, with 91% of land nearing desertification (Mani, Osborne & Cleaver, 2021), prompting government and private initiatives to promote recycling and sustainable practices (Regenize, 2023).

Tourism, a key economic sector dependent on pristine environments, faces growing pressure to balance development with sustainability (Hall, Scott & Gössling, 2020). As part of this effort, green hotels have emerged, integrating eco-friendly operations such as energy and water conservation (Kumar & Singh, 2020), waste recycling (Lee et al., 2020), and sustainable sourcing (Chan, 2020). These initiatives aim to reduce environmental impacts while enhancing operational efficiency and corporate image (Kim, Lee & Kim, 2020).

Consumer perceptions and attitudes are pivotal in supporting these initiatives. Perception involves interpreting environmental cues (Kotler, Keller & Brady, 2020), while attitude—comprising cognitive, affective, and conative components—guides consumer behaviour toward green accommodation. Pro-environmental attitudes and green consumerism, driven by social norms, values, and education, influence purchasing decisions and willingness to support sustainable hotels.

Guided by the Tri-Component Attitude Model, this study examines the interplay between consumer perceptions, attitudes, and behavioural intentions toward green hotels in South Africa. It aims to contribute to sustainable tourism scholarship by highlighting how environmentally conscious consumer behaviour can mitigate environmental degradation and enhance the hospitality sector's ecological responsibility. Ethical clearance number 2022/CAES_HREC/037

A quantitative study was employed to test the various hypotheses. A total of 220 respondents participated. Data was collected using a structured questionnaire and analysed using SPSS 28. Results showed that pro-environmental guests had a positive attitude towards green hotels and green initiatives. The study found that respondents preferred hotels that encouraged guests to support green initiatives, such as recycling and sustainable use of resources. It found that respondents were more likely to use hotels due to feeling obligated to support green initiatives, the state of the environment, and a sense of responsibility to protect the environment. The factors considered when making hotel reservations included cleanliness, comfort, affordability, environmental care, and green initiatives. Respondents felt an obligation to contribute positively to the environment by staying in a hotel. However, few disliked the idea of repeating linen and thought green hotels were expensive compared to traditional hotels.

The study will benefit the hotel industry in terms of understanding consumer attitudes towards hotels and highlighting the preferred green initiatives. It will also contribute to the body of knowledge by adding an understanding of consumer attitude and how it may influence consumer behaviour.

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SAAFECS26-135

Do Strong Institutions Enhance the Impact of Financial Literacy on Financial Inclusion? Cross-Country Evidence

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Key words: Financial Inclusion Financial Literacy Institutional Quality Governance

Financial inclusion is widely recognised as a foundation of consumer well-being because it enables households to smooth consumption, manage risk, and invest in education and health (Demirgüç-Kunt et al., 2018). Financial literacy enhances individuals' ability to understand interest compounding, inflation, and risk diversification, thereby improving financial decision-making (Lusardi & Mitchell, 2014). However, knowledge alone may not translate into meaningful participation in formal finance when governance quality is weak and consumer protection mechanisms are limited.

This study investigates whether institutional quality strengthens the impact of financial literacy on financial inclusion using cross-country evidence from 65 economies. We integrate harmonised data from the World Bank Global Findex Database, the S&P Global Financial Literacy Survey, and the Worldwide Governance Indicators. Financial inclusion is operationalised as a multidimensional index comprising penetration (account ownership), availability (access points), and usage (credit participation), following Sarma (2008). Institutional quality is measured through a composite governance index capturing rule of law, regulatory quality, and control of corruption (North, 1990; Law & Azman-Saini, 2012).

Ordinary Least Squares (OLS) and quantile regression estimations reveal three main findings. First, financial literacy significantly increases financial inclusion. Second, institutional quality independently enhances inclusion. Third, and most importantly, the

interaction between financial literacy and institutional quality is positive and statistically significant, indicating that strong institutions amplify the marginal contribution of financial literacy. The moderating effect is stronger in middle- and high-inclusion contexts, suggesting that governance conditions become increasingly important as financial systems mature. Channel-based analysis shows that penetration and usage are the primary transmission mechanisms, while ATM-based availability plays a comparatively weaker role in the digital era.

The findings imply that financial literacy programmes alone are insufficient without supportive institutional frameworks. Effective financial inclusion requires coordinated strategies that integrate consumer education with governance reforms, aligning directly with the SAAFECS 2026 theme “Science as Collaboration” by highlighting the joint role of consumers, regulators, educators, and financial institutions in building inclusive systems. This study uses publicly available secondary data from international databases and does not involve human participants. According to Universiti Putra Malaysia research ethics guidelines, formal ethics approval is not required for secondary macro-level data analysis.

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Sustainability and globalisation

SAAFECS26-017

Balancing Nutrition and Sustainability: Tackling Food Waste in South Africa's School Breakfast Programme

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Keywords: School Feeding Programmes, Food Waste, South Africa, Nutrition, Sustainability, Cultural Food Preferences, Education and Food Security

School feeding programmes in South Africa are vital for addressing childhood hunger, improving attendance, and supporting academic performance (Department of Planning, Monitoring and Evaluation/Department of Basic Education - DPME/DBE, 2016). Beyond meals, they contribute to learners' health, well-being, and development. However, food waste undermines these goals when meals are discarded due to cultural misalignment, personal dislike, or oversized portions (Mumba & Kesa 2020). In South Africa, with its diverse diets, programmes must align with learners' preferences while ensuring nutrition and sustainability (Mafugu, 2021). This study examined the extent and drivers of food waste in the Tiger Brands Foundation (TBF) school breakfast programme and identified strategies to reduce waste and enhance impact.

A mixed-methods design captured both the scale of waste and participant perspectives. Data collection covered 25 schools in Gauteng, KwaZulu-Natal, North West, Limpopo, and the Northern Cape. Quantitative data came from Food Waste Diaries, while qualitative insights were drawn from 75 interviews and 25 focus groups with educators, NSNP coordinators, food handlers, and learners. This triangulated approach provided a comprehensive view of causes and consequences.

Food waste varied across provinces. Gauteng reported the lowest, with 71% of participants noting no waste, while Limpopo recorded the highest at 6.58 litres on average. The most wasted foods were Ace instant porridge and Mabele, mainly due to learners' dislike and unfamiliarity. Oversized portions also drove waste, as many learners received more than they could consume. Additional factors included poor preparation, inconsistent portioning, and learners being full from meals at home.

Although formal waste management systems were limited, informal practices emerged. In Gauteng, surplus food was redistributed, while in Limpopo, recycling and composting were common. These efforts showed schools' willingness to act despite limited resources. Participants valued the breakfast programme, citing improved attendance, concentration, and performance. Concerns included limited meal variety, favouritism in distribution, and occasional spoilage. Ethics Approval Number: 24STH12.

The study concludes that while the TBF breakfast programme delivers significant benefits, food waste diminishes its effectiveness. Recommendations include diversifying meals to reflect cultural preferences, offering flexible portion sizes, and training food handlers in preparation and portion control. Formal waste management systems should complement existing practices such as redistribution and composting.

Policy implications highlight the importance of integrating cultural, nutritional, and sustainability considerations into school feeding schemes. Collaboration between government, food manufacturers, and education stakeholders is needed to design culturally appropriate menus, improve logistics, and expand coverage to more disadvantaged schools.

The research contributes by (1) providing evidence on food waste drivers and scale in South African schools, (2) offering practical, adaptable strategies to reduce waste, and (3) reinforcing the need to embed sustainability in school feeding programmes so they both nourish learners and promote responsible food systems.

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Scale development and Validation: A value typology for sustainable consumption

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Keywords: Value Typology, Scale Development, Scale Validation, Sustainable Consumption

The global fashion industry stands as one of the most resource-intensive and polluting sectors worldwide, driven by the accelerating phenomenon of fast fashion (Masserini et al., 2024). Characterised by its emphasis on speed, low cost, and constant novelty, fast fashion promotes cycles of overproduction and overconsumption that severely strain ecological systems (Omondi, 2022). The consequences are alarming (Moodly et al., 2024): raw material extraction for textiles depletes scarce resources, while production and disposal processes contribute significantly to carbon emissions, chemical waste, and water contamination. Clothing waste adds to landfill congestion, releases methane during decomposition, and introduces microfibers into aquatic ecosystems. These realities highlight the urgent need for sustainable alternatives.

Sustainable fashion has emerged as a counter-movement that addresses these challenges by reducing harm throughout the product life cycle, from design and sourcing to production, distribution, and disposal (Carfora et al., 2024). Although consumers frequently articulate concern about sustainability and report a willingness to pay more for sustainable clothing, the persistent gap between intention and action remains a major obstacle (Moodly et al., 2024). Convenience, affordability, and social norms continue to reinforce fast fashion consumption, particularly in emerging economies. In this context, understanding what consumers truly value when considering sustainable clothing is a critical step toward bridging the gap between attitudes and behaviours.

This study, positioned within Holbrook's typology of consumer value, explores how South African consumers conceptualise the value of sustainable fashion. Holbrook's framework proposed eight value dimensions: efficiency, excellence, status, esteem, play, aesthetics, ethics, and spirituality. Yet consumer values are context-specific, shaped by socio-cultural and environmental realities, necessitating validation in particular regions. This research therefore not only examined South African consumers' perceptions of sustainable clothing but also developed and validated a scale that reflects the values driving sustainable clothing consumption in this context.

A quantitative research design was employed, using an online survey distributed to South African adult clothing consumers. Exploratory and confirmatory factor analysis refined Holbrook's typology. Results indicated a reduction from eight values to five: transcendence, prestige, astuteness, ethics, and pleasure. Transcendence was defined as recognition of sustainable fashion's contribution to collective good, beyond personal benefit. Prestige captured the social signalling value of sustainable consumption. Astuteness referred to the perceived intelligence of making sustainable choices, reflecting long-term benefits. Ethics encompassed moral responsibility toward people and the planet. Pleasure emphasised the hedonic dimension of sustainable fashion, where enjoyment aligns with environmental responsibility.

The scale development and validation process provide a robust contribution to consumer research by offering a context-specific measurement tool for sustainable clothing values. This advancement enables researchers and practitioners to better assess consumer motivations and design interventions tailored to South Africa's fashion landscape. Retailers can leverage these values to inform product development, communication, and branding. For example, emphasising ethical sourcing may build trust, while highlighting prestige and astuteness could encourage adoption among aspirational groups.

The identification of pleasure as a central value dimension underscores that sustainable clothing should not be positioned only as an ethical duty but also as a source of enjoyment, creativity, and self-expression. This insight challenges perceptions of sustainable fashion as restrictive and opens avenues for designing products that combine responsibility with desirability. At a societal level, understanding these value dimensions supports sustainability transitions by aligning consumer behaviour with circular economy principles.

In conclusion, this study advances theoretical understanding of consumer values in sustainable fashion while offering a validated, context-specific framework for measuring these values in South Africa. By refining Holbrook's typology into five empirically supported dimensions, it provides a foundation for future academic inquiry and practical interventions. Ultimately, these insights can help steer both consumers and industry actors toward more sustainable fashion systems in emerging economies.

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Effects of rising food prices on household food choices in Vhembe District, South Africa

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Keywords: Food Choices, Food Prices, Affordability, Food Security, Smallholder Farmers

South Africa is food secure as a nation; however, not all households can secure adequate food (Oluwatayo et al., 2020). The rise in food prices has made it difficult to secure food both at the household and national level (Mkhawani et al., 2016; Tambe et al., 2023). The World Bank has indicated that the rise in food prices has made it difficult for people to secure adequate food and has pushed people into food insecurity. The World Bank further indicates that an estimated 75 million people worldwide will be food insecure by October 2024 (WHO, 2025). In addition, the Global Report on Food Crises, 2025 estimated that in 2024, approximately 56.0 million people, representing 25% of the analysed population across 12 Southern African countries, experienced high levels of acute food insecurity, facing food crises (Derindag et al., 2023; FSIN, 2025). The rise in food prices has been reported to be one of the factors that contribute to food insecurity (Aphiwe, 2024).

Daily provision of food is a necessity for all households; approximately 820 million people are facing hunger in the world, and two-thirds of the world's population is unable to acquire essential nutrients (FAO, 2018). Food prices play a significant role in household food security globally. Studies relating to the impact of food prices on food security have been reported before; however, little is known of the impact of food prices on household food choices at a local level. The reason for this study is to investigate the effects of food prices on households' food choices.

The study was conducted in the Vhembe District in the Limpopo Province of South Africa. Vhembe is one of the five district municipalities of Limpopo province and the others are Waterberg, Sekhukhune, Capricorn and Mopani. Parts of the Vhembe District were in the former Venda homeland. The study included smallholder farmers in the Vhembe District (Thulamela municipality) in the far northern part of the Limpopo Province. The sample size was 200 smallholder farmers from a list of those willing to participate in the study, or the most senior member of the smallholder farmers' household. From the population of 800 smallholder farmers, which was obtained from the database of the Department of Agriculture rural development (Vhembe District office), a sample size was selected.

The researcher used qualitative and quantitative methods to collect data on the dietary practices and food choices of the smallholder farmers in the Vhembe District. Qualitative methods were used to gather information on the dietary practices and food choices of the participants. Structured questionnaires were used to gather quantitative data, together with a focus group questionnaire. The prime goal during this investigation was to describe individual and social factors affecting food prices and how they affect households.

This research was approved by the University of South Africa's Ethics Committee of the Agriculture and Environmental Sciences (CAES) (Ethical clearance reference number: 2023/CAES_HREC/1424). Permission to conduct the research was granted by the Department of Agriculture and Rural Development (DARD) for the research to be conducted in Limpopo Province. The participants were assured that their confidentiality and anonymity would be protected before they voluntarily gave informed consent to participate in the study.

The high levels of unemployment in South Africa are contributing to the food insecurity status of households. Tambe et al (2023) indicated that high unemployment rate and poverty, especially amongst women, are some of the key factors contributing to inadequate food access and poorly-nutritionally balanced diets (International Monetary Fund, 2012). Unemployment and poverty have been reported to be playing a big role in households securing adequate food. Food choices are severely affected when household members are unemployed. The majority of households in the study are dependent on smallholder farming for income as well as social grants such as pension funds. They indicated that the money is not enough for them to secure enough food for their households to sustain them monthly. Household income plays a big role in the access to food within the household, which in turn plays a bigger role in the nutritional status of the households (Tambe et al,2023).

The increase in food prices has a great impact on the food security of individuals as well as households. A study done in Ethiopia on the increase of food prices has indicated that a 7-25% decline in caloric consumption due to the increase in food prices, resulting in poorer households suffering the most (Hadley et al., 2011). This is similar to the findings in this study, smallholder farmers were found to cut down on meals because they wanted to spare food for other family members, some indicated that they only had two meals a day and in small portions in order to accommodate other family members. Poorer households are mostly affected by the increase in food prices. Shifts in eating behaviour and decline in anthropometric measurements have been some of the signs demonstrating the food insecurity among individuals, more especially among children (Hadley et al., 2011).

Household food purchases are a key indicator of dietary intake, influenced by and influencing individual eating patterns. Rising food prices significantly affect household food choices, often forcing low-income families to buy cheaper, lower-quality foods, which compromises diet quality. Studies show that healthier diets, rich in fruits, vegetables, and legumes, generally cost more. Geographical and demographic barriers make it challenging for policymakers to target households most affected by food price increases. Suggested solutions include expanding social safety nets, implementing tax and subsidy policies to lower prices of essential foods, and increasing grassroots nutrition education to help households make better use of local and affordable food sources. More research is needed on the broader effects of food price changes to better inform policy.

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Bridging Gap in Home Economics: Aligning Learning to Industrial Engagement for Global Competence among Students

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Keywords: 21st Century Skills, Global Trends, Instructional Strategies, Learning Approaches

Zambia has a lot of youthful graduates who loiter around in the streets almost doing nothing but begging (Chisenga, 2018). Notably, recent research holds that many of these individuals have completed training at colleges and other higher education institutions (Kalumba, 2019; Kalonga et al., 2021; Kabombo et al., 2025). Within this demographic, Home Economics (HE) graduates are not exceptional. The circumstance highlights a broader issue concerning the utilization of acquired skills and qualifications among this segment of the youth population. The concern is that why should the youths loiter around when they underwent a training that gave them skills to connect, collaborate and compete with others in a global market. Does this imply that the training colleges failed to adequately address the training needs of the students? It is a reason why this study was undertaken to find out if educators of HE in Zambian colleges of education were aligning learning to industry in delivery of knowledge and skills that prepared students to connect, collaborate, compete and be globally competent in the emerging global trends. The alignment would bridge the gap between traditional pedagogical approach and the provision of 21st century skills to present day learners. Subsequently the study may empower HE educators, policymakers, and communities to effectively address the issue of HE graduate unemployment.

The study was a cross sectional design based on a descriptive mode survey. Descriptive surveys are studies where information is collected without changing the environment (Kelly, Clark, Brown & Sitzia, 2003; Levin, 2006). Equally, the research employed a mixed-methods design utilizing a concurrent triangulation approach. This methodology involved the simultaneous collection of qualitative and quantitative data, thereby facilitating the integration of diverse perspective of the responses. Furthermore, this approach enabled the cross-verification of various aspects, including the topics, teaching methods, and instructional strategies employed by sampled HE lecturers in the delivery of knowledge and the development of students' skills. The targeted population comprised all private and public colleges offering Home Economics (HE) in Zambia. A purposive sampling technique was used to select 10 colleges from a total of 23 colleges (both public and private). The study's sample consisted of 120 participants, comprising of 110 lecturers specializing in HE and 10 heads of departments for HE. Questionnaires and interviews were used for data collection. Sections on the questionnaire were according to the demands of each objective with a view to address the research questions. Data was analysed using descriptive and thematic analysis. Thematic analysis was used because it was an appropriate method in finding out respondents' opinions, knowledge and experiences regarding the teaching of home economics knowledge and skills coupled with industrial engagement of students. This kind of analysis helped in identifying common ideas that came up repeatedly from respondents. Demographic characteristics were analysed using descriptive statistics. Ethical issues were strictly considered and it was guaranteed that all details and information from respondents would be used for study purposes only and no harm would be incurred to any participant who provided information.

The results showed that 80% of respondents did not engage students in industrial activities. Learning approaches and instructional strategies used were fully embedded with traditional methods of imparting knowledge within the classroom settings. This led to a conclusion that colleges of education in Zambia seem not to have aligned HE students' learning to industrial engagement. This very much needed aspect of showing students how what they learn in class is used in real world contexts to prepare them for global competence was missing.

The study found that lecturers in colleges do not effectively involve students in activities that foster their preparedness for active participation in the industry. Thus, to enhance industrial engagement among college students, this study strongly recommends the integration of industry-related activities into the teaching and learning processes within HE programs in colleges. This could be achieved through a comprehensive review of the existing curriculum to incorporate more industry-relevant issues and practical experiences. Such an approach is likely to foster the development of critical thinking skills and better prepare students for active participation in the industrial sector locally and at global level.

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Adoption of AI in Home Economics to Respond to the Aging Society: A Mixed-method Study

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Keywords: Home-and-Community Based Elderly Care, Global Emerging Technology, Text Analysis, 3p Model, Technological Empathy, Emotional Connectivity

The whole world is witnessing an unprecedented trend of ageing, posing great challenges in the social and healthcare services to the older population (Choi et al., 2024). More than 90% older adults show their preferences to ageing in place. Enhancing the home-and-community based elderly care is one of the most important sustainability issues. In recent years, the global trend of artificial intelligence (AI) has been seen. Home Economics, which bridges social resources and family demand, should take the responsibility to adopt the global emerging technology to reorganize the work scenes. This article aims to present a whole picture about how Home Economics in China uses AI to respond to the ageing society(Deng et al., 2025; Yi et al., 2025).

We employed a mix-method from May to July, 2025. In the qualitative part, we conducted a comprehensive text search through government files, academic articles published in the Web of Science and CNKI, and industry development reports, along with field visits to AI industries, trying to figure out the input and output of AI applications in home care through Home Economics. In the quantitative part, we collected data from networks (such as TikTok), used the keywords “older adults” & “well-being/quality of life/happiness" & “AI”, and employed TE-IDE keyword extraction, LDA topic modeling, and sentiment analysis via SnowNLP, to picture how AI influences the life of older adults (Kairo et al., 2024). This study received ethical approval from the Ethics Committee of Zhejiang Shuren University (ID: S23-236-001) before initiating data collection.

We found 3 pathways of how Home Economics uses AI to influence the life of older adults. First, AI upgrades the home-based care for older adults. From sleep quality to mobility, and nutrition to physical activity, AI-driven technologies, like the Internet of Things, Robots, Information Technology, and Smart Devices, are providing comprehensive, intelligent support for aging people. For example, in 2025, DeRUCCI launched the T11+ AI Smart Mattress, which can detect changes in sleep posture within 20 milliseconds and dynamically adjust support for five key body zones—shoulders, back, waist, hips, and legs. As a result, users fall asleep nearly 50% faster on average, and total sleep duration increases by 38% (Li, 2025). This is that “gets smarter as you sleep”. Second, AI technology makes medical services more collaborative. As intelligent applications become more widespread, they help reshape the value chain of healthcare services, spanning the home, hospital, and regional government levels (Ma et al., 2023). At the household level, it strengthens the early prevention and monitoring; at the hospital level, it enhances the capability of diagnosis and treatment; and at the government level, it integrates resources and provides support and management. AI makes the integrated model “monitoring-diagnosis-service” come true. Third, AI bridges the digital divide and revitalizes silver-age social connectivity. As of March 2020, only 23.7% of older adults used the Internet, compared to 73.0% of the other groups (Wang and Liao, 2025). AI technology is lowering the barriers to digital participation for aging people by simplifying user interfaces and streamlining interactions. Transforming seniors from digital spectators to active players-that's the master key to unlocking the silver economy (Zhao, 2025).

In the context of an aging population, Home Economics using AI to develop a more “people-friendly, productive, pleasant” (3P) model to redefine elderly care and home services, through the dual forces of “technological empathy” and “emotional connectivity”. This not only enriches the human-centered vision of a “better life”, but also makes sustainability come true.

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Entrepreneurship and financial literacy

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Focus on learning to learn – game pedagogy merging with everyday financial life

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Keywords: Financial Literacy, Everyday Financial Life, Escape Room Pedagogy, Game Pedagogy, Learning to Learn, Metacognitive Skills in Learning

Financial literacy is exercised in consumers' everyday lives, from routine tasks such as paying bills and budgeting groceries but also in organizing and balancing household's living expenses. Indeed, financial literacy is closely interwoven with daily activities. Financial literacy encompasses knowledge, skills, and attitudes that support households' financial decision-making and wellbeing (OECD, 2022). Global crises, digitalization and increasingly complex financial services challenge consumers' abilities; continuous learning and updating information is essential when navigating new circumstances. While such changing circumstances strain young adults' developing financial capability, awareness of one's learning capabilities has been shown to support young adults' financial independence (Kortesalmi et al., 2024). However, research on financial literacy and financial education has devoted only limited attention to the role of learning-to-learn in financial contexts.

Learning-to-learn skills encompass metacognitive abilities that support individuals in managing and adapting their own learning processes (Hautamäki et al., 2002). These include self-awareness as a learner, goal setting, strategic use of learning methods, reflection, motivation, and critical thinking. Such skills are essential for autonomous, lifelong learning and for responding effectively to complex, evolving contexts, such as everyday financial decision making.

In financial education, the emphasis is often on knowledge-based content. Similarly, financial literacy is typically assessed through evaluations of knowledge, for example, the widely used Big Three questions that test numeracy and general economic understanding. This presents a challenge for those involved in financial education:

educators need to ponder what kinds of teaching approaches strengthen learners' abilities to adopt new ways of thinking and to face the challenges of an ever-changing economic environment.

This study focuses on learning-to-learn skills from the perspective of everyday financial literacy. We examine how playing an escape room game built around everyday financial situations is perceived to enhance players' learning-to-learn abilities. Game-based pedagogical solutions have been shown to foster players learning as they integrate multisensory experiences and engage in interaction with the learning process (Jabbar & Felicia, 2015).

The data for this study was collected within the WorryEscape project, which focuses on developing, testing and disseminating an escape game addressing everyday financial events. Data was collected during the testing phase: test players, that is, study participants, completed a survey both before and after test playing the game. The anonymous survey, administered through Microsoft Forms, included pre-game questions on financial knowledge, behavior, and self-perceived financial literacy. The post-game survey examined participants perceived effect of the game, including confidence in financial situations, engagement with financial issues, and recognition of financial phenomena in daily life.

Participants comprised home economics teacher students at the University of Eastern Finland and social services students at Laurea University of Applied Sciences. These groups were selected because their future professions require competencies in teaching and guiding everyday financial issues and household financial management. In total, nine test sessions were conducted with 145 student participants, who completed the survey. Participation was voluntary, and all participants were informed that the collected data would be used for research purposes.

The results indicate that playing the game enhanced participants' meta-skills, that is, their learning-to-learn skills in complex daily situations. Participants reported that game play influenced their self-beliefs as learner (ability to recognize their own financial literacy, to utilize it, and confidence applying literacy in real-life situations). In addition, participants perceived influences in their contextual beliefs (interest in finances, recognizing daily financial situations) and co-operation skills (instruction skills).

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Entrepreneurial orientation of street food vendors in Tshwane, South Africa

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Keywords: Business Skills, Entrepreneurship, Entrepreneurial Orientation, Job Creation, Management, Street Food

Reducing hunger and promotion of decent work for both men and women has been emphasised as major objectives of the 2030 Sustainable Development Goals (SDGs) (UN, 2015). Street food vending (SFV) provides inexpensive, ready-to-eat (RTE) meals to many city dwellers, while providing a source of income for the vendors (Cortese et al., 2016; WHO, 2019). Jaffee et al. (2019) estimated that 2.5 billion people worldwide depend on street food daily. Additionally, street food vending contributes significantly to economic sustainability of developing countries (Fusté-Forné, 2021; Panicker and Priya, 2020).

The informal trading of food is an important component of the informal economy which ensures the livelihoods of many South Africans (Petersen et al., 2017). SFV is key in job creation, and an activity that can lead to sustainable development through poverty alleviation. Entrepreneurial orientation is a process through which managers accept risks, demonstrate creative behaviour, and showcase proactive and aggressive behaviour towards their competitors (Covin and Wales, 2019). It is critical to ensure that SFVs have operational practices that is essential to the sustainability of the business. Therefore, it was necessary to investigate the entrepreneurial orientation and operational practices embraced by SFV to fulfil their objectives in terms of sustainable profit. This paper aims to explore the entrepreneurial orientation of street food vendors and how it affects sustainable livelihoods, job creation and poverty alleviation.

A qualitative approach and exploratory research design were followed to provide a holistic understanding and new insights into the street food vending phenomenon. The study population consisted of street food vendors who operate in the City of Tshwane, in the Gauteng province of South Africa. Purposeful and convenience sampling strategies were used to select 15 street food vendors to participate in this study. Data was collected through semi-structured interviews and a participatory observation approach. Thematic analysis was used to identify, analyse and report on patterns and themes emerging from the data (Maguire & Delahunt, 2017). Ethical clearance was obtained from the College of Agriculture and Environmental Science Health Research Ethics committee with reference number 2020/CAES/096 before the study was undertaken.

The study found that most of the SFVs lack the necessary business management and entrepreneurial skills to ensure sustainable livelihoods, as they are not equipped with the needed business acumen. Businesses that were passed on from generation to generation have survived for extended periods. Participants displayed creativitiy in differentiating their menu with distinctive specialty meals. However, they were reluctant to take risks which hinder business expansion. Other challenges indicated by the findings include choice of location, fluctuating customers, undocumented goals and an absence of actionable plans to sustain their livelihoods.

In conclusion, the lack of fundamental business skills severely limits the growth of SFVs, restricts access to funding, and reduces the likelihood of long-term success. Participants identified required business management skills which can be considered for the development of customised training. SFVs also indicated their desire to acquire the necessary business skills to improve their business sustainability, highlighting the need for structured training programmes. Future research could investigate ways to develop entrepreneurial skills of SFVs and assess the effect of training on sustainable street food vending.

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Hospitality management

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Managements' Perceptions Regarding Climate Change in Selected Hotels in Mbombela, Mpumalanga Province, South Africa

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Keywords: Climate Change, Managers' Perceptions, Hotels, Hospitality Industry

Climate change poses significant challenges to the global hospitality industry, particularly regarding resource management, energy consumption, and environmental sustainability (1). Hotels, as high-impact establishments, contribute to and are affected by climate-related issues such as rising temperatures, extreme weather events, and shifting tourist behaviors (2). The role of managers and supervisors as front-line decision-makers is crucial in shaping and implementing sustainability practices within hotel operations (3). Their understanding and perceptions of climate change are essential for promoting effective environmental strategies and fostering a culture of responsibility. This study investigates how hotel managers and supervisors perceive the risks and impacts of climate change, their level of awareness, and their readiness to adopt sustainable practices. By examining these perceptions, the research provides insights into the current mindset of hospitality leaders. It identifies potential barriers and enablers to environmental action, highlighting the complexity of the issue and the need for comprehensive solutions. The findings will help guide future policies, training programs, and sustainable development initiatives within the hotel sector.

This study employs a qualitative research design to explore hospitality professionals' perceptions regarding the causes and consequences of climate change. It investigates their level of awareness and the strategies currently implemented or proposed to reduce the environmental impact of hotel operations.

Most participants acknowledged that hotels contribute significantly to environmental degradation through high carbon emissions, extensive use of single-use plastics, and increased traffic volumes. There was a shared consensus that all stakeholders, including hotels, bear responsibility for addressing their environmental impact, as climate change affects everyone and requires collective management efforts.

Ethical Approval: All participants gave their informed consent before participating in the study. The study was conducted by the Declaration of Helsinki, and the proposal was approved by the University of Mpumalanga Research Ethics Committee (UMP/MKHABELA/201763818/ADPHOS/2023)

The findings underscore the urgent need for enhanced environmental education, stronger policy support, and increased collaboration within the hospitality industry to improve climate resilience. However, the implementation of proactive climate action measures remains uneven, often hindered by limited resources, inadequate training, and insufficient institutional backing.

It is recommended that hotels implement regular training and workshops, focusing on climate change awareness, sustainable practices, and practical solutions, for managers, supervisors, and staff. This will enhance their understanding and empower them to take proactive actions. Hotel management, in partnership with local authorities and industry bodies, should develop and enforce clear environmental policies that promote energy efficiency, waste reduction, and responsible resource use. Hotels should reduce dependence on single-use plastics by adopting eco-friendly alternatives. They should prioritize investments in green technologies such as energy-efficient lighting and water-saving systems to minimize their carbon footprint.

Additionally, platforms should be established for hotels in Mbombela and the wider Mpumalanga Province to share best practices, challenges, and innovations in climate change mitigation, supported by partnerships with environmental organizations. The importance of increased funding and incentives from government and private sectors, such as grants, subsidies, or tax benefits, is crucial and should give the audience a sense of hope and optimism. These resources are essential to facilitate the adoption of sustainable measures. Finally, hotel leadership must integrate climate change considerations into their long-term strategic planning to embed sustainability in their operational decisions.

This study adds to the broader discourse on sustainable tourism by emphasizing local hotel management's pivotal role in driving operational climate action.

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Finding meaning at work for South African hospitality employees

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Keywords: Meaningful Work, Positive Meaning, Meaning Making Through Work, Greater Good Motivations, Hospitality Industry

The hospitality industry has an immense social and economic value and improves the quality of life of many South-Africans either as guests or as hospitality employees. Guest satisfaction and business success are largely dependent on hospitality personnel. This occupation is challenging, fast-paced, and continuously developing (Dahiya et al., 2023). There are however, many hospitality employees who struggle to find an equilibrium between meaningful work and the demands of their service-oriented occupations within the hospitality industry (Alrwajfah et al., 2020). Meaningful work has been widely researched within disciplines of organizational behavior and industrial psychology, but studies are limited within the realm of the hospitality and tourism industry. Being the ideal setting as employees within this industry are faced with irregular working hours, low pay that leads to emotional exhaustion and the concept of meaningful work is said to promote balance and contribute positively for an employee. Therefore, the study's objective was to locate the extent do hospitality employees find their jobs meaningful. The study employed the quantitative approach with a cross-sectional research design. Cross sectional designs assist in collecting data that would directly answer the research question of this study and following the positivist research paradigm (Cummings, 2018). The validated Meaningful Work Inventory (WAMI) was borrowed to measure meaningful work amongst employees employed in restaurants, chefs and areas of rooms division.

For data to be collected ethical consent was sought from Institutional Research Committee (IREC) and approval was attained (Ethics number UJ - 22STH27). Based on the willingness of the respondents, the study achieved a total sample of 452 respondents using the convenience sampling technique. Steger et al. (2012) conducted an exploratory factor analysis (EFA) using the dimension reduction technique that ultimately developed the validated ten items in the WAMI scale. Based on the factor loadings three factors were extracted namely, Factor 1: Positive Meaning (PM); Factor 2: Meaning making through Work (MM) and Factor 3: Greater Good Motivation (GG). To meet the study's objective, a correlation analysis was conducted measure the relationship between these three factors. Findings indicate that hospitality employees do find a sense of meaning in their work to an extent however, results reveal that there are statistically significant differences existed among the occupations and the three factors (PM, MM, GG) of the WAMI.

Practical implications refer to an increased focus on meaningful work especially as the wellbeing of the hospitality employees are essential for quality guest service that ultimately fosters repeat business, job creation, growth and sustainability within the hospitality industry. Furthermore, managers should also pay more attention to the areas of the kitchen and restaurant employees as findings confirm that these are the less favorable areas to work in due to their working conditions for the purpose of reducing employee turnover and dissatisfaction.

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Aligning Hospitality and Tourism Education with Industry Needs: Curriculum Implementation in Zimbabwe

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Keywords: Curriculum Implementation, Hospitality and Tourism Education, Experiential Learning, Technology Transformation, Industry Growth

The growth of the hospitality and tourism industry depends on the extent to which institutions implement curricula that align with industry needs, drawing from the Humanist theory (Essel, Aqyarkoh and Mohammed, 2014), which historically emphasized the transformative role of education from the Renaissance to the Industrial Revolution. This study explores the gap between academic preparation and industry expectations in hospitality and tourism education. Many institutions admit students into hospitality and tourism programmes without adequately assessing their preparedness

(Kurete, 2015). Kurete (2015) & Dimmock (2015) agree that students should have prior exposure and appreciation of the industry before being enrolled in the discipline of their choice, to avoid operating under the assumption that training alone will enhance professional competence upon graduation. Thus, training received by students at institutions of learning should instill their motivation, while aligning interests with industry. Unlike other academic disciplines, hospitality and tourism education necessitates a concurrent integration of teaching, learning, and experiential practice, making pedagogical approaches central to graduate readiness. This study focused on the promotion of collaborative ties to reduce the gap between academia and the tourism and hospitality industry in the teaching and learning of students (Mbarushimana, Role & Allida, 2017).

Using a desktop review methodology, secondary data from policy documents, curricula, published research, and evaluation reports were analysed to assess how teaching strategies and curriculum implementation respond to rapid technological change, including Artificial Intelligence (AI).

Findings show that institutions lag behind industry practices markedly in terms of technology adoption, teaching infrastructure, and experiential training, leaving students unprepared to integrate workplace innovations with outdated academic instruction. There is a huge gap between the type of facilities where the teaching and learning take place, compared to the industry facilities graduates are expected to work in upon graduation. This misalignment undermines graduate readiness and weakens the industry's capacity to innovate and compete globally. The study concludes that bridging this gap requires urgent pedagogical reform. Thus, students' mind-sets need to be fully geared for progression into the world of work. There is always a big challenge if the training institutions are not a true replica of the industry. Stronger partnerships between academia and industry are key in reducing the training blame game that may exist between training institutions and the industry regarding the type of graduates produced (Solnet, 2007).

This study recommends a robust move in the adoption of interactive and user-friendly teaching platforms. There is a need for the establishment of industry-monitored teaching hubs and closer collaboration between lecturers and curriculum development units to ensure that reforms are responsive to ongoing industry changes. The incorporation of AI in all teaching and learning platforms may increase the rate at which institutions of learning cope with current market and industry trends. Such measures are critical to producing competent graduates who can meaningfully contribute to the competitiveness, innovation, and sustainability of the hospitality and tourism sector (Mukolwe & Cheloti, 2016; Mukhadis, Ulfatin and Bagus, 2018; Hyasat, 2022; Kusumawardhana, 2020). Based on the gaps identified, reviewing educational policies constantly ensures addressing current challenges influenced by global changes immediately. This paper therefore provides valuable suggestions in identifying best practices in curriculum planning, development, and implementation to ensure graduates produced are globally relevant. Ethical clearance REC-270710-028-RA Level 01

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SAAFECS26-108

Restaurant Chefs' Knowledge and Practice of Indigenous Ingredients: A Case Study of Vilakazi Street

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Keywords: Gastronomic Tourism, Culinary Heritage, Indigenous Vegetables, Menu Innovation, Sustainable Food Systems, Chef Training

Indigenous ingredients have increasingly been recognised for their cultural, nutritional, and economic importance, yet their integration into mainstream restaurant menus has remained limited in South Africa. The global industrial food system, while expansive, contributed to climate change, socioeconomic inequality, and nutritional challenges, which highlighted the importance of promoting indigenous food knowledge and practices as sustainable alternatives (Fanzo, Bellows, Spiker, Thorne-Lyman, & Bloem, 2021; IPES-Food, 2023). In South Africa, restaurants, particularly those situated in heritage sites such as Vilakazi Street in Soweto, played a vital role in preserving and promoting culinary heritage. Despite this, indigenous foods were underrepresented in restaurant offerings, with many chefs lacking exposure and training in their preparation and presentation (Rankoana, 2021). The purpose of this study was to investigate restaurant chefs' knowledge and practice of using indigenous South African ingredients, focusing on Vilakazi Street as a hub of gastronomic tourism and cultural exchange.

This qualitative case study employed semi-structured interviews, non-participant observation, and document analysis to generate an in-depth understanding of chefs' engagement with indigenous ingredients. Purposive sampling was used to recruit 8 chefs, including head chefs, sous chefs, and kitchen managers, who were directly involved in menu development and ingredient sourcing. The study site, Vilakazi Street, was a historic and cultural landmark frequented by both local patrons and international tourists, which made it an ideal setting for exploring the role of indigenous foods in tourism and hospitality. Thematic analysis, guided by Braun and Clarke's (2006) framework, was applied to interview transcripts, observation notes, and supporting documents such as menus and supplier lists. This triangulation of methods ensured credibility, dependability, and context-rich insights into the barriers and opportunities for promoting indigenous cuisine.

Findings indicated that while chefs recognised the cultural and nutritional value of indigenous foods such as morogo, amadumbe, and rooibos, several barriers hindered their use. These included a lack of formal culinary training in indigenous ingredients, limited availability in commercial supply chains, and perceptions of low consumer demand compared to Western cuisine (Spiro, 2023; Louw, 2020). Conversely, chefs who incorporated indigenous foods often cited motivations such as preserving heritage, meeting tourist expectations for authenticity, and responding to growing sustainability discourses in gastronomy (Du Rand & Fisher, 2020; Garibaldi, Pozzi, & Viani, 2016).

Observations revealed that indigenous ingredients were more likely to be featured inside dishes or promotional events rather than as central menu items, reflecting both innovation and hesitation within the culinary landscape.

Ethical clearance for this study was obtained from the University of Johannesburg's School of Tourism and Hospitality ethics committee (Approval No: STH-2025-014).

The study concluded that while there was growing awareness of indigenous ingredients, systemic barriers in training, sourcing, and consumer perception continued to limit their full integration into restaurant menus. Recommendations included:

• Embedding indigenous food education into culinary training curricula to familiarise upcoming chefs with traditional ingredients and techniques.

• Encouraging partnerships between restaurants and local farmers to strengthen supply chains for indigenous produce.

• Leveraging gastronomic tourism marketing strategies to position indigenous cuisine as a unique and authentic attraction on Vilakazi Street and beyond.

• Policy interventions to support the promotion of indigenous food systems in line with the Sustainable Development Goals, particularly SDG 2 (Zero Hunger) and SDG 12 (Responsible Consumption and Production).

This research contributed to scholarship on food heritage, sustainability, and gastronomy tourism by positioning chefs as key mediators between indigenous knowledge and contemporary culinary practice. The findings held implications for policymakers, culinary educators, and the hospitality industry in strengthening cultural identity, promoting sustainability, and enhancing the competitiveness of South African cuisine in a global context.

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SAAFECS26-125

Enhancing total quality management through training: a theoretical framework for SAEs

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Keywords: Hospitality, Accommodation Operations, Training and Development, Quality Management

Small, Medium and Micro Enterprises (SMMEs) play a fundamental role in the assuagement of unemployment, penury and economic decline. A remarkable 91% of formal businesses in South Africa are SMMEs and 60% of the countrywide workforce are tenured in SMMEs, contributing 34% towards overall economic production (Sibiya, van der Westhuizen and Sibiya, 2023). The South African government intentionally allocated SMMEs as a priority growth sector and thus entrepreneurship has become the backbone of our economy (Mokoena and Liambo, 2023). One of the tourism industry's most distinctive features "is that it is composed of small-scale enterprises" (Sixaba and Rogerson, 2023), these micro businesses include restaurants, accommodation, travel agencies, safaris, spas and transport services (Nomnga, 2021).

Small accommodation establishments (SAEs) provide guests with personalised and/or tailor-made offerings and services in an environment that feels homely, this sector include guest houses, B&Bs, farm stays, boarding houses, lodging houses, and self-catering (Wang and Hung, 2015). Although SAEs have a positive influence on the GPD, unfortunately, numerous challenges still exist within them, these challenges include scarcity of funds, poor infostructure, high taxation, competition and the absence of business management expertise. Another key challenge with the majority of South African SAEs managers/owners is that they have little to no official hospitality or tourism management training and education, resulting in the suffering of quality services (Coetzee, 2015). Possible hindrances that SAEs owner-managers tend to face which contribute to an elevated business failure percentage include the absence of knowledge concerning tourism trends, poor financial planning, lack of strategic alliances and limited managerial knowledge (Coetzee, 2015).

Quality may be perceived as the lack of flaws or defects (Shewfelt, 1989). Service quality in the hospitality sector means always providing the presumed services to guests (Ali, et al. 2021). While Quality Management works towards evolving something, and this is achieved by the use of frameworks, methods and tools (Kapiki, 2012). The performance of employees in the hospitality sector is seen as a critical dimension of quality (Crick and Spencer, 2010). Today, hospitality businesses are presented with a mosaic of challenges that not only present a competitive business setting, but owners are also faced with task of satisfying guests who are demanding custom-made experience. Therefore, owners have no other choice but to provide high-quality service and to produce a positive customer experience since the aforementioned is crucial for business success and sustainability (Castro-Casal, Vila-Vizquenz and Pardo-Gayoso, 2019) This research aims to develop a comprehensive theoretical framework for Total Quality Management training in small accommodation establishments in Gauteng. This framework will guide the advancement of practical training and development programmes in SAEs and propose a training component to TGCSA's star grading assessment criteria. Ethical approval was granted for this study: REC2024/02/027-MS.

An explanatory sequential mixed method approach was utilised. The study was conducted in two stages, the first stage employed a quantitative approach where structured questionnaires were distributed to employees in SAEs, data was captured from 370 participants and analysed using SPSS. In the second phase the researcher collected data using semi-structed interviews with 7 SAEs related professional bodies and data was analysed through manual codes.

The respondents agree that training is in line with self-development, upskilling or performance enhancement. Respondents view training as an integral part of service delivery in SAEs. The results revealed that several training gaps still existing within the sector and that regular training is viewed as the answer. Some of the suggestions in mitigating the existing training gaps in SAEs include regular training, refresher training, multiskilled individuals, employee appraisals and rewarding systems. The respondents strongly believe that the development of SOPs/uniformity in SAEs training is a dire need in this sector. The top five training needs that were recorded from the collected data were housekeeping training, customer service training, accounting/bookkeeping training, computer/IT skills and food preparation training.

The absence of a theoretical framework for Total Quality Management training in small accommodation establishments has resulted in shortcomings in the small accommodation establishments' level of service quality. This research project seeks to contribute to the noticeable lack of training relating to Total Quality Management education which has been identified in small accommodation establishments. The development of a comprehensive theoretical framework for Total Quality Management training will remedy the listed difficulties.

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Education/teaching and learning in Consumer Sciences

SAAFECS26-036

Reimagining Home Economics in the Age of Artificial Intelligence: Examining AI's Representation of the Discipline

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Key words: Artificial Intelligence Home Economics Transformation Perceptions Identity

The rapid integration of artificial intelligence (AI) into everyday life is reshaping knowledge production, access, and perception across disciplines. Home Economics—an interdisciplinary field encompassing food, nutrition, textiles, family studies, and financial literacy—faces unique challenges in this context. While AI tools increasingly generate content, offer expertise, and provide guidance in areas central to Home Economics, the accuracy, inclusivity, and disciplinary integrity of these portrayals remain largely unexplored (Baker & Hawn, 2021). This paper argues for a critical examination of how AI portrays Home Economics, highlighting the potential for bias, oversimplification, and devaluation of its holistic nature and builds on work by Deagon and Pendergast (2024).

This study adopts a mixed-methods approach, combining critical discourse analysis of AI-generated outputs with expert evaluation from Home Economics educators and scholars. The research design unfolded in three phases.

Phase One: Corpus Development. A purposive sample of AI-generated materials was collected from widely used generative AI platforms. The sample included text (e.g., explanations, lesson outlines, recipes, and financial literacy advice), images (e.g., generated depictions of family, food, and textiles), and instructional resources directly related to Home Economics domains. Search prompts were standardized to reflect core disciplinary areas—nutrition, food studies, textiles, family and community studies, and financial literacy—to ensure breadth and consistency across outputs. This process was used to produce a corpus of approximately 20 text samples and 20 images.

Phase Two: Critical Discourse Analysis. The textual and visual corpus was subjected to thematic coding and critical discourse analysis (CDA). Codes were developed inductively to capture recurring patterns in language, imagery, emphasis, and omissions, as well as deductively. The CDA focused on how AI systems framed Home Economics knowledge, what disciplinary values were highlighted or ignored, and whether stereotypical or reductionist narratives emerged (Baker & Hawn, 2021). For visual data, multimodal discourse analysis was applied to identify symbolic representations, cultural cues, and inclusivity markers.

Phase Three: Expert Evaluation. Findings from the discourse analysis were then reviewed by an expert panel of three internationally recognised Home Economics scholars with expertise in the field. They were asked to (1) assess the alignment of AI portrayals with contemporary disciplinary frameworks, specifically the IFHE Position Paper (IFHE, 2008) (2) evaluate the degree of accuracy and inclusivity in the outputs, and (3) provide recommendations on how AI could more faithfully represent Home Economics. Their assessments were gathered through two iterative rounds of structured feedback enabling convergence of opinion.

Data Integration and Interpretation. Results from the CDA and expert panel were triangulated to highlight areas of convergence and divergence. For example, when both discourse analysis and experts identified stereotypical portrayals of Home Economics as limited to domestic cooking, this was flagged as a significant narrative distortion requiring further exploration. Conversely, when experts disagreed with the coding interpretations, revisions were made to ensure validity. This multi-layered methodology strengthens the study's rigour by combining empirical analysis of AI outputs with disciplinary expertise, thereby ensuring that findings are both evidence-based and grounded in the values and complexities of Home Economics (Cai, Zhu, & Ma, 2024).

By addressing this critical intersection of technology and education, this research contributes to broader discussions on AI's role in shaping disciplinary identities and underscores the importance of actively guiding AI representations to reflect the values and complexities of Home Economics in the 21st century.

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SAAFECS26-107

Students Perceptions on Parental Involvement in their Children's Education: Implications in Teaching and Learning Home Economics

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Key words: Academic Performance Student -Parent Collaboration Parental Involvement

Parents are students' initial educators; their involvement in their children's education has been associated with positive educational outcomes (Mutodi & Ngirande, 2014; Durisic & Bunijevic, 2017). In Botswana, Mphafe et al., (2014) asserted that parental involvement is facilitated through structures such as Parent-Teacher Associations (PTA), sport activities, parents' consultations, and school open days, with the main aim of a three-way collaboration between teachers, students and parents. Nanogang Junior Secondary School in Gaborone, Botswana, consistently performed well in National Junior Secondary School Examinations. This success was partially attributed to strong parental involvement in the children's education. Most research on parental involvement and student academic performance has focused on adults/parents and teachers' perspectives. This study sought to assess the role of parents' involvement in education from the perspective of the students. Emphasis was placed on implications of parental involvement in teaching and learning Home Economics, a practical subject that has the potential to benefit even more from such collaboration.

The qualitative descriptive study used a semi-structured questionnaire with closed-ended questions on demographic data and open-ended questions on students' perceptions of parental involvement in their learning to collect data from 32 purposively selected Forms 2 and 3 students in Nanogang Junior Secondary School, Gaborone. Statistical Package for Social Sciences Software (SPSS) Version 23 was used to analyse demographic data and produce summaries such as frequencies and percentages. Thematic analysis was used to synthesize qualitative data on the students' perceptions.

The study findings aligned well with the six categories of Epstein's model of parental involvement in children's academic work, namely parenting, communication, volunteering, supporting learning at home, decision-making, and collaborating with the community (Epstein et al., 2019). Participants in this study reported that parental involvement in their education impacted them in various ways, including their academic achievement and psycho-social development. They reported that the student–parent collaboration generally helped them feel motivated, encouraged, and supported in their education. Furthermore, the collaboration provided students with a relaxed platform for open communication with parents and emotional support, consequently developing healthy relationships throughout their educational journey. For Home Economics education, parental involvement has the potential to reinforce students' attitudes towards home and life skills, providing real-world context, and offer unique perspectives that make learning more relevant in their daily lives.

However, the participants highlighted some challenges that hindered full parental involvement in their education, such as limited financial resources, demanding jobs, and family obligations. This could negatively impact Home Economics, a practical subject that requires extra financial resources from both the school and parents. Low income and low level of educational attainment of some parents also prevented full parental engagement in some educational subjects, such as Home Economics.

Ethical clearance and permission to conduct research in the school were obtained from Office of Research and Development (ORD) of the University of Botswana and the Ministry of Basic Education, respectively. Following the explanation of the study, parents voluntarily gave written consent and permission for their children to volunteer to participate in the study. Children who opted to attend also signed assent forms.

Students perceived parental involvement in their education as a key input that had a positive influence on their academic participation and performance. Participants felt motivated and supported when their parents were involved in their school activities. Practical subjects such as Home Economics, which need extra resources, could benefit more from the student-parent-teacher collaboration. However, parental involvement can be hindered by factors such as low income, low educational attainment, demanding work schedules, and family commitments. This study assessed the perceptions of a small sample of urban students; however, the results provided a starting point for further research. Future research could assess the role of parental involvement in education on larger samples of Home Economics students learning to improve focus and representativeness as well better inform students, parents and institutions.

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SAAFECS26-001

Advancing Students' Skills in Body Type Recognition and Classification using Digital Technology in Fashion Education

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Keywords: Technology-Enhanced Pedagogy, Female Figure Type Classification, 3d Point Cloud, Body Shape, Fashion

Integrating 3D body scanning technology into fashion education strengthens students' technical competence in garment sizing and fit across diverse body types. This is particularly relevant in South Africa (Phasha et al., 2017; Gribbin, 2014). Hence, this study adopted a technology-enhanced, learner-centred approach within the "Evaluation of Apparel" project module. The aim was to evaluate the students' aptitude in visually identifying and classifying South African women's body types from Biofidelic point-cloud scans presented as 2D images.

A cohort of 40 third-year fashion undergraduate students participated in the longitudinal study (2019–2023). The students had to visually classify 31 female body types, producing 1,262 assessments from the nine body types from Pandarum et al's (2020) study that developed algorithms for South African women. The reporting process was guided by a validated morphotype framework and a structured rubric. The students used descriptive statistics to analyse classification patterns and supported these findings with reflective narratives on the ease of visually assessing body types and their overall learning experience.

Findings indicate that the students identified the dominant body types as the hourglass (38%), triangle (16%), and "U" (15%), whereas the algorithm indicated that the dominant body types were the rectangle, spoon, and hourglass. Only 38% of student classifications corresponded with the framework, suggesting a low level of alignment. Asymmetrical body types were reported to be particularly challenging to classify, whereas the hourglass was easier to identify in 2D. A possible explanation is that the hourglass body type has historically been the clothing sector "ideal" both in fashion media and design, which may

have heightened the students' cognitive awareness, making it easier to visually identify and classify.

The assessment highlighted a pedagogical gap in visual body-type recognition within an Open Distance e-Learning context. To address this, revised project guidelines, enhanced learning resources, industry expert lectures, and 3D-printed Biofidelic models have been incorporated into the curriculum to strengthen students' analytical, practical, and applied learning skills in body type analysis. Further research is focusing on the integration of augmented reality tools that will allow students to project Biofidelic scans into real-world environments using mobile phones.

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Using Coaching Circles to Promote Collaboration Among FCS Professionals

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Keywords: Job Embeddedness, Mentorship, Inclusion, Agents, Faculty, Programs

An organisation's capacity to advance its mission is intrinsically linked to its people. High staff turnover, ineffective communication, and a negative workplace culture increase human resources expenditure, lower morale, and impede productivity. Job embeddedness theory provides valuable insight into employee retention, identifying job

satisfaction as a key mediator between work-life balance and the intention to remain in post (Sudibjo, Birgita, & Suwarli, 2020; Zhang, Fried, and Griffeth, 2013). Mitchell et al. (2001) highlight four critical dimensions—links, fit, sacrifice, and community—that influence embeddedness. Establishing formal opportunities for collaboration is essential to embedding these strategies within an organisation's culture. Successful mentoring programs include structured support and relationship-building across career stages (Texas A & M AgriLife Extension, 2012), the need for intentional, structured coaching (Benge, Steele, & Beattie, 2020), formal mentoring (Hagerman, Marshall, Sullins, & Burdine, 2022), and mentor training (Harder, Leitheiser, K., & Caillouet, L., 2024). Well-designed coaching or mentoring programs result in mutually-beneficial outcomes for the employee being coached, the coach, and the organization (Franz, N. & Weeks, R., 2008.

A Cooperative Extension Service organisation in the southern United States adopted a Coaching Circle approach to strengthen relationships among managers and colleagues—a method shown to enhance job embeddedness (Yigit, 2022). Monthly online Coaching Circles were structured around three career stages: early-career (0–5 years), mid-career (6–10 years), and seasoned professionals (11+ years). Each group comprised a mix of Family and Consumer Sciences (FCS) professionals—faculty, programme associates, county-level educators, and administrative assistants—from all 75 counties in the state and the state office. This inclusive structure encouraged cross-level collaboration and mutual support. Participants included 35 early-career professionals (one faculty member, one programme associate, two administrative assistants, and 31 county-level educators); 20 mid-career professionals (one faculty member and 19 county-level educators); and 25 seasoned professionals (three faculty members, four programme associates, and 18 county-level educators).

Each Coaching Circle was tailored to meet the distinct needs of its participants. The early-career group focused on equipping new staff with the knowledge and resources necessary to support early success and programme goals. The mid-career group emphasised peer support in recognising and managing burnout, while also pursuing awards and career development. The seasoned group concentrated on fostering high-quality mentorship across all levels of FCS. Meeting topics were aligned with each group's specific objectives.

At the end of the 12-month programme, participants were invited to complete a voluntary Qualtrics survey, conducted in accordance with the research ethics requirements of the organization, to share their experiences of the Coaching Circles. The survey included one open-ended question asking how a particular session—or the programme as a whole—had supported their personal or professional growth. The qualitative data were analyzed and coded for themes. Results indicate that the Coaching Circle program was positive, highlighting strengthened connections with colleagues and the organisation. Two representative examples are provided below:

I thoroughly enjoyed interacting with seasoned agents and exchanging ideas. I appreciated that most of the sessions were open discussions, and it felt like a safe space to express how I was feeling.

One of my favorite ones was in March: Personal Wellness and Work-Life Balance. It was beneficial to gain ideas on how to balance work and life, and I appreciated the presentation and open discussion.

Following the first year, the Early Career Coaching Circle continued under the leadership of New Agent FCS Educators, who work closely with new county-level educators and facilitate their engagement with FCS faculty. The Mid-Career Coaching Circle is now led by an FCS Instructor pursuing a terminal degree, with a dissertation focused on job embeddedness in Cooperative Extension. The Seasoned Career Coaching Circle is self-directed by experienced agents and faculty, with an emphasis on cultivating a positive workplace environment. The Extension Foundation's Leadership & Team Development Specialist supports sessions for seasoned agents. All participants in the Coaching Circle programme remain employed with the Cooperative Extension Service one year later. Furthermore, 10 received regional awards, and eight received national awards in their respective FCS content areas.

This programme underscores the value of Coaching Circles in promoting job embeddedness. By formalising connections among colleagues, managers, and peers, Coaching Circles provide a structured platform for exploring personal, career, and future aspirations. Participants regard the programme as a meaningful employment benefit and a mechanism for strengthening relationships that foster long-term organisational commitment.

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The Role of Digital Technologies in Home Economics Education: Benefits and Challenges

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Keywords: Multimedia, Digital Literacy, ICT, Virtual Learning, Teacher Training, Educational Resources

Home economics education, rooted in human sciences, aims to improve the quality of life for individuals, families, and communities. With the growing digitalisation of education, integrating digital technologies into Home economics has become essential for enhancing teaching and learning. In Zambia, particularly Lusaka District, the use of digital tools presents both opportunities and barriers. Potential benefits include improved access to information, interactive learning experiences, and skill development in areas such as nutrition, financial literacy, and family management. However, challenges remain, including limited access to technology, inadequate teacher training, insufficient institutional support, and unequal resource allocation.

This study investigated the role, benefits, and challenges of digital technologies in Home Economics education in Lusaka District, Zambia. A convergent parallel mixed-methods design was employed, combining quantitative and qualitative approaches to obtain a comprehensive understanding. Quantitative data were collected from 92 respondents, including teachers and school administrators, using structured questionnaires, while qualitative data were obtained through semi-structured interviews with 10 Home Economics teachers. Purposive sampling was used to select teachers and administrators, and convenience sampling for learners. Quantitative data were analysed using SPSS, while qualitative data underwent thematic analysis to identify key trends and insights.

The findings indicated that digital technologies are widely adopted and considered necessary in Home economics education. A majority of respondents reported daily (39.1%) or weekly (22.8%) use of digital tools, with smartphones being the most common (84.1%), followed by PowerPoint, nutrition apps, and online tutorials. More advanced tools such as virtual simulations and budgeting software were less frequently used. An overwhelming 98.9% of respondents acknowledged the helpfulness of digital technologies in enhancing teaching and learning. Teachers reported multiple benefits, including increased engagement through interactive lessons, improved teaching efficiency, access to a wide range of educational resources, flexible learning opportunities through virtual platforms, and enhanced professional growth and creativity.

Regarding their importance, 70.7% of respondents rated digital technologies as effective or very effective. Teachers notes that these tools enhanced learner motivation and engagement through multimedia resources, personalised instruction catering to diverse learning styles, improved lesson delivery and assessment efficiency, development of digital and 21st-century skills, and strengthened collaboration and communication between teachers and learners. These findings suggest that digital classrooms play a critical role in modernising Home Economics education, making it more interactive, skill-orientated, and aligned with contemporary educational demands.

Nevertheless, significant challenges were identified. The most significant barrier was poor internet connectivity (43.5%), followed by the high cost of digital tools and software and insufficient teacher training (16.3% each). Additional obstacles included unequal access to technology among students (9.8%) and lack of access to devices (7.6%). Qualitative findings further highlighted inadequate infrastructure, limited institutional support, restrictive policies, low digital literacy, cultural resistance, and administrative inefficiencies. More than half of the teachers (57%) felt unsupported by their institutions, indicating systemic barriers to effective technology integration.

Teachers recommended strategies to enhance digital technology use, including integrating multimedia and interactive content such as videos, virtual labs, and quizzes; improving infrastructure and access to reliable electricity and devices; providing continuous professional development and training; and increasing institutional support through the provision of digital tools, pre-programmed devices, and technology kits. The targeted provision of subject-specific resources and data bundles was emphasised as crucial for improving practical instruction and ensuring equitable learning opportunities.

In conclusion, the study affirms that digital technologies are both necessary and transformative for Home economics education, enhancing engagement, learning efficiency, and skill acquisition while addressing contemporary educational needs. The findings underscore the need for targeted investment in infrastructure, teacher training, and institutional support to overcome challenges. It is recommended that policymakers, school administrators, and education stakeholders prioritise digital literacy, resource allocation, and the development of tailored digital resources to maximise the benefits of technology in Home economics.

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Home Economics subject enactment in Western Australia (WA)

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Keywords: Home Economics, Teachers, Future, Subject Enactment

Home Economics is a subject continually evolving, adapting to curriculum, school based and societal changes, with teachers balancing these requirements. The aim of this exploratory research was reviewing function and relevance of Home Economics within Western Australia (WA) secondary schools, as the subject has a role to play in educating today's global students (Pendergast, 2007), and curriculum changes are an ongoing reality for teachers and schools, with professional learning needed to support this (Jenkins, 2020). There are options for Home Economics to link to contemporary society

including health, wellbeing and craft (Pendergast & Dewhurst, 2012; Moss, 2021 and Obama, 2022) and for it to lead in sustainability education (Maguire & McCloat, 2017). However, there are school pressures and challenges regarding future subject enactment, all of which are informed by societal expectations as well as teaching practice. Despite subject position statements by International Federation of Home Economics (IFHE) in 2008, and Home Economics Institute of Australia (HEIA) in 2010, there are a range of issues confronting this subject (IFHE, 2008; HEIA, 2010). Collectively, teachers' experiences can be used to advocate for this subject, whilst also informing stakeholders and policy makers ensuring future curriculum revisions are informed by best teaching practice and current social expectations.

The investigation involved a two-stage explanatory sequential design, collecting quantitative data followed by qualitative data, with collated results providing a general insight into the problem. This commenced with a researcher designed statewide survey of WA Home Economics teachers, allowing for the state's large geographical nature, capturing breadth. The survey was primarily conducted through a social media site and completed by one hundred and seven respondents throughout WA, identifying relevant demographics, Home Economics curriculum spaces, curriculum experiences, school enactment of Home Economics, as well as societal and external influences on the subject. The survey identified several issues, which were then further explored by conducting ten individual semi-structured interviews with Home Economics teachers, who volunteered at the completion of the survey. These teachers were of various ages, experiences, sectors and regions. Thus, gaining insights and delving deeper into the issues identified, including their lived experiences and collaborations within schools, building increased subject relevance for the future.

Respondent discussion insights included suggesting the use of explicit terminology in future WA curriculum documents for high school students, clearly identifying the subject, with an easy-to-follow format to minimise the need for individual teacher interpretation, which could encourage more consistency with implementation. Respondents further believed facilitating the sharing of good practice with other colleagues and working in a more collaborative manner could strengthen subject delivery and the subject's place in curriculum. Results show valuable insights, whilst showcasing some concerns teachers have with current subject school and curriculum enactment. Respondents identified varying levels of confidence when enacting curriculum, inconsistencies with banner used to identify the subject in schools, subject area alignment, allocation of subject leaders and with curriculum documents, differing implementation in schools, as well as influence of various societal and external influences. Recommendations are to policy makers and stakeholders, which included recognition as a specialised distinct subject, using consistent and recognisable terminology, strengthening the subject. As well as suggestions regarding future teaching enactment, increased support within schools, mentoring with colleagues, collaborations and subject recognition. Moving into the 21st century these results could assist identify changing needs of students, whilst involving stronger sustainability links and creating positive links with technology, which support and assist teachers. Which is timely, given ongoing Australian curriculum reviews, and this study has the potential to inform curriculum change and policy makers in WA, especially as the state curriculum body, the School Curriculum and Standards Authority (SCSA), is currently reviewing and refining the latest version for implementation in 2026. There is the need for Home Economics evolvement to meet changing student and community demands. Change is only as effective as those who need to implement it, and if teachers feel empowered by having input into curriculum development, they are more likely to feel invested in implementing, resulting in changes (Jenkins, 2020). Ethics approval number: 2021-03137- SMITH

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Constructing meaningful entrepreneurship education in South African Consumer Studies

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Keywords: Best Practice, Consumer Studies Education, Entrepreneurial Learning, Pedagogical Guidance, Teacher Support

'Pedagogy' refers to the practice of teaching, including the "theory or principles of education" that results in "a method of teaching based on such a theory" (Oxford Dictionary, 2025). When employing a constructivist learning lens (or theory), pedagogy refers to the "methods, activities, principles or practices that best support the construction of knowledge and skills in Consumer Studies" (Du Toit, 2018:220). Such a view implies that knowledge and skills can be built (or constructed) through the design and implementation of best practices. In constructivist pedagogy, teaching AND learning methods, activities, or practices contribute to meaningful education. The teacher and learners are, therefore, co-constructors and responsible for learning in the educational process. In the current study, meaningful education was regarded as "a structured process of combining certain elements to construct meaningful learning experiences" (Du Toit, 2022:73). In particular, the research reported here focused on how pedagogical guidance ('certain elements') could be combined in a structured process to design and implement (construct) meaningful entrepreneurship education as part of the school subject Consumer Studies.

The extensive entrepreneurship education embedded in Consumer Studies makes it a unique and invaluable subject as part of the South African school curriculum (Du Toit &

Goosen, 2024). Pedagogy greatly impacts the effectiveness and meaningfulness of entrepreneurship education (Annafatmawaty et al., 2018), and structured pedagogical guidance for teachers in this topic is, therefore, critical. Yet, numerous studies have reported a dearth of pedagogical guidance for Consumer Studies educators (Ngwenya & Shange, 2019), particularly for entrepreneurship education embedded in the subject (Booyse et al., 2013; Du Toit, 2018). Developing structured pedagogical guidance that enables or enhances meaningful entrepreneurship education – especially in Consumer Studies, which includes a significant focus on this topic – remains a problematic lacuna in research that needs to be addressed. The current paper aims to ameliorate this problem by presenting empirically validated recommendations that can serve as pedagogical guidance for constructing meaningful entrepreneurship education in Consumer Studies education.

Using a constructivist lens, a sequential mixed-methods research design was implemented. One phase served to qualitatively explore, analyse and identify practices utilised for entrepreneurship education from published scholarly literature across the globe. A systematic literature review of EBSCOhost Online Research, ERIC and Sabinet databases was conducted for this purpose, with a total of 359 items (papers, articles, reports and theses) analysed. Next, purposive convenience sampling, followed by snowball sampling, was used to invite South African Consumer Studies teachers to voluntarily complete an online questionnaire. A third phase entailed conducting focus group sessions in all nine South African provinces, with some of the same participants, to clarify and gain deeper insights into their questionnaire responses. The current paper only reports on the findings for items focusing particularly on pedagogy for entrepreneurship.

The ethics approval reference number for this study was 2016/CAES/101, and all required permissions were obtained from the South African Department of Basic Education (national) as well as from the Department of Education in each of the nine provinces.

Six core themes were found in global literature on pedagogy for entrepreneurship education: (1) Entrepreneurship education is structured around learning, not only teaching; (2) Active learning is an immutable pedagogy in entrepreneurship education; (3) Learner-centred learning, linked to real-world experiences, fosters engaged and meaningful entrepreneurial learning; (4) Pedagogy should not be separated from the knowledge and skills developed in entrepreneurship education; (5) Learning from mistakes creates extended opportunities for learning in entrepreneurship education; and (6) Pedagogy cannot be designed in isolation – the context in which entrepreneurship education must be developed, the rationale for its inclusion, as well as the developmental level of the learners (as co-constructors of learning), must be considered in the process. These six strategies were subsequently used as an analytical framework to compare the reported practices of South African Consumer Studies teachers. The data showed that, overall, there is a misalignment between the entrepreneurship education pedagogical practices of most South African Consumer Studies teachers in comparison to global best practices (the six strategies) in this regard.

A significant gap exists between Consumer Studies teachers' pedagogical praxis for entrepreneurship and those identified as global best practices. Several contextual issues contribute to this complex problem. Still, the findings of the current study were useful to make empirically validated recommendations that can serve as pedagogical guidance for constructing meaningful entrepreneurship education in Consumer Studies education.

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Everyday Mathematics in the Food Lab for Home Economics Student Teachers

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Keywords: Home Economics, Mathematics, Home Economics Student Teacher, Design Study

Learning outcomes and interest in science have steadily declined in Finland (Kang et al., 2023; Ministry of Education and Culture, 2023). The Real Life Math project (funded by TFK) in home economics at the University of Eastern Finland aims to highlight everyday mathematics in an engaging way as part of kitchen work carried out by home economics student teachers. Real Life Math partner universities are in Finland Vaasa`s Luma Centre Ostobothnia, in South Africa`s North West University, in Lesotho College of Education, in Zimbabwe National University of Science and Technology and Lupane State University. The project aims to enhance understanding of mathematics within the context of everyday life.

Numeracy, comparable to literacy, refers to the ability to comprehend, reason with, and apply numerical information (Brooks & Pui, 2010). Numeracy is needed in home economics education, for example when reading recipes, in order to correctly interpret quantities.

The aim of our design-based research is to increase the visibility of everyday mathematics as part of home economics teacher education, to develop existing mathematical tasks, and to inspire student teachers to integrate mathematics into their teaching – potentially in collaboration with mathematics teachers. The significance of design-based research can be examined through its capacity to transform educational practices (Design-Based Research Collective, 2003). The development work draws on a teaching diary maintained by the teacher, which is analyzed using content analysis. Our design-based research progresses in iterative cycles: the process involves analyzing, developing, and evaluating mathematical tasks, with the aim of making them more visible (Nieveen & Folmer, 2013). The research follow the guidelines for research ethics by the Finnish National Board on Research Integrity (TENK, 2023).

According to preliminary findings, it was found that mathematics is strongly present in everyday life and food preparation. In the university-level home economics teacher education program, students engage extensively with numerical information, including statistics, data on energy and water consumption, numerical content in recipes, as well as halving or doubling a recipe, calculating unit prices for food items – such as cleaned fish – and preparing budget calculations. In the food lab environment, where students engage in hands-on cooking, the development of mathematical skills may occur without conscious awareness and the learning of numeracy is reflected as concrete benefits in everyday life. The inspiring tasks designed by the teacher, which concretize mathematics in everyday contexts, serve as important examples for student teachers on how mathematics can be taught as an integral part of home economics education.

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SAAFECS26-088

A Christian Perspective on Consumer Studies: Incorporating the Concept of Aesthetics in the South African Curriculum

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Keywords: Aesthetics, Christian Perspective, Consumer Studies, Curriculum, South African

Consumer Studies is described in South Africa's National Curriculum Statement (NCS) using terms such as "responsible and informed consumer behaviour", "optimal use of resources", and "production and marketing" of products (DBE, 2011:8). These terms emphasise an underlying focus on the economic aspect of Consumer Studies. This study is framed within a Christian perspective that recognises human beings (consumers) as made in the image of God and, therefore, as creative agents with an intrinsic appreciation for the aesthetic aspect of life (Schaeffer, 1985; Goheen & Bartholomew, 2008; Ryken, 2013). Where aesthetic aspects of everyday life refer to behaviours concerning the creativity and imagination expressed in the way resources are used, effective businesses are run, products are packaged and marketed, etc. (Goheen & Bartholomew, 2008:156; 158). Accordingly, the research question asks whether the aesthetic aspect constitutes an underlying concept that should be intentionally incorporated into the South African Consumer Studies curriculum. A qualitative exploratory literature review was conducted. At the outset, the databases EBSCOhost, ERIC, Google Scholar, Online Research and Sabinet were searched for two kinds of articles. Articles on the effect of aesthetics in education and articles that investigate the effect of aesthetics in consumer behaviour. Inclusion criteria included English as the language, a date range between 2015–2025 and the word 'aesthetics' in the title.

Drawing from the analysis, the paper argues for the deliberate inclusion of aesthetics alongside the economic focus in Consumer Sciences. This argument is formulated based on Christian literature (Schaeffer, 1971; Stam, 2008), recent studies that recognize the subtle effects of aesthetics in consumer contexts (Hsiao, Chiu & Chen, 2008; Cheung, Law, Yip & Wong, 2019), and studies that highlight the positive effects of aesthetics in education (Wickman, Prain & Tytler, 2025; Ferguson, Tytler & White, 2025). Together, these sources indicate that aesthetic considerations are pedagogically valuable and practically consequential for consumer behaviour. The research results show a strong alignment between economic and aesthetic aspects, suggesting that attention to aesthetics can complement, rather than compete with, responsible and informed consumer behaviour and optimal resource use. The article concludes that the aesthetic aspect of Consumer Studies should be deliberately incorporated as an underlying concept in the South African Consumer Studies curriculum, alongside the complementary economic and entrepreneurship focus. This inclusion would align the

curriculum with evidence from the literature, the stated NCS aim of improving human well-being, and a holistic educational vision. Further research might undertake mixed-method investigations linking aesthetic instruction to responsible consumption behaviours.

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SAAFECS26-096

Advancing a Home Economics Professional Identity Through Teacher Education

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SAAFECS26-098

From Abstraction to Application: Reimagining the Amalgamation Potential in Mathematics and Consumer Studies Teacher Preparation

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Keywords: Real-World Learning, Teacher Education, School Curriculum, Mathematical Literacy, Measurement Literacy, 21st-Century Skills, Curriculum Integration

In the South African school context, many learners continue to perceive mathematics as an abstract and disconnected subject, with limited relevance to their everyday lives. This challenge is particularly pronounced in relation to measurement topics such as volume, solids, temperature, and spatial reasoning—concepts that are foundational not only to mathematical literacy, but also to real-world behaviour, environmental awareness, and sustainable decision-making. Despite curriculum development efforts, including the introduction of a South African subject called Mathematical Literacy, learners still struggle to apply these concepts in authentic contexts, revealing a critical shortfall in teacher preparation (Kloppers & Grosser, 2014). On the other hand, another subject in the South African school curriculum – Consumer Studies – includes extensive opportunities for learners to practically and meaningfully apply mathematical measurement knowledge and skills. For example, measuring temperature, volume and mass of ingredients for food production, or taking body measurements and calculating textile needs when designing textile items (Department of Basic Education [DBE], 2011). However, reports indicate that Consumer Studies teachers (and learners) frequently struggle with the mathematical calculations and abstractions required as part of this subject's content (Du Toit, 2018).

Drawing on observed learner difficulties and curriculum analysis, the argument is made that current pre-service and in-service training models insufficiently equip Mathematics and Consumer Studies teachers to bridge the gap between abstraction and application. The result is a generation of learners who cannot meaningfully engage with numeracy as a 21st-century skill. Yet, there appears to be potential to amalgamate measurement learning from Mathematical Literacy and Consumer Studies education, to benefit learners in both subjects (Umalusi, 2014:12; 94) by making learning life-relevant and meaningful. To explore this potential, with the aim of making implementable recommendations toward strengthening measurement knowledge and skills in both subjects, the curricula, teacher preparation, and teachers' practices will have to be analysed. The researchers, both experienced in school education and teacher preparation, outlined a conceptual roadmap of possible intersections, topics, and foci across the two subjects' intended and implemented curricula, as well as the structuring of teacher preparation programmes for both.

The current paper only reports on the conceptual outline developed as a point of departure for South African teacher preparation in Mathematical Literacy and Consumer Studies education. This outline will contribute to the foundation for a much more extensive study, which also involves other countries (Finland, Lesotho, and Zimbabwe) experiencing similar challenges across these two subjects, as part of the TFK project. The ethical approval for the TFK project serves as an umbrella and precursor to the approval from local institutions, which is currently in progress.

An exploratory conceptual investigation was used to analyse the current teacher preparation programmes for Mathematical Literacy and Consumer Studies teacher preparation at one South African university. The thematic analyses focused on possible intersections, topics, and foci across the two programmes, where student teachers could collaborate and co-construct measurement learning and other numeracy knowledge and skills in an interactive manner to bridge the gaps between abstraction and application of such skills.

The initial findings highlight key challenges in teacher preparation, including a lack of contextualised pedagogy, weak integration (or silo teaching) between subjects, and minimal use of tactile or digital tools to support conceptual understanding. Based on these initial findings, the researchers propose strategies to strengthen amalgamation or interlinking – where relevant – of teacher education programmes—emphasising interdisciplinary task design, experiential learning, and reflective practice—to empower teachers to facilitate learning that is both mathematically rigorous and socially responsive.

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SAAFECS26-100

Taste as an Educational Tool for Sustainability: A Didactical Model for Home Economics Education

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Keyword: 1. Sustainable Food Consumption 2. Didactical Model 3. Home Economics Education 4. Transactional Taste 5. Critical Food Education 6. Sensory Learning

Sustainable food consumption is a central theme in Home Economics education globally. In Sweden, the national curriculum for compulsory school (Lgr22, 2024) emphasizes the importance of consumer knowledge and domestic practices in promoting sustainable development. However, sustainability education often relies on normative frameworks that prioritize rational decision-making and factual knowledge, leaving limited space for embodied, sensory, and relational dimensions of food practices. This study explores how the concept of taste—understood through a pragmatist lens as a transactional and experiential activity—can be used to challenge these normative approaches and foster deeper engagement with sustainability in Home Economics education.

The study is based on a small-scale qualitative pilot project involving a group of Home Economics teachers in Sweden. The participating teachers tested sensory-based classroom activities with their students and provided written reflections and discussions about their experiences. Importantly, the students were not included as research subjects; all data was collected from the teachers. The study draws on a pragmatist view of learning, inspired by Deweyan principles, where knowledge is constructed through experience, inquiry, and contextual interaction. This perspective informed the development of a five-step didactical model aimed at supporting teachers in planning, implementing, and reflecting on teaching that integrates taste in relation till sustainable food consumption, as an educational tool.

The teachers identified several pedagogical challenges, including contextual integration, navigating value conflicts, and avoiding normative instruction. In response, a five-step didactical model was developed:

1. Developing taste awareness and conceptualization – introducing students to basic taste theory and encouraging sensory reflection through structured exercises.
2. Recognizing taste as changeable – exploring how taste is shaped by bodily, social, and situational factors, and how it evolves through experience.
3. Exploring food-ethical values – facilitating ethical reflection on food choices using tools such as value hierarchies and ethical frameworks.
4. Experimenting with taste to influence food habits – encouraging repeated exposure to diverse ingredients and cooking methods to foster curiosity and sustainable preferences.
5. Reflecting on taste experiences and preferences – supporting ongoing self-reflection through tools like taste diaries to connect personal development with sustainable consumption.

Together, these strategies frame taste as a educational rich and collaborative activity that supports inclusive, reflective, and sustainability-oriented learning in Home Economics.

This study contributes to Home Economics education by introducing a pragmatist and transactional understanding of taste as a pedagogical resource. The didactical model offers a structured yet flexible framework for integrating taste experience with sustainability themes. While the small scale of the study limits generalizability, the findings point to promising directions for future research and practice. We recommend further development and testing of the model in broader educational contexts.

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SAAFECS26-105

Technical skills as a wellness buffer among design and technology students in continuous professional teacher development programs in Zimbabwe

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Keywords: Continuous Professional Teacher Development, Design and Technology Education Student Wellness, Technical Skills, Wellbeing Buffer

Student wellness is increasingly recognised as a central dimension of effective learning within higher and continuing education (Ryan & Deci, 2017; Van der Westhuizen & De Beer, 2021). In Zimbabwe, Design and Technology student-teachers enrolled in continuous professional teacher development programs face multiple and intersecting challenges, including balancing demanding professional responsibilities, extensive academic workloads, and family commitments. These pressures compromise motivation and well-being, particularly when program structures are rigid and institutional support is limited (Mafumbate & Simelane, 2020). Against this backdrop, the study investigated how engagement in technical skills functions as a wellness buffer, enhancing emotional, social, and professional well-being. The study was framed by self-determination theory, which emphasises the importance of autonomy, competence, and relatedness in sustaining motivation and well-being (Deci & Ryan, 2000). The research aimed to contribute insights into how continuous professional teacher development programs could be redesigned to be more wellness-sensitive and sustainable.

A qualitative, interpretive research design was employed, using semi-structured interviews to capture the lived experiences of D&T student-teachers. Nine part-time students drawn from different institutions across Zimbabwe participated in the study. Data were analysed thematically, guided by Braun and Clarke's (2006) six-phase approach to thematic analysis. Ethical approval for the study was obtained from the National University of Science and Technology Research Ethics Committee (Approval No: NUST/IRB/2025/142).

Three core themes emerged. First, engagement in hands-on technical skills provided emotional satisfaction, fostered professional confidence, and facilitated social competence. Students reported that practical engagement reduced stress, increased self-efficacy, and created peer bonding opportunities, thus serving as a wellness buffer. Second, students identified significant challenges, including role overload, compressed curricula, financial strain, and inadequate institutional support. These factors undermined autonomy and contributed to emotional and physical exhaustion. Third, coping strategies such as time management, peer and family support, and drawing strength from spirituality were identified as essential in navigating program demands.

These findings align with SDT, illustrating that wellness flourishes when learning environments support autonomy, competence, and relatedness (Ryan & Deci, 2017).

The study concludes that technical skills are not only educational outcomes but also protective factors that buffer against the pressures of part-time professional study. However, the benefits of technical engagement are constrained by structural and institutional barriers. Recommendations include the integration of wellness-sensitive design into continuous professional teacher development programs curricula, flexible program structures to accommodate adult learners' multiple roles, and institutional policies that provide psychosocial and financial support. Policymakers and higher education institutions should recognise the wellness implications of continuous teacher development programs and adopt more inclusive and human-centred frameworks. Contributions of the study include extending self-determination theory into the field of continuing teacher education in Zimbabwe, highlighting technical skill engagement as a unique wellness buffer, and offering evidence-based recommendations for curriculum and policy redesign. Future research could expand to comparative studies across disciplines and contexts to deepen the understanding of wellness in professional development programs.

Family and related social issues

SAAFECS26-013

No Ring, No Rights?: The Implications of Dying Intestate in Ghanaian Cohabitation Relationships.

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Keywords: Cohabitation, Inheritance Rights, Intestacy, Family Law, Legal Awareness, Ghana

Cohabitation is increasingly common in Ghana, yet remains legally unrecognised under both statutory and customary law (Obeng-Hinneh and Kpoor, 2022; Acquaah, 2023). This lack of legal status leaves cohabitants, particularly women, vulnerable to loss of property and inheritance upon the intestate death of a partner (Obeng-Hinneh and Kpoor, 2022). In the absence of formal marriage, Ghana's PNDC Law 111 does not extend automatic inheritance rights to surviving partners, often resulting in property confiscation by the deceased's family (PNDC Law 111). Despite these legal realities, there is limited empirical evidence on cohabitants' understanding of their inheritance rights or the will-making process. This study addresses this gap by exploring cohabitants' knowledge of the implications of dying intestate in Atadeka, Ashaiman, within the Greater Accra Region of Ghana.

A qualitative cross-sectional design was adopted to capture in-depth insights into cohabitants' perceptions and legal knowledge. Thirty-six participants (19 women, 17 men) aged 18–60, currently in cohabiting relationships, were recruited through purposive and snowball sampling. Semi-structured interviews, guided by four research objectives, explored participants' understanding of cohabitation, reasons for cohabiting, awareness of inheritance laws, and knowledge of will-making processes. Interviews were conducted in English and local languages (Twi and Ga), transcribed verbatim, and analysed using Braun and Clarke's six-phase thematic analysis.

In order to ensure ethics in the study, ethical clearance was sought from the Ethics Committee for Basic and Applied Sciences (ECBAS) at the University of Ghana.The certifciate number for the ethical clearance was (ECBAS 042/ 23-24).

Most of the participants defined cohabitation as living together without performing formal marriage rites, with a few perceiving it as a preparatory stage for marriage. Primary motivations for cohabitation included financial constraints, unplanned pregnancies, and

testing partner compatibility (Sassler and Lichter, 2020; Acquaah, 2023). Legal literacy was low: over half of the participants were unaware of PNDC Law 111 or its implications for inheritance rights (Ditsela, Diala & Ozoemena, 2024). Misconceptions about “common law marriage” persisted, with some believing cohabitation conferred marital rights. A majority lacked knowledge of the legal steps involved in will-making, and many assumed wills were only necessary for individuals with significant property (Maina, 2024). Socio-cultural barriers such as family disapproval and exclusion from property claims emerged as major challenges for surviving cohabitants, particularly women (Obeng-Hinneh and Kpoor, 2022; Gyasi-Gyamerah, Quansah, Annor & Gyasi-Gyamerah, 2023). These findings align with global literature showing that informal unions often leave partners, especially women, economically insecure after a partner’s death (Sassler and Lichter, 2020; Maina, 2024).

This study highlights a significant gap between the increasing acceptability of cohabitation, while highlighting inadequate legal awareness of intestacy and inheritance rights in Ghana. The lack of legal recognition and protective measures leaves cohabitants, particularly those in economically vulnerable situations, at risk of dispossession and social insecurity (Obeng-Hinneh, 2023; Maina, 2023). Public education campaigns on inheritance laws and will-making should be prioritized by government bodies, legal professionals, and civil society organisations. Legal reforms might consider extending certain protections to long-term cohabitants, in line with proposed but unpassed legislation such as the Property Rights of Spouses Bill. The study contributes to family and consumer sciences by providing context-specific evidence that can inform policy advocacy, legal literacy initiatives, and community outreach on estate planning. It also stresses the importance of interdisciplinary collaboration among consumer scientists, legal experts, and community leaders to address the socio-legal vulnerabilities faced by families in non-traditional unions.

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SAAFECS26-085

Aging-Related Shame in Family Elderly Care and Its Alleviation Mechanisms: A Mixed-Methods Study

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Keywords: Family Caregiving, Emotional Work, Biographical Reconstruction, Memory Intervention, Narrative Facilitate

In China, 90% of older adults opt for community-based aging in place. A significant issue within this context is the growing prominence of "shame" experienced by the elderly due to physical dependence and the loss of social roles in daily family care (Briller,2020; Shaw,2024). This not only affects their mental health but also poses challenges to the dynamics within families and the integration of social support systems (Schulz,2020). This study focuses on the interactive mechanisms among older adults, family members, and social support systems, exploring how emotional work and memory intervention strategies, facilitated through the family unit, can reconstruct self-identity and enhance family cohesion, thereby effectively alleviating shame and improving the quality of elderly care (Wu,2022).

This research employs a mixed-methods approach, combining qualitative interviews and structured questionnaire surveys, to systematically investigate older adults, family caregivers, and community workers across multiple communities in Hangzhou, Zhejiang Province. In the qualitative phase, NVivo12 was used to code and thematically analyze

in-depth interview transcripts, with a focus on the contexts in which shame arises, emotional coping strategies, and the therapeutic role of memory narratives. In the quantitative phase, structural equation modeling (SEM) was applied to examine the structural relationships among shame, family support, and the efficacy of emotional work. Additionally, hierarchical linear modeling (HLM) was used to control for individual- and institutional-level variables, enhancing the robustness of the model and the strength of causal inferences.

The findings indicate that: (1) Emotional work centered on "biographical reconstruction" serves as a key mechanism for alleviating shame among the elderly, transforming narratives of passive dependence into subjective narratives highlighting resilience and wisdom; (2) The effectiveness of family caregiving is not only determined by the caregiver's technical skills but is also significantly influenced by their "emotional-cognitive flexibility" and ability to negotiate within the micro-politics of the family (Mei,2020); (3) Structural equation modeling confirms that "memory-oriented emotional support" is the strongest predictor of reduced shame ($\beta = -0.67$, $p < 0.001$) and effectively activates "weak-tie" networks, such as community participation, thereby enabling a multidimensional expansion of social support systems; (4) The "home," as the core setting of domestic care, is transformed through emotional work into a "memoryscape" that embodies personal history. Household items and spatial arrangements become vital mediums for emotional interaction, highlighting the therapeutic function of the home environment in modern elderly care (Lovatt,2023). Furthermore, based on existing research, the future core competency of domestic care work will depend on whether caregivers possess the professional ability to transition from "task performers" to "narrative facilitators."

This study elucidates the critical role of emotional work and memory interventions in mitigating aging-related shame within family care contexts. It contributes theoretically by integrating biographical reconstruction and micro-political negotiation into the interaction systems and mechanisms of family caregiving, and empirically through robust modeling of psychosocial mechanisms (Li,2020). Practically, the findings underscore the need to train caregivers as narrative facilitators rather than task performers. Future research should explore cross-cultural applicability, while policymakers and educational institutions are urged to incorporate emotion-centered strategies into care standards and training programs to enhance elderly well-being and systemic support (Yang,2025).

Ethical approval for this study was obtained from the Ethics Committee of Zhejiang Shuren University (ID: S23-236-002). All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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Community engagement and outreach

SAAFECS26-026

Baseline anthropometric status and Fundamental Movement Skills of Children in Low-Income Early Childhood Development Centres in the JB Marks District, South Africa

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Keywords: Anthropometric Status, Fundamental Movement Skills, Children, Early Childhood Developmental Centres

Malnutrition and developmental delays remain significant challenges among South African children, particularly those attending Early Childhood Development (ECD) centres in low-income areas. Despite South Africa's constitutional commitment to children's right to adequate nutrition, malnutrition remains a major concern. One in four children under five is stunted, 13% are overweight or obese, and many face micronutrient deficiencies, with 33% being anaemic and around 40% zinc deficient (National Department of Health (NDoH) et al., 2019; Kruger et al., 2022; Malan et al., 2024). ECD centres play a critical role in addressing this crisis, providing meals to 1.5 million children daily (Department of Basic Education, 2021), enhancing nutrition, and supporting motor and cognitive development.

Fundamental Movement Skills (FMS) are an important part of human life, and they are interrelated with a child's physical, cognitive and social development (Zhang et al., 2025). Although motor development is a process continuing throughout life, early childhood is the optimal phase to learn and develop FMS (Veldman et al., 2024). As FMS in children also forms the foundation for academic skills such as reading, writing and mathematics (Gallahue et al., 2019; Macdonald et al., 2018; Magistro et al., 2022), they are essential in the development of school readiness skills (Chang & Gu, 2018). Based on the ECD census index sample, only 44,5% of children under five years in the North West province are regarded as developmentally 'on track' by meeting the learning standards for the five learning domains considered (gross motor development, fine motor coordination and visual integration, emergent numeracy and mathematics, cognition and executive functioning, and emergent literacy and language) (Department of Basic Education, 2022). However, data from the JB Marks municipal area are limited. To fill this knowledge gap, this study aims to report on the growth and fundamental movement skills of children in this area.

This descriptive, cross-sectional study reports on the FMS and body composition and anthropometric measurements of children at baseline of the StartWell Study. The StartWell Study aims to evaluate the effect of a multi-grain legume-based cereal on growth, development, and diet quality in children aged 2 to 5 years old in ECD centres in the JB Marks district, North-West province, South Africa.

At least two hundred children from two to four purposively selected ECD centres will be enrolled in the StartWell study. All children at the ECD centres meeting the inclusion criteria (age between two and five years, and no known allergies and/ or disabilities) are eligible for enrolment. Anthropometric measures will include weight, height, and mid-upper arm circumference, interpreted according to the World Health Organisation Child Growth Standards. Body composition will be assessed via bioelectrical impedance analysis (InBody S10) and will include body fat percentage, muscle mass, total body water, and lean body mass. FMS proficiency will be measured using the KIDDO online assessment tool, covering locomotor, stability, and object-control skills. Data collection will be performed by trained fieldworkers following standardised procedures to ensure accuracy and reliability.

The results will be available after the baseline data collection in January 2025.

Baseline findings will provide a comprehensive profile of the body composition, anthropometric status/measurements and motor competence of the study population, highlighting potential developmental disparities among children in ECD centres.

Ethics approval is currently in process with the North-West University Health Research Ethics Committee (Reference number pending). Goodwill permission has already been obtained from the Department of Basic Education of the North-West Province, as well as permission from the school principals. Informed consent from parents is in process.

This study will provide essential baseline data on the anthropometric status and FMS proficiency of children in selected ECD centres. This will help identify priority areas for intervention and enable monitoring of progress over time. It is anticipated that findings will guide the design of tailored nutritional and physical activity programmes within ECD centres, ensuring alignment with national guidelines and local context-specific needs. Likewise, it is envisioned that the results will inform evidence-based policy, ECD curriculum planning, and community-level initiatives aimed at improving early childhood health and developmental outcomes.

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Producer Empowerment for Stronger Food Systems and Healthier Communities

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Keywords: Food Access, Public Health Equity, Community Nutrition Education, Youth Engagement, Funding Barriers

Black, Indigenous, and People of Color (BIPOC) producers face longstanding structural inequities in accessing federal agricultural funding (Union of concerned scientists | heal food alliance, 2020). The growth of viable farm businesses is constrained by complex application requirements, insufficient technical assistance, and longstanding strained relationships with federal institutions. These constraints reduce the availability of fresh, nutritious foods in rural and under-resourced communities, contributing to higher rates of food insecurity and diet-related chronic diseases. At the same time, traditional nutrition education, when delivered without attention to food access or producer realities, often fails to generate sustained behavior change (USDHHS, and USDA, 2020). This study aimed to identify systemic funding barriers from the perspective of BIPOC producers, document producer-driven solutions, and explore how integrating community nutrition education with producer success and improved food access can strengthen community health outcomes.

This study was approved by the University of Maryland Eastern Shore Institutional Review Board under Protocol #10-2021-003, titled "AMS Grant Application Process Evaluation: Assessing Barriers and Rebuilding Trust between BIPOC Farmers and USDA AMS Funding Programs."

The analysis used an inductive thematic approach (Thomas, 2006) to code transcripts from 302 focus groups and semi-structured interviews with BIPOC producers across 35 U.S. states and territories. Participants were purposefully selected to ensure geographic diversity (rural, tribal, coastal, and island regions), representation across production types (vegetable, livestock, fisheries, specialty crops), and inclusion of small-scale, beginning, and multigenerational producers. Eight trained coders independently coded transcripts using Dedoose Version 9.0., then engaged in iterative consensus meetings to establish intercoder reliability. Member-checking was conducted with producer co-leaders to verify the accuracy of the thematic interpretations and to ensure that the findings were culturally and contextually aligned with their lived experiences. A complementary literature review (2010–2023) examined the impact of pairing nutrition education with improved food access mechanisms (e.g., farm-to-community initiatives, mobile markets, and youth agriculture programs) on dietary behavior and chronic disease prevention.

Producers consistently described burdensome and inequitable administrative processes, including inaccessible language in RFAs, limited guidance on matching fund requirements, and inconsistent communication from funding agencies. Inadequate technical assistance emerged as a critical barrier: 68% of producers reported receiving no support prior to applying for federal grants, and 72% indicated that documentation requirements "significantly increased administrative burden." Additionally, 54% reported being unaware of federal funding opportunities until after deadlines had passed.

Despite these barriers, producers identified youth engagement, peer mentorship networks, and community-based partnerships as highly effective strategies for improving access to federal resources. They explained that involving youth will increase local food literacy, expand awareness of grant opportunities, mobilize volunteers, and help sustain farm operations.

Literature review findings aligned with the following: community-based nutrition education—especially when integrated with culinary skills, gardening, and local food system engagement—improves healthy food purchasing and fruit and vegetable intake (Dannefer et al. 2015, Metcalfe et al., 2021; 2022) and strengthens linkages between consumer demand and local producers (Seguin-Fowler et al., 2021). Lanou et al, (2021) further noted increases in trust, improved purchasing decisions, and closer alignment between community needs and producer supply.

Findings demonstrate that inequitable administrative processes and insufficient technical assistance continue to limit small producers' access to federal grants. However, producer-led strategies—such as youth involvement, peer networks, and culturally responsive community partnerships— would enhance grant readiness and support local food systems. When paired with targeted nutrition education, these approaches may foster trust, improve purchasing behaviors, and strengthen alignment between community demand and producer supply.

Policy Recommendation: Federal and state agencies should streamline RFAs, expand pre-award technical assistance, and invest in youth-centered agricultural pathways to build long-term equity and resilience across local food systems.

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Reducing Vaccine Hesitancy Through Community Nutrition Education: The Expanded Food and Nutrition Education Program Model

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Keywords: Health Equity, Community Engagement, Trust in Healthcare, Public Health Education, Expanded Food and Nutrition Education Program

Vaccine-preventable diseases continue to disproportionately impact adults in Black Indigenous and People of Color (BIPOC) communities (Bhanu et al., 2021; Quinn & Andrasik, 2021). Vaccine hesitancy, fueled by misinformation, mistrust, and systemic barriers, continues to pose a significant public health challenge (Dubé et al., 2013; Kolobova et al., 2022). The Expanded Food and Nutrition Education Program (EFNEP), a federally funded, community-based nutrition education initiative that engages low-income families through trusted paraprofessional educators, provides a scalable model for integrating preventive health messaging into existing nutrition education (AuYoung et al., 2023; Richard-Eaglin & McFarland, 2022). EFNEP's emphasis on culturally responsive education, peer-to-peer learning, and long-standing community partnerships makes it an ideal platform for addressing vaccine hesitancy as part of holistic well-being promotion (Habib et al., 2023). This study utilized EFNEP's community infrastructure to deliver age- and culture-appropriate vaccine information to rural BIPOC adults in Delaware and Maryland.

This study was approved by the University of Maryland Eastern Shore Institutional Review Board under UMES Protocol #07-2021-003, titled "Assessing Vaccine Confidence among Delmar People of Color through Community Engagement."

The study examined (1) baseline perceptions and barriers to vaccination, (2) the development of culturally tailored vaccine education within EFNEP, and (3) changes in attitudes, trust, and perceived barriers post-intervention.

A mixed-methods Community-Based Participatory Research (CBPR) approach was employed, consistent with best practices for engaging communities experiencing persistent health inequities (Moosa et al., 2022; Upshaw et al., 2024). Quantitative data were collected from 124 adults at baseline and 89 at follow-up across Sussex County (Delaware) and Somerset and Wicomico Counties (Maryland). Logistic regression assessed associations between demographics and vaccination status, reporting odds ratios (OR), 95% confidence intervals (CI), and p-values. Qualitative data from 5 focus groups and 29 interviews were analyzed via inductive thematic coding (Thomas, 2006). The EFNEP-trained paraprofessionals co-delivered culturally tailored fact sheets, short videos, and community conversations in English and Spanish.

Pre-intervention findings revealed substantial barriers to vaccination, with lack of authentic information emerging as the most prominent concern (57.4%), followed by widespread misinformation within social networks (48.3%) and mistrust of public health agencies (36.8%). Logistic regression indicated that adults' vaccination status was significantly associated with their children's vaccination history (OR = 0.072; 95% CI: 0.02–0.21; $p < .001$) and their level of educational attainment ($p = .008$), underscoring the role of family context and health literacy in shaping vaccine behavior. Qualitative themes from focus groups reinforced these quantitative barriers: participants described uncertainty about long-term side effects, confusion due to conflicting media messages, and a feeling that existing public health communications lacked cultural resonance. These baseline findings highlighted the need for interventions that emphasize trust-building, transparent communication, and cultural relevance—core strengths of the EFNEP model.

Post-intervention results showed a substantial reduction in vaccine hesitancy across all major categories, with reported barriers decreasing by 93% (336 to 23). The greatest declines occurred in concerns regarding lack of authentic information (−96%), behavioral hesitancy (−90%), and misinformation or negative external influence (−96%). Trust-related sentiments increased markedly, particularly trust in healthcare providers, which rose from 58 to 168 mentions—a 190% increase, reflecting the impact of EFNEP educators' cultural familiarity and relational credibility. Participants demonstrated improved understanding of vaccine safety, age-appropriate recommendations, and the purpose of booster schedules, often attributing this shift to the clarity and relatability of EFNEP's tailored fact sheets and videos. Qualitative responses further contextualized these quantitative improvements: individuals described feeling "more confident," "better informed," and "represented" in the intervention materials. While overall hesitancy declined, some participants had reservations about booster frequency, emphasizing the importance of autonomy and continued dialogue rather than one-time messaging.

Embedding vaccine education into EFNEP successfully reduced key barriers, strengthened trust in healthcare providers, and improved understanding of vaccine safety among rural BIPOC adults. EFNEP's existing credibility, cultural tailoring capacity, and community-centered delivery amplified the intervention's effectiveness (AuYoung et al., 2023; Richard-Eaglin & McFarland, 2022). This integrated model demonstrates substantial potential for national scalability and could serve as a blueprint for addressing vaccine hesitancy through nutrition and health education programs. Sustained engagement, longitudinal data collection, and expanded partnerships with healthcare providers are recommended to reinforce long-term vaccine confidence and address persistent autonomy-related concerns.

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Threads of Well-being: The Role of Quilting in Promoting Mental Health and Social Cohesion among Mature Women in Rural Communities

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Keywords: Quilting, Mature Women, Mental Health, Rural Communities, Social Cohesion

Rural communities around the world continue to face formidable barriers to accessing mental health services, leading to exacerbated health disparities and elevated levels of social isolation, especially among older women (World Health Organization, 2021; Hartley, Berg & MacLeod, 2022). While the consequences of limited health infrastructure are widely documented, less attention has been paid to the role of local cultural practices in supporting mental health and social well-being in rural contexts (Stickley and Eades, 2013). Traditional crafts, such as quilting, have a long-standing presence in rural America, not only as artistic pursuits but also as vital forms of social engagement, storytelling, and emotional expression (Pöllänen, 2015). This study aimed to explore the mental health and social benefits of quilting among mature women in rural settings, positioning the creative arts as community-centered interventions that align with multiple United Nations Sustainable Development Goals (United Nations, 2015).

A six-month ethnographic study was conducted between January and June 2025 in a rural Midwestern community in the United States. Eight female participants, aged 60-79, were recruited through local craft guilds and social organizations. This study was reviewed and approved by the Institutional Review Board (IRB) of the University of Arkansas at Pine Bluff. All research procedures involving human participants were conducted in accordance with institutional guidelines and established ethical research standards. Ethical clearance was granted under the University of Arkansas at Pine Bluff IRB (UAPB IRB #090321). The research employed a qualitative design, utilizing both participant observation during weekly quilting sessions and semi-structured focus group interviews to gather in-depth perspectives (Braun and Clarke, 2006). Observations focused on group dynamics, expressions of emotion, cognitive engagement during craftwork, and spontaneous discussions related to well-being. Interviews explored participants' personal histories with quilting, their perceptions of the psychological and social benefits, and their experiences of community belonging. All participants provided informed consent and were assured of confidentiality, voluntary participation, and the right to withdraw at any point. Data were thematically coded and analyzed using Braun and Clarke's (2006) six-phase approach to thematic analysis, with credibility and trustworthiness strengthened through member checking, peer debriefing, and the maintenance of a reflexive audit trail.

Thematic analysis of the qualitative data revealed four primary benefits associated with group quilting as: 1. Stress reduction and emotional well-being, participants consistently described quilting as a means of managing anxiety and reducing stress, providing a sense of calm and emotional regulation. 2. Cognitive engagement, participants reported that designing intricate patterns and learning new techniques fostered a sense of ongoing mental challenge and growth, echoing findings in the cognitive health literature (Camic and Chatterjee, 2013).3.Social connections and community building, several participants described the quilting group as their "primary social network," countering loneliness and providing a platform for community engagement (Hartley, Berg and MacLeod, 2022). 4. Accomplishment and self-worth, the creative freedom inherent in quilting enabled participants to express individuality and contribute visibly to the community, reinforcing their sense of purpose and value (Pöllänen, 2015).

These findings suggest that quilting, as a communal creative practice, constitutes a valuable, low-cost intervention to promote mental well-being and social inclusion among mature women in rural areas. Through stress relief, cognitive engagement, and the cultivation of meaningful social relationships, quilting circles can address fundamental gaps left by under-resourced rural health systems (Stickley and Eades, 2013).

These psychosocial benefits of quilting provide a foundation for multidisciplinary collaborations among creative arts practitioners, community organizations, and scientific researchers. Art-science partnerships can facilitate the design of evidence-based, culturally tailored, and scalable interventions for promoting mental health and social cohesion in underserved rural settings (Camic and Chatterjee, 2013). Additionally, collaboration with public health experts and policymakers could enhance advocacy for the inclusion of creative arts in rural health strategies, positioning quilting circles as partners in community resilience and preventive care (World Health Organization, 2021).

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Textile & Design Exhibition

Graduate Student Designs

Re-Piece: Sustainable, Adaptive Children's Apparel Integrating Digital Prototyping and Repurposed Textiles

Mr. Trevor Collins (Mentored by Rachel Eike)

Iowa State University, United States

Reimagining Healthcare Protection: A User-Oriented Surgical Gown Design

Ms. Zahra Falsafi (Mentored by Rachel Eike)

Iowa State University, United States

Professional Designs

BloomStep: A Regenerative Footwear Prototype Using Reclaimed Textiles and Papermaking Processes

Mrs. Bahar Hashemian Esfahani, Rachel Eike, PhD, Raluca Iancu, MFA

Iowa State University, United States

Full Circle Hobo: Reclaimed and Recrafted Cellulose

Dr. Rachel Eike, PhD

Iowa State University, United States

Pieces of Tradition

Dr. Erin Irick, PhD

University of Wyoming, United States

Interdisciplinary, Speculative, and Materialist Narration of Hazel Futa: Miss South Africa 1955

Prof. Khaya Mchunu, Mr. Thato Radebe, Prof. Tobias Barnard, Mr. Xylan de Jager

University of Johannesburg, South Africa

New Materialism Explored Through a Speculative Design Inquiry for Futuristic Zulu Traditional Attire

Ms. Thando Nene, Ms. TB Nene

University of Johannesburg, South Africa

RawrWear: Adaptive, Sustainable Youth Clothing Developed Through User-Centered and Collaborative Design Science

Dr. Rachel Eike, PhD

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