



EXAMINING THE IMPLICATIONS OF PROCUREMENT PRACTICES ON SOCIO- ECONOMIC OBJECTIVES IN THE SOUTH AFRICAN CLOTHING INDUSTRY: A CRITICAL ANALYSIS

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AGENDA

Introduction

Research Gap

Literature Review & Research Questions

Research Methodology

Findings

Conclusion and Recommendations

INTRODUCTION



- Procurement is a vital organisational function as it contributes to cost reduction and profit elevation.
- 50% to 60% of the total expenditures should be met through procurement (Ramphoma, 2020:57).
- Global clothing industry worth around \$2.4 trillion and employs millions of workers worldwide (Hilema et al. 2020:4).
- Primary financial provider and social change for most of the growing state, and is a gateway to the international supply chain and export business (Edmonds et al., 2019:iv).
- Strategic importance of procurement in clothing organizations lies in creating value by benefiting society and the economy.
- Procurement that leads to socio-economic objectives promotes job creation, localisation and competitiveness (Badenhorst-Weiss et al., 2022:204).
- In South Africa, the clothing industry is vital to the economy, and procurement is used as a socio-economic tool to achieve government imperatives. The industry generates over 8% of manufacturing and 2.9% of the GDP (Kaplan, 2020:35).
- Government policies and regulations, such as Broad-based Black Economic Empowerment (B-BBEE), the Industrial Policy Action Plan (IPAP), and the National Environmental Management Act (NEMA) guide the procurement practice to achieve socioeconomic objectives.
- Therefore, in this paper, we investigate procurement practices in the clothing industry, to determine the impact towards socio-economic objectives and improve the competitive performance of the industry.

RESEARCH GAP

The Problem:

- South African clothing industry have been negatively affected by retail clothing buyers purchasing garments from international clothing suppliers instead of supporting local suppliers (Jenkin and Hattingh, 2022:11).
- Competition and inputs from clothing from Asian countries such as China, India, Turkey is affecting the local clothing industry (Jenkin & Hattingh, 2022:40; Bag et al., 2023:3; Gornostaeva, 2023:15).
- 74% of the entire clothing and textile sector, including footwear, is imported (Worku, 2019:98).
- Retail clothing shops do not order from local manufacturers due to high production cost and quality challenges resulting from the lack of required skills, technical capabilities and resources (Netshishivhe, 2021:3).
- Non-compliance with procurement policies and regulations (Joshi, 2023:107, Norheim-Hansen, 2023:104, Mamun and Hoque, 2022:2, Buchel et al. 2022:243) and Fung et al. 2019:1).
- Lack of bargaining powers, as retailers dominate the negotiation process by setting price points (Nabee & Swanepoel, 2021:4; Veitch, 2021:6; Jenkin & Hattingh, 2022:40).
- Low import tariffs that are posed by international trade regulations (Netshishivhe, 2021:3).



RESEARCH GAP

Previous Studies:

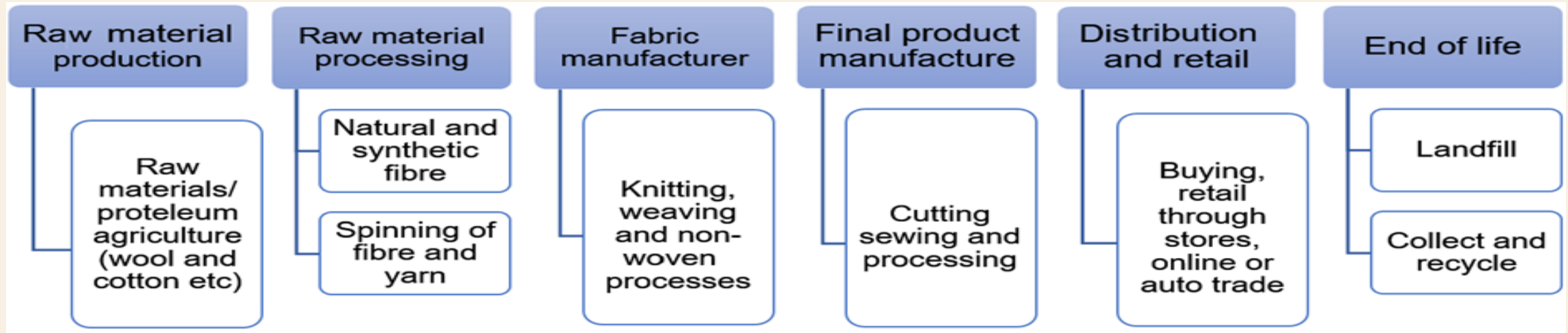
- Yuen and Cheng (2013); Turker and Altuntas (2014) Su (2013); Koprulu and Albayrakoglu (2007); and Early (2017) developed procurement frameworks and models for the enhancement of the clothing industry.
- Staritz, Morris and Plank (2016), Ramdass and Kruger (2011), and Godfrey (2015) focused on dynamic shifting in the apparel export industry in sub-Saharan Africa to combat apparel exports, globalisation in the clothing industry and global, regional and domestic apparel value chains.
- There is still a lack of studies that address local sourcing that promotes the socio-economic objectives, and which may contribute to advancements in the welfare of individuals through local job creation and local economic upliftment.

Therefore, this paper aims to investigate procurement practices in the clothing industry, to determine the impact towards socio-economic objectives and improve the competitive performance of the industry.



LITERATURE REVIEW AND RESEARCH QUESTIONS

Procurement practices in the global clothing industry



The clothing value chain

Source: Adapted from Jenkin & Hattingh (2020)

Globally, organizations have developed and adopted a range of procurement practices in the clothing industry, such as:

- **Need identification** (Khan and Yu, 2019:53; Makinde, et al. 2022:21; Lau et al. 2019:39, Kamau et al. 2020:219; Van Tilburg et al. 2022:3).
- **Supplier selection** (Schiele, 2019:45; Cole and Aitken, 2019:2; Wisner et al. 2019:53; Lelala, 2019: xi; Nolan, 2019:13).
- **Negotiation and contracting** (Van Tilburg et al. 2022:4; Zsidisin and Henke, 2019:414; Mateo-Fornés et al. 2021:3, 12).
- **Ordering** (Kamau et al. 2020:222; Makinde et al. 2022:21; Omuruyi and Nwele, 2020:503).
- **Expediting** (De Villiers et al. 2019:27; Bowersox et al. 2020:27; Kamau et al. 2020:37).
- **Receiving, inspection, invoicing, and payment** (De Villiers et al. 2019:27; Kamau et al. 2020:219; Deep et al. 2019:2).
- **Supplier development and partnership** (Shabangu, 2020:54; Kaplan, 2020:71; Van Tilburg et al. 2022:4).

LITERATURE REVIEW AND RESEARCH QUESTIONS

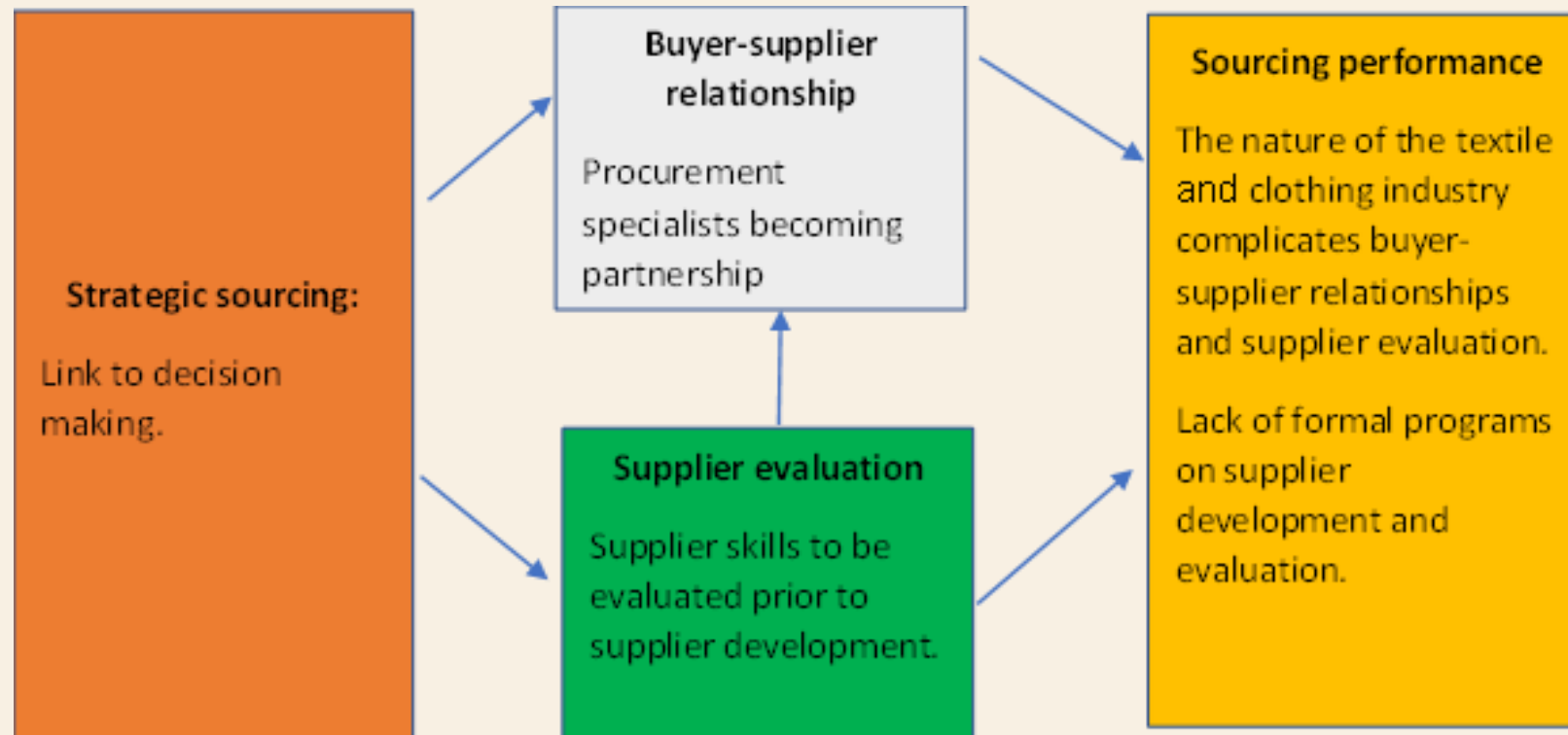
Developing the key constructs of the study

Procurement practices	Sources	Government policies and regulations	Sources
Demand Planning	Jacobs & Karpova, 2020:6; Senapati, Chattopadhyay & Chakrabarty, 2022:3; Teke, 2022:15); Braglia, Marrazzini, Padellini & Rinaldi, 2020:189; Senapati et al., 2022:3; Swaminathan & Venkatasubramony, 2023:3); Van Raaij (2016); Pereira et al. (2022:3);	Procurement policies and regulations	Broad-based Black Economic Empowerment (B-BBEE) Industrial Policy Action Plan (IPAP)
Strategic Sourcing	Singh and Chan (2022:19); Arrigo (2020:3); Jacobs and Karpova (2020:366); Zijm et al. (2019:47); Utama et al. (2021:119); Jacobs and Karpova (2020:370) Jenkin and Hattingh (2022:54; Mejías et al. (2019:145); Reis (2019:20); Fung et al. (2019:10)	National Environmental Management Act (NEMA)	Amahlathi Local Municipality, 2020:18; Kuture, 2022:72; Veitch, 2021:32; Tsolakis et al. (2023:164) and Huttunen (2022:11); Jack (2020:20); Shen et al. (2019:120); Abbate et al. (2023:1), Yang and Jiang (2023:1), and Němcová and Tučková (2019:1193).
Contracting	Mai and Phong (2020:1229); Arrigo (2020:3); Twyg (2020:50); Jenkin and Hattingh (2022:54).	Sustainable practices	Sources
Enterprise Supplier Development	Netshishivhe (2021:4); Moloji (2019:74); Kaplan (2020:71); Kaplan (2020:71); Dos Santos (2020: 40); CottonSA (2019:1);	Social (safe working conditions, informal working hours, minimum wage, CSR etc)	Fung et al. (2019:2); Statista (2021:38); Jack (2020:20); Jin and Cedrola (2019:5). Edmonds et al. (2019:iv); Mercer (2020:100); Shen et al. (2019:12); Mercer (2020:100) Nabee and Swanepoel (2021:1
Strategic Partnership	Chen et al. (2023:1236); Perry and Wood (2019:7); Utama et al. (2021:125); Singh and Chan (2022:2).	Environmental (Compliance, high pollution, waste chemicals, fast fashion, ISO certification etc)	Mejías et al. (2019:150); Arrigo (2020:10). Fung et al. (2019:1); Perry and Wood (2019:2); John and Mishra (2023:1); Jenkin and Hattingh (2022:17); Shen et al. (2019:12); John and Mishra (2023:1); Riazi and Saraeian (2023:1); Jack (2020:26) Statista (2021:38); Statista (2021:38); Singh and Chan (2022:2); Shen et al. (2019:12)

RQ 1: *What procurement practices are employed by South African clothing manufacturers that could enhance socio-economic objectives in the clothing industry?*

LITERATURE REVIEW AND RESEARCH QUESTIONS

Procurement Frameworks in the Global Clothing Industry

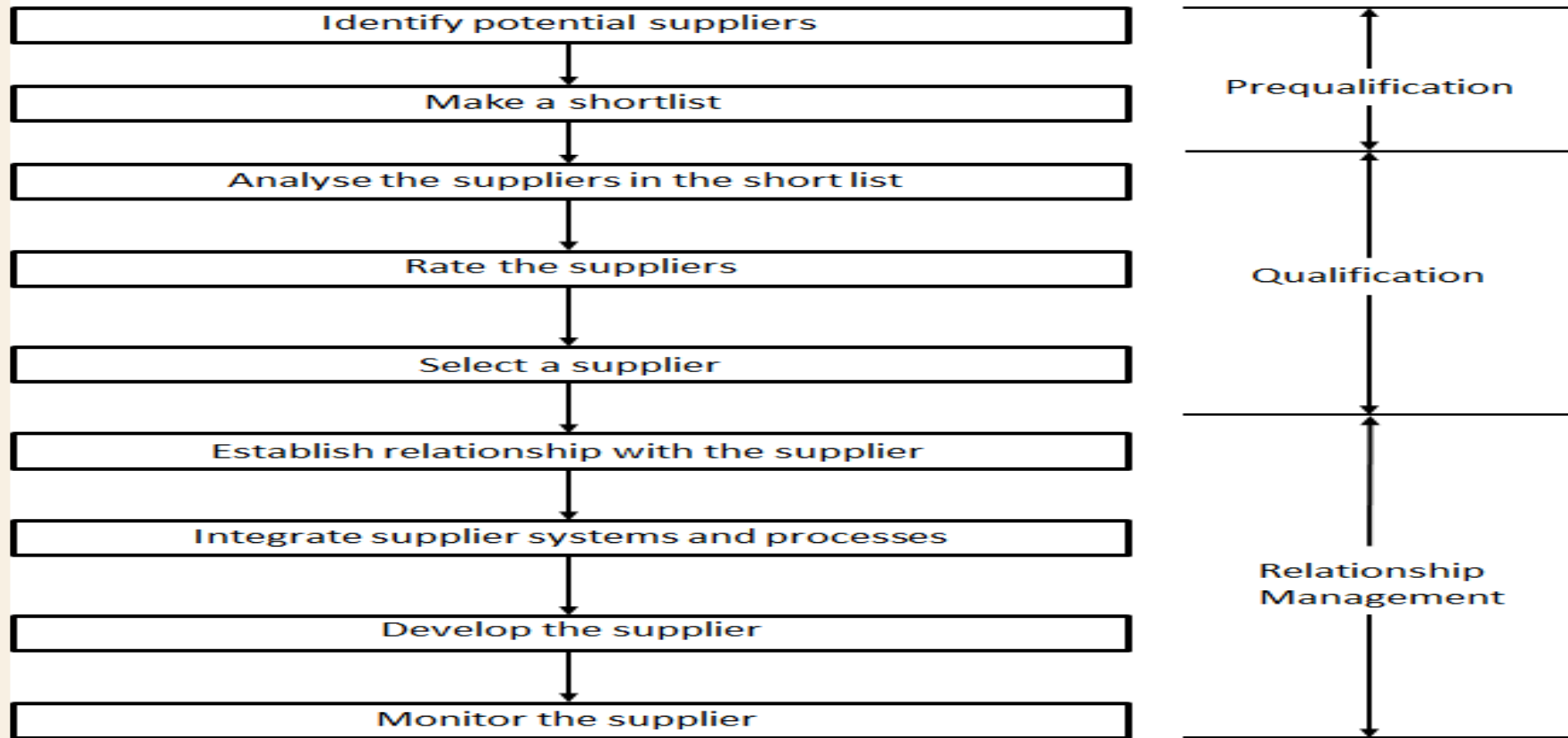


Model for integrating the structural and measurement model -SEM representation

Source: Adapted from Su (2013)

LITERATURE REVIEW AND RESEARCH QUESTIONS

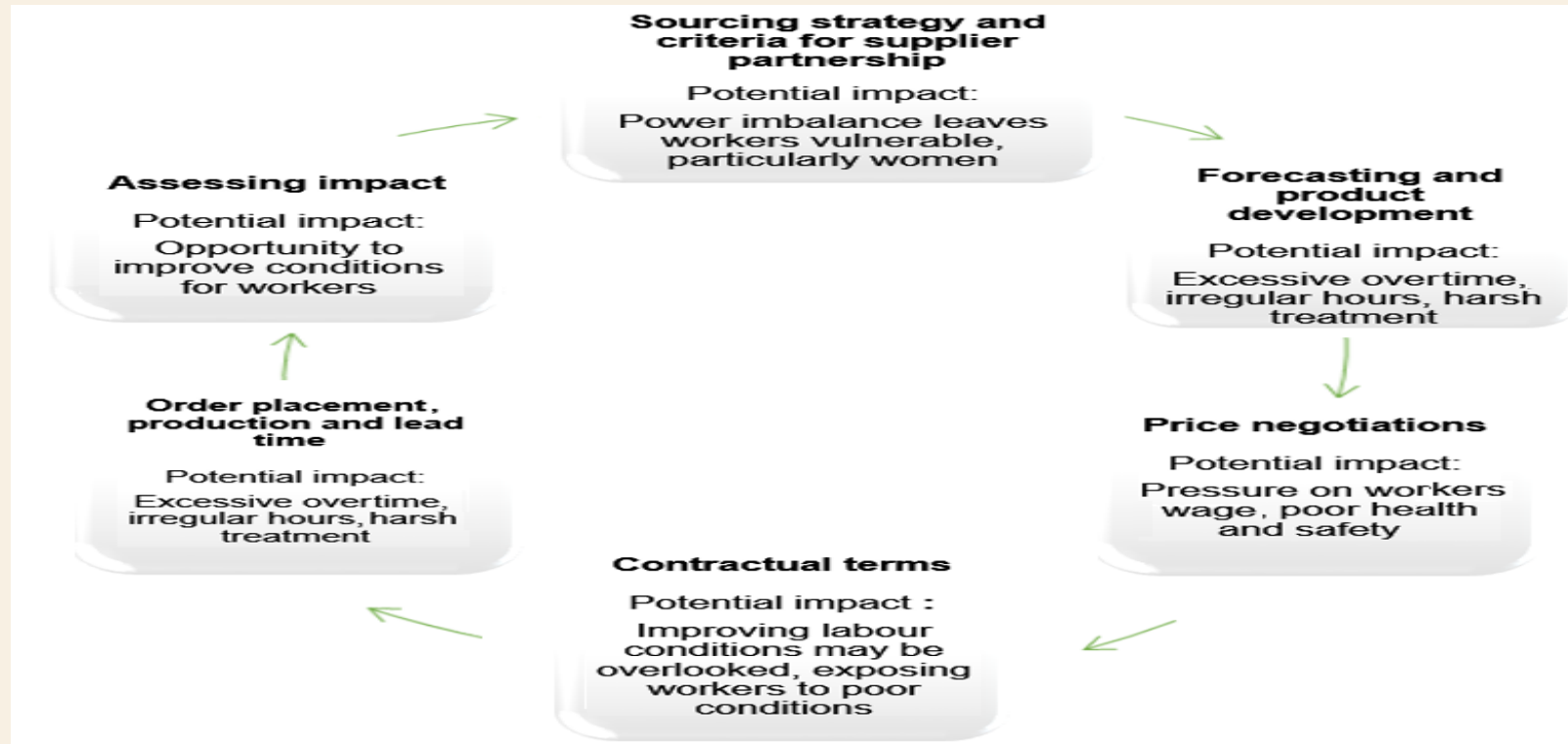
Procurement Frameworks in the Global Clothing Industry



Model for Supplier Relationship Management
Source: Adopted from Koprulu & Albayrakoglu (2007)

LITERATURE REVIEW AND RESEARCH QUESTIONS

Procurement Frameworks in the Global Clothing Industry



Six stages of the procurement cycle
Source: Early (2017)

RQ 2: *What kind of procurement framework can be developed to enhance socio-economic objectives in the clothing industry?*

LITERATURE REVIEW AND RESEARCH QUESTIONS

Research Hypothesis

Hypothesis development

Research hypothesis 1 (H1)	
H01a: Procurement practices are not affected NEMA.	H1: Procurement practices are affected by NEMA.
H02: Procurement practices are not affected by government policies and regulations.	H2: Procurement practices are affected by government policies and regulations.
Research hypothesis 2 (H2)	
H03: Procurement practices do not affect environmental sustainability.	H3: Procurement practices effect environmental sustainability.
Research hypothesis 3 (H3)	
H04: Procurement practices do not affect social sustainability.	H4: Procurement practices affect social sustainability.

LITERATURE REVIEW AND RESEARCH QUESTIONS

Theories Supporting the study

Theories	Alignment to the study
<p>Transaction cost theory</p> <p><i>The transaction cost (TC) theory by Williamson (1979, 1985) claims that economic productivity may be achieved by cutting organizational exchange costs, and also the environmental, political, social or economic threats surrounding them.</i></p>	<ul style="list-style-type: none"> ▪ Cost-associated strategic sourcing and ordering. ▪ Cost shared amongst partners. ▪ Assess opportunistic behaviour.
<p>Resource-based theory</p> <p><i>Emphasizes the importance of how an organization manages and utilizes its resources and capabilities in determining its overall performance (Barney in 1991, and Barney, Hesterly and Rosemberg, 2007)</i></p>	<ul style="list-style-type: none"> ▪ Integrate resources, skills and technology between industry partners. ▪ Government policies to support the industry. ▪ Consideration of local resources.
<p>Stakeholder theory</p> <p><i>Emphasized the need to consider all relevant stakeholders when acquiring a company, including employees, customers, and investors (Freeman, 1984:46).</i></p>	<ul style="list-style-type: none"> ▪ Building on local capital and promoting growth in the clothing industry of developing countries.
<p>Lean Production theory</p> <p><i>Emphasizes the importance of waste reduction and efficiency maximization in the procurement process (Levitt, 1972).</i></p>	<ul style="list-style-type: none"> ▪ Sustainable sourcing of suppliers. ▪ Examine the effective functioning of sustainability, negotiation and contractual agreements.

RESEARCH DESIGN & METHODOLOGY



- A quantitative research design.
- A survey was conducted among clothing manufacturers to understand how they conduct procurement within the industry.
- The clothing industry in South Africa is spread across different provinces, but most manufacturers are in the Western Cape, KwaZulu-Natal (KZN), Free State, and Gauteng (Veitch, 2021:10).
- Veitch reported that there are only 800 registered clothing manufacturers in SA, and they are spread across SA.
- The study focused on the whole population in Western Cape, KwaZulu-Natal (KZN) and Gauteng. All the clothing manufacturers had an opportunity to participate in the study. However, due to the closure of many clothing manufacturers, as well as the effect of Covid-19, we were unable to access many of the manufacturers.
- We adopted a snowball sampling approach (Dos Santos, 2020:40; Mokwana, 2021:12), which meant that respondents who completed the survey made referrals to other clothing manufacturers still in operation (Creswell & Creswell, 2018:212; Bairagi & Munot, 2019:94; Acharyya & Bhattacharya, 2020:169). Therefore, all the clothing manufacturers had an opportunity to participate in the study.
- Survey 621 managers and procurement specialist.
- The data was collected by means of structured questionnaires measured through a five-point point-likert response format. The research instrument was validated using a pilot test that was tested on 15 clothing managers and procurement specialists (Pietersen & Maree, 2020:262).
- We employ descriptive and inferential statistical methods to analyze the data. Structural equation modelling (SEM) was used to examine the relationship between the variables and to test the model fit and hypotheses. The hypothesis of the procurement framework was tested using the SAS 9.4 (2020) output on the paths standardized coefficient with relevant critical ratios.
- The reliability tests are presented in terms of Cronbach's alpha, composite reliability and average variable extracted (AVE). The values of Cronbach's alpha of the construct are greater than 0.7.

FINDINGS AND DISCUSSION

Descriptive statistics

Descriptive statistics on procurement practices

Constructs	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
Procurement Practices							
Strategic partnership	621	1.70	4.00	3.54	.399	-.717	.660
Strategic sourcing							
SSC	621	1.00	4.00	3.31	.496	-.797	1.846
SSRC	621	1.00	4.00	3.49	.574	-1.438	2.449
Contracting							
CMA	621	1.00	4.00	3.28	.593	-1.220	2.033
CPS	621	1.00	4.00	3.40	.492	-.914	2.149
CN	621	1.00	4.00	3.41	.572	-1.001	1.441
DP	621	1.00	4.00	3.49	.445	-1.066	3.181
Government Policies and Regulations							
NEMA	615	1.00	4.00	3.15	.668	-.858	.912
Procurement related policies and regulations	615	1.00	4.00	3.33	.513	-.791	1.223
Environmental and Social Sustainability							
Environmental sustainability	613	1.00	4.00	3.243	.512	-.647	.901
Social sustainability	613	1.00	4.00	3.531	.461	-.775	.997

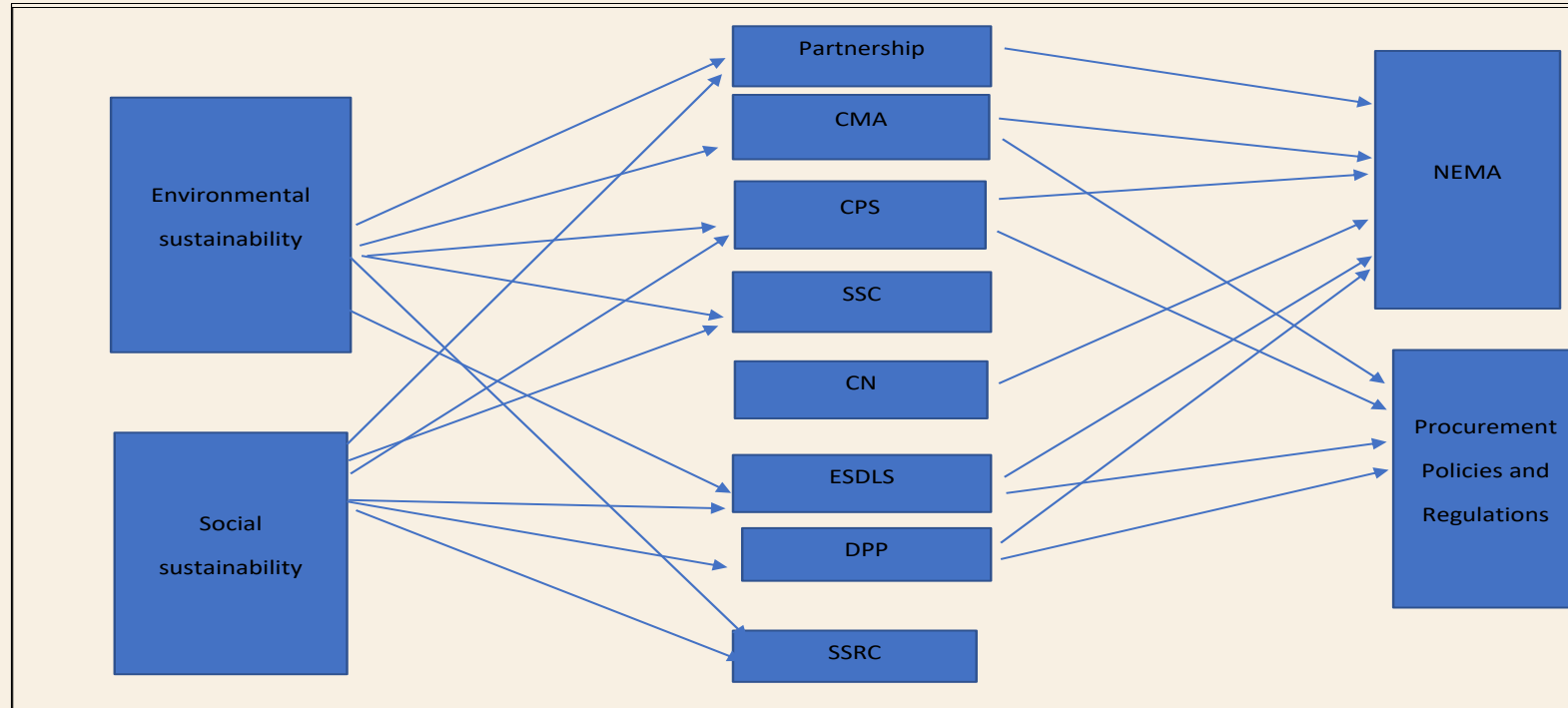
(Where NEMA = National environmental Act; SSC= Strategic sourcing compliant, SSRC=Strategic sourcing resource compliant; CN=Contract negotiation; CPS=Contracting Policy and Standards; CMA= Contacting mutual agreement; DP=Demand planning, ESD=Enterprise Supplier Development)

FINDINGS AND DISCUSSION

Inferential Statistics [Structural Equation Modelling (SEM)]

Goodness-of-fit indices of the SEM model

	Chi-square	Df	Cmin/df	CFI	Tucker Lewis Index	RMSEA	SRMR
Model	134.3879	29	0.8861	0.9767	0.971	0.0771	0.0762
Fit indices	≥ 0.05		<5	≥ .90	≥.90	< 0.08	< 0.80



Final SEM model linking procurement practices with NEMA, government policies and regulations, and environmental and social sustainability.

FINDINGS AND DISCUSSION

Inferential Statistics [Structural Equation Modelling (SEM)]

Relationship between procurement practices with government policies and regulations, social and environmental sustainability

	Path			Parameter	Beta coefficient/ estimate	Standard Error	t Value	Pr > t	
H1	Procurement practice	====>	NEMA						
	Strategic partnership	====>	NEMA	_Parm01	-0.104	0.044	-2.341	0.019	
	Contracting								
	CMA	====>	NEMA	_Parm02	0.264	0.043	6.176	<0.001	
	CPS	====>	NEMA	_Parm03	0.136	0,049	2.778	0.006	
	CN	====>	NEMA	_Parm05	-0.104	0.037	-2.779	0.006	
	Strategic sourcing								
	SSC	====>	NEMA	_Parm04	0.076	0,039	1.966	0.049	
	ESD	====>	NEMA	_Parm06	0.206	0.040	5.123	<0.001	
	H2	Contracting							
CMA		====>	Government policies and regulations	_Parm07	0.193	0.042	4.577	<0.001	
CPS		====>	Government policies and regulations	_Parm09	0.229	0.047	4.907	<0.001	
DP		====>	Government policies and regulations	_Parm08	0.122	0.037	3.335	0.001	
ESD		====>	Government policies and regulations	_Parm10	0.194	0.041	4.795	<0.001	

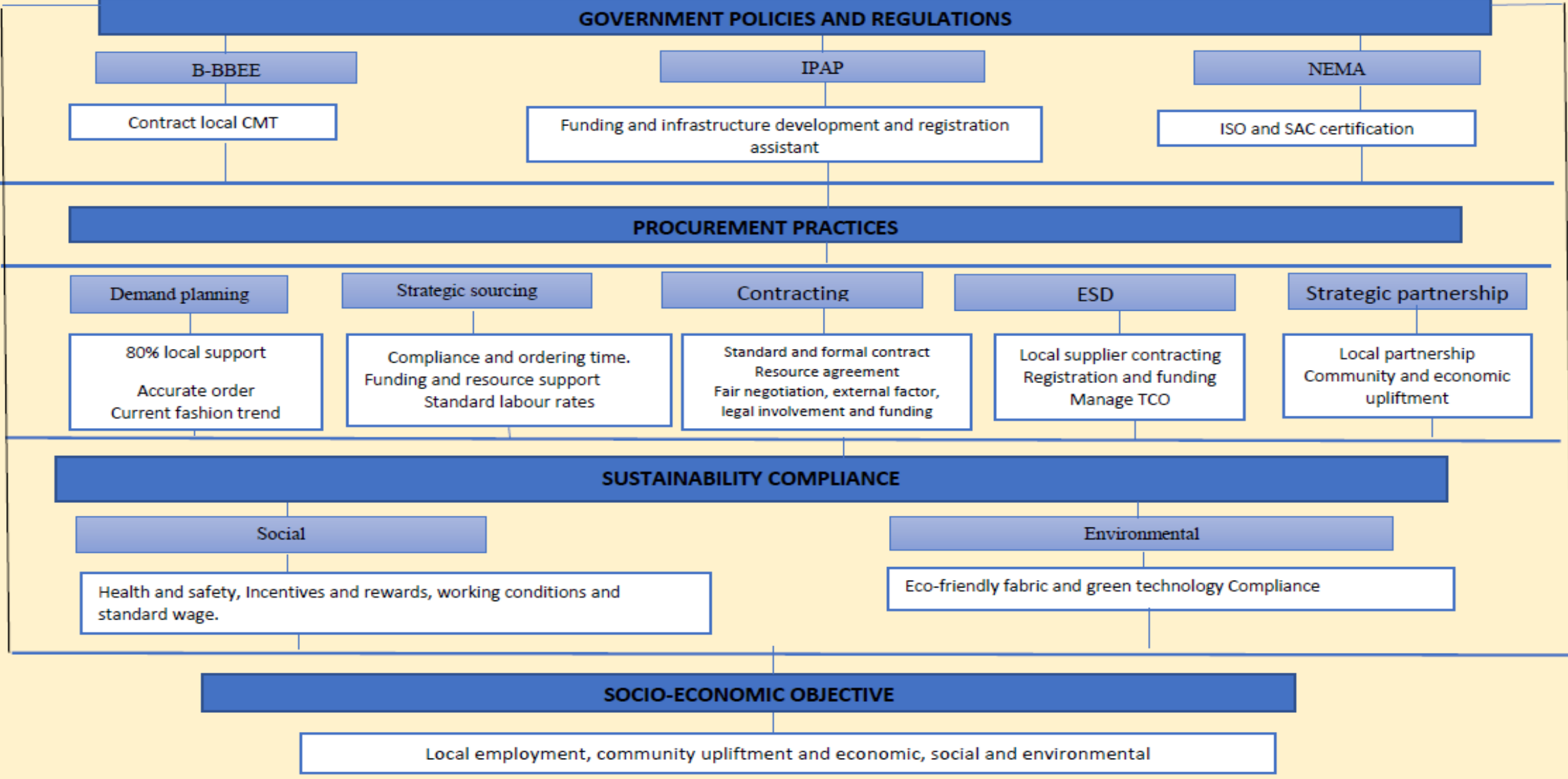
FINDINGS AND DISCUSSION

Inferential Statistics [Structural Equation Modelling (SEM)]

Relationship between procurement practices with government policies and regulations, social and environmental sustainability

	Path		Parameter	Beta coefficient/ estimate	Standard Error	t Value	Pr > t	
H3	Environmental sustainability	====>	Strategic partnership	_Parm20	0.133	0.027	4.920	<0.001
	Environmental sustainability	====>	Contracting					
	Environmental sustainability	====>	CMA	_Parm21	0.340	0.035	9.772	<0.001
	Environmental sustainability	====>	CPS	_Parm23	0.238	0.033	7.250	<0.001
	Environmental sustainability	====>	Strategic sourcing					
	Environmental sustainability	====>	SSC	_Parm24	0.204	0.035	5.793	<0.001
	Environmental sustainability	====>	SSRC	_Parm25	0.261	0.035	7.374	<0.001
	Environmental sustainability	====>	ESD	_Parm26	0,148	0,036	4,100	<0.001
H4								
	Social sustainability	====>	Strategic partnership	_Parm27	0.350	0.037	9.501	<0.001
	Social sustainability	====>	DP	_Parm28	0.269	0.039	6.987	<0.001
	Social sustainability	====>	Contracting					
	Social sustainability	====>	CPS	_Parm29	0.142	0.038	3.727	0.000
	Social sustainability	====>	Strategic sourcing					
	Social sustainability	====>	SSC	_Parm30	0.145	0.044	3.285	0,001
	Social sustainability	====>	SSRC	_Parm31	0.195	0.041	4.825	<0.001
Social sustainability	====>	ESD	_Parm32	0.195	0.047	4.137	<0.001	

PROCUREMENT FRAMEWORK



CONCLUSION AND RECOMMENDATION

Conclusion:

- Based on the findings, procurement practices are vital for the South African clothing industry.
- However, local support is lacking to improve procurement practices, and bias when contracting local suppliers.
- The SEM model revealed that there is an association between procurement practices, government policies and regulations as well as social and environmental sustainability.

Recommendations:

We made recommendations as follows:

- A procurement framework constituting four (4) pillars and ten (10) variables including demand planning (DP), strategic sourcing, contracting, enterprise supplier development (ESD), strategic partnership, IPAP, B-BBEE, NEMA, social and environmental sustainability.
- Clothing retail buyers should comply with the B-BBEE policy that encourages them to support local suppliers.
- Local clothing manufacturers in the industry should take advantage of the opportunity to apply for SA government funding through IPAP.
- Concerning environmental and social sustainability, there is a lack of compliance with NEMA and SAC as most clothing organizations do not have ISO14000 certification.
- Clothing retail shops establish and control price settings during contracting and late payments, which places suppliers in a financial predicament.
- For the industry to become socially sustainable, it still needs to invest in employee reward and recognition and improve health and safety in the working conditions.

CONCLUSION AND RECOMMENDATION

Theoretical and Practical Implications:

- Study makes a unique contribution to the body of knowledge, especially in the South African clothing industry and similar developing economies. While previous frameworks on procurement in the clothing industry have been developed such as Su (2013); Koprulu and Albayrakoglu (2007) and Early (2017), they did not pay attention to the type of sustainable procurement practices that create value in terms of job creation and localization, especially in the clothing industry in developing countries similar to SA.
- Policies in the clothing industry have been used to promote local sourcing in domestic and international markets:
 - United States, for example, the Buy America Act (Wisner, Tan and Leong, 2023:80).
 - China, the Industrial Development Strategy (Zhang, Kong, and Ramu, 2015).
 - Brazil, the local content policy (Trade policy note, 2017:2).
- Government can learn about funding flaws, non-compliance issues, and policies that stem from a shortage of refunding sources and financial support.
- Study can assist management, owners, and procurement specialists in identifying procurement practices that may be aligned with policies, sustainable practices, and existing challenges to improve socio-economic objectives and performance.

Limitations

- The study was conducted on managers and procurement specialists in the clothing industry in Gauteng, Western Cape, and KwaZulu-Natal and had a sample of 621 respondents.
- Future research can involve policymakers and management in the clothing industry to explore the effectiveness of the IPAP and B-BBEE policy in terms of accessing and improving funding.
- It may also be essential to explore how restrictions on import tariffs can be revised to reduce the influx of imports.



THANK YOU

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