

Development and validation: Fairness perceptions of broad-based black economic empowerment



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Orientation: Within the South African context, fairness perceptions of employment equity and affirmative action programmes are discussed at length. However, the perspectives of employees from various backgrounds on the fairness of Broad-Based Black Economic Empowerment (BBBEE) are limited. Further to this, no psychometrically sound instruments could be identified, which can assist to assess the fairness perceptions people hold of BBBEE.

Research purpose: The aim of this study was to develop and validate an appropriate measurement of fairness perceptions of BBBEE within the South African context.

Motivation for the study: Minimal research effectively advances our understanding of what actual fairness perceptions people hold of BBBEE.

Research approach/design and method: To satisfy the aim of the study, an exploratory sequential mixed-method design was undertaken. This involved the use of semi-structured interviews, followed by a quantitative research design.

Main findings: The exploratory factor analysis revealed that a four-factor solution comprising 31 items was both valid and reliable.

Practical/managerial implications: The instrument can advance the understanding about the ways in which individuals in the workplace perceive BBBEE. In addition, it can assist to determine whether the programme is indeed effective and enables organisations to better manage those perceptions.

Contribution/value-add: The development of a valid and reliable measure can be used by both employers and researchers for the purposes of gaining insight into the influence of BBBEE on behaviour in the South African workplace.

Keywords: Broad-Based Black Economic Empowerment; fairness; perceptions of equal opportunities; South Africa; scale development.

Introduction

Orientation

Since the first democratic election in April 1994, the South African government has established legislative frameworks to address inequalities faced by previously disadvantaged groups. The Broad-Based Black Economic Empowerment Act 53 of 2003 (BBBEE Act) is one such framework aimed at promoting the economic empowerment of black South Africans. According to the Codes of Good Practice (Republic of South Africa, 2015), having more black people own and manage corporate entities signifies an effective BBBEE policy. Success, as per Akirav (2019), should be measured by accomplishing the entity's intended goals. Rather than solely considering the number of black people in various roles or ownership positions, it is vital to gauge effectiveness through the perceptions of those affected by the policy, as highlighted by Hudson et al. (2019).

Many believe that BBBEE is an unfair policy (Bowman, 2019; Harris, 2017; Herman, 2014), is ineffective and have suggested a reform of the policy (Gules, 2018; Ngwenya, 2019; Phakathi, 2019). However, President Ramaphosa recently affirmed its permanence (BusinessTech, 2020; Meyer, 2020). To aid organisations in implementing this policy and effectively supporting equity and equality, it is important to understand employees' BBBEE fairness perceptions so as to determine the effect on organisational outcomes (Mebratie & Bedi, 2013). Determining these perceptions is also important because previous research suggested that perceived fairness

violations can result in employee counterproductive behaviours (De Clercq et al., 2021) and employee turnover (Mengstie, 2020).

In South Africa, research examining fairness perceptions of post-apartheid policies designed to promote equal opportunities for previously disadvantaged groups in the workplace mostly relates to affirmative action (AA) (Coetzee & Bezuidenhout, 2011; Coetzee & Vermeulen, 2003; Vermeulen & Coetzee, 2006) and employment equity (EE) (Van Der Heyden, 2013). Very little research has focused on the perceptions people have over fairness and equitable opportunities in the workplace. Moreover, the experiences and perspectives of employees from various backgrounds on the fairness of BBBEE are limited, vague or capture one-sided perspectives. Minimal research effectively advances our understanding of what actual fairness perceptions people hold over the implementation of BBBEE, let alone how those perceptions are measured. This is useful information to seek, not only to develop research in this area but also to assist organisations to effectively support equity and equality. It may also assist to determine whether the programme is indeed effective (Coetzee & Bezuidenhout, 2011). To this end, this study seeks to address the gap in knowledge around the inadequate understanding of the perceptions concerning BBBEE, as well as the appropriate measurement of fairness perceptions related to BBBEE.

Research objectives

The objectives of this study were to, firstly, explore the fairness perceptions of BBBEE held by individual employees. To satisfy this objective, the following research question emerged: What are the perceptions people hold of the fairness of BBBEE within the workplace? Secondly, the study set out to develop and validate the BBBEE Fairness Perception Questionnaire. It is important to notice that this study does not aim to assess the policy's specific objectives. Instead, the focus is to understand how individuals perceive and interpret the BBBEE policy.

Literature review

Contextualising Broad-Based Black Economic Empowerment

The South African apartheid regime denied black people their basic rights and freedom prior to 1994 (Clark & Worger, 2022; Ramphele, 2008). After 1994, the newly elected South African government, the African National Congress (ANC), set out efforts to redress the inequalities presented under the then apartheid system (Jackson et al., 2005). This involved devising and implementing the BBBEE strategy, policy (Iheduru, 2003) and Codes of Good Practice (Republic of South Africa, 2007). Broad-Based Black Economic Empowerment is the 'economic empowerment of all black people including women, workers, youth, people with disabilities and people living in rural areas through diverse

but integrated socioeconomic strategies' (Republic of South Africa, 2014, p. 4).

Despite its intended purpose, BBBEE has raised some concerns. For instance, BBBEE has resulted in tender corruption, where unqualified companies with an unsatisfactory BBBEE score are awarded tenders (Pike et al., 2018). BBBEE may lead to unfair discrimination against non-beneficiaries on the grounds of ethnicity (Krüger, 2014a). Wehmhoerner (2015) expressed that BBBEE has not assisted in eliminating historical inequities. This assertion is supported by statistics extracted from the 20th Commission for Employment Equity Annual report 2019 and 2020 (Department of Labour, 2019 and 2020), which shows the persistent underrepresentation of black employees across gender groups in managerial roles.

For example, in 2017, African men accounted for 9.6% of top management roles (10% in 2018 and 9.9% in 2019). Similarly, African women accounted for 4.7% in 2017 (5.1% in 2018) and 5.4% in 2019. The minimum compliance target for black employees occupying top management roles (including board participation) is 50%, and for black female employees, the minimum compliance target is 25%. However, the statistics show that the target has yet to be achieved. Oosthuizen and Naidoo (2010) found that African women are perceived to have been afforded preferential treatment in the form of appointments, promotions, training and performance appraisals, far greater than any previously disadvantaged group, which is considered to be unfair by African men who participated in the study. The Organisational Justice Theory maintains that employees judge the extent to which outcomes (Colquitt et al., 2001; Moorman, 1991), procedures (Leventhal, 1980) and interpersonal interactions are fair in nature (Colquitt et al., 2001). Considering this theory, the awarding of tenders to companies that lack the competencies and that do not satisfy the criteria specified in the BBBEE scorecard would relate to unfair *outcomes*. Not adhering to standard tender policy processes in awarding tenders would relate to the practice of unfair procedures, while affording preferential treatment to African women over African men in the form of appointments, promotions, training, and performance appraisals (Oosthuizen & Naidoo, 2010) would relate to unfair interpersonal interactions. Based on the theory and these examples, it can be assumed that employees would not perceive the implementation of BBBEE as fair in nature. The above-mentioned literature demonstrates a prevalence of adverse experiences, which lead the authors to hypothesise that (H1) BBBEE is perceived as unfair in the workplace.

Measurement of fairness perceptions of Broad-Based Black Economic Empowerment

BBBEE compliance is measured against the following indicators: ownership, management control, skills development, enterprise and supplier development, and

socioeconomic development (B-BBEE Commission, 2016). While this study acknowledges these objectives, the focus remains on comprehending how individuals perceive and interpret the BBBEE policy. Moreover, while recognising the importance of BBBEE in advancing economic participation of black South Africans, the literature reveals the absence of a single measure that adequately captures the fairness perceptions of BBBEE by South African workers. The majority of the past few studies have focused on the development of measures that assess the positive and negative impacts of BBBEE on SMEs (Van Niekerk, 2019), as well as the positive and negative effects of BBBEE on business operations and competitiveness (Krüger, 2014b).

More so, Van Niekerk's (2019) measure focuses on the following dimensions: advantages of BEE for SMEs, advantages of BEE for employees of SMEs, disadvantages of efficiency and reliability for SMEs, economic disadvantages for SMEs and perceived fundamental disadvantages of BEE (Van Niekerk, 2019). No specific dimension is assessed in Krüger's (2014b) measure. A major limitation of both these measures is the failure to assess the fairness perceptions of BBBEE. To this end, there is the absence of a single instrument that evaluates the fairness perceptions of BBBEE within the workplace. It is important to observe that none of these measures were used to inform the development of items of the current BBBEE measure.

The process involved in scale development usually includes the following:

- clearly defining the construct under investigation (Chaffee, 1991; Tay & Jebb, 2017)
- specifying the dimensionality and purpose of the construct (Carpenter, 2018)
- item generation, informed either deductively (relies on a thorough literature review and pre-existing measures, Hinkin, 1995) or inductively such as focus groups or interviews (Simms, 2008)
- determining the most suitable response format to employ (DeCastellarnau, 2018)
- inspecting the validity (Crocker, 2015) and reliability of items (Anastasi & Urbina, 1997).

Given the absence of a singular measure to assess workplace perceptions of BBBEE fairness and drawing from the literature that relates to scale development, the following objective was framed: To develop and validate the BBBEE Fairness Perception Questionnaire, consequently, the following hypothesis was formulated:

H2: The BBBEE Fairness Perception Questionnaire is valid and reliable.

Research design

Research approach

To address the research objectives and hypotheses, an exploratory sequential mixed-method design was used,

where a qualitative, inductive methodology was adopted. Semi-structured interviews were held with a convenience sample of eight participants, across South African organisations and sectors to gauge the perceived fairness of BBBEE. More than half of the sample were male (five), were African (six) and had obtained a bachelor's degree (four). Almost half of the participants were employed in middle and junior management positions. The collection of data ceased with eight participants, as no new themes emerged from the data.

The qualitative quotes were converted into measurement items. If an item reflected experience, a perception related to the (un)fairness of BBBEE or understanding of BBBEE, it was considered for inclusion in the item pool. Similarities identified in the items were clustered together into themes. Braun and Clarke's (2006) thematic analysis process was used to identify the following perceptions of BBBEE: empowerment (and lack thereof), window dressing, ineffective policy and unethical behaviour. These themes thus constituted the factors of the measurement tool (Creswell & Clark, 2018). Relatedly, a minimum of three items per factor was considered necessary for the measure to be regarded as valid and reliable (Fabrigar & Wegener, 2012).

Having a clear understanding of the construct guided the researchers in item writing. The researchers made certain that all items of the measure made reference to BBBEE and some degree of (un)fairness towards BBBEE. The initial item pool comprised 38 items to enhance reliability compared to a measure with fewer items after item deletion. Alongside this, a five-point Likert scale response format was chosen by which respondents could judge each item. This allowed for finer gradations and reduced the likelihood of variance error.

Content and face validity

The items were subjected to content and face validity, where methodologists and subject matter experts, as well as laypersons, assessed and identified the items that should be accepted, modified or rejected. More specifically, the convenience sample ($n = 7$) consisted of two methodologists, two subject matter experts and three adults from the general population with knowledge of BBBEE. Among those participants, 71% were women and 29% were men, between the ages of 30–40 (57%) and 40–50 (43%) years, respectively. The sample consisted of 71% white participants and 29% African participants. Among the participants, 29% spoke Afrikaans, 29% spoke Sepedi and 42% spoke Setswana. Majority of the participants held a bachelor's degree (42%), while others held a master's degree (29%) and a doctorate qualification (29%). The participants were academically qualified (57%), occupied senior management (29%), and junior management roles (14%), in various industries (finance and insurance 14%, scientific and technical services 57% and public administration 29%).

The panel were informed about the overall purpose of the study and were requested by email and telephone to provide written feedback on item quality and the degree to which the items captured the overarching construct, item clarity and the necessity for item rewording, deletion or retention. More so, each panel member was requested to provide written feedback on each individual item and its relatedness to BBBEE, and to assess which items should be grouped together. This was carried out between the months of October and November 2020.

From the consultations with the panel members, it was recommended that 28 items of the 38 newly developed items be modified to facilitate better understanding on the part of the potential research participants. For example, 'To what extent are you willing to listen attentively to the ideas developed by your black colleagues who are from designated groups' was modified to 'I am in support of listening attentively to the ideas developed by my colleagues who are black'. 'To what extent are you willing to be empathetic about the personal challenges faced by your colleagues who are black' was revised to 'I am in support of being empathetic about the personal challenges faced by my colleagues who are black'. The panel members were then asked to review the modified items that were included in the measure, in a second round of evaluations. There were no deletions or changes made to the items, which constituted the final measurement that was administered to a sample of 300 participants.

Research method

Research participants

Administering the measure to a sample of 300 participants would help to determine the dimensionality of the set of items, which can be achieved through factor analysis. Various recommendations exist regarding the suitable sample size required when conducting factor analysis. Both Gorsuch (1983) and Kline (1979) recommended that the adequate sample size for factor analysis be a minimum of 100. Comrey and Lee (1992) suggested a rough rating scale for acceptable sample sizes: 100 = poor, 200 = fair, 300 = good, 500 = very good, ≥ 1000 = excellent. Guadagnoli and Velicer (1988) supported this recommendation and proposed that the sample size should be at least 300–450.

Based on the recommendation made by Guadagnoli and Velicer (1988), a convenience sample of 300 participants took part in this study for the purposes of performing the factor analysis, more specifically, an exploratory factor analysis (EFA). This sampling method was chosen because it afforded the researcher the opportunity to gain access to research participants who were conveniently accessible (Wienclaw, 2019). Individuals needed to have worked in a South African organisation for at least 1 year in order to participate in the study, be proficient in the English language and voluntarily consent to partake in the research.

An online self-administered survey using Google Forms was created. The survey comprised an introduction, the aim of the study and the consent form. Individuals whom the researcher had a professional relationship with were informed of the research via email and were requested to partake in the study. The link to the survey was distributed on social networking sites (WhatsApp®, Instagram®, Facebook®). Several departmental executives from various organisations in South Africa were approached via email. The participant organisations were informed of the study by the researcher and permission for the study was granted. The researcher requested that the departmental executives disseminate the survey link among their colleagues and to their professional networks, whom they thought might be interested in partaking in the study.

The participants comprised 69% female and 30% male. Most of the participants were between 26 and 35 years. Most were African (80%), were English speaking (20%), held a master's degree (24%), were academically qualified (44%) and were employed in the education industry (46%).

Measuring instruments

Participants completed a biographical questionnaire and the BBBEE Fairness Perception Questionnaire. The main purpose of administering the questionnaire to a sample of 300 participants was to validate the items of the measure. Each of the measures listed here is described in the following sections.

Biographical questionnaire

The questionnaire comprised two parts, namely parts 1 and 2. Part 1 of the questionnaire comprised sections A and B. Section A of the survey comprised a biographical information section. The biographical questionnaire was used to gather information pertaining to gender, age, race, home language, education, the job level of the participants and the industry of employment.

The Broad-Based Black Economic Empowerment Fairness Perception

Section B comprised the BBBEE Fairness Perception Questionnaire. The instrument was developed to measure the respondents' fairness perceptions of BBBEE. The measure consisted of 38 items rated on a five-point frequency measure ranging from 1 (strongly disagree) to 5 (strongly agree).

Statistical analysis

Statistical analyses, namely, descriptive statistics, reliability analysis and EFA, were carried out using the Statistical Package for the Social Sciences (SPSS) software version 25 (SPSS Inc, 2018). The first step involved examining the data for missing and unexpected values. Next, the researcher obtained the descriptive statistics for all factors of the BBBEE measure, where the mean, standard deviations, skewness and kurtosis were inspected to describe their plausibility. A cut-off point of > -2.00 and < 2.00 was set for skewness to

determine the normal distribution of the data, and in terms of kurtosis, Pyzdek and Keller (2003) suggested a cut-off score of >4.00 and <4.00 , while Curran et al. (1996) suggested a cut-off score of $>\pm 7$, as data consisting of kurtosis values of $>\pm 7$ have shown to be problematic and are considered to have elevated levels of kurtosis. Thus, the guideline proposed by Curran et al. (1996) was used to determine the normal peak of the data.

The next step in the analysis was to examine sampling adequacy. The Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy (MSA) and Bartlett’s test of sphericity were analysed to determine whether the sample size was appropriate for conducting an EFA (Pallant, 2011). A KMO value of 0.6 and above is recommended as a suitable indicator (Kaiser, 1960) and Bartlett’s test of sphericity should generate a significant statistic ($p < 0.01$) (Bartlett, 1954). Factor analysis is concerned with identifying the shared variance among variables and grouping variables that are highly correlated with one another into factors, while removing items that are not correlated with other items (Tabachnick & Fidell, 1989). Exploratory factor analysis is a multivariate technique that attempts to determine latent variables that parsimoniously explain the structure among observed manifest variables (Preacher et al., 2013). It has been instrumental in the design, development and validation of psychological measures (Williams et al., 2010).

To aid in the number of factors to keep, the eigenvalues-greater-than-one technique (Kaiser, 1960), the scree plot (Cattell, 1966) and parallel analysis scree plot (see Figure 2), as well as the parallel analysis outcomes (Horn, 1965), communality values and corrected item-total correlations were studied and used as criteria to retain items or for possible further item analysis. The objective of Kaiser’s criterion is that factors are retained when the eigenvalue is greater than the threshold of one (Kaiser, 1960). The parallel analysis technique is a Monte Carlo simulation method (Ledesma & Valero-Mora, 2007). The basic premise of parallel analysis is to compare the eigenvalues obtained from the actual data with the eigenvalues generated from the random data (Horn, 1965). The principle is that, when the i th eigenvalue from the real dataset is larger than the i th eigenvalue obtained from the random data, the factor is retained (Horn, 1965).

Reliability was determined by using the Cronbach’s alpha coefficient. Netemeyer et al. (2003) recommended a cut-off of $\alpha < 0.70$. As an additional test for reliability, the inter-item correlations were calculated. Positive inter-item correlations that significantly ($p < 0.05$) correlate moderately or strongly with all other items in the measure are desired. This indicates that the items measure the same underlying characteristics. An additional measure that was employed to provide further information about the reliability of the measure was the corrected item-total correlations. In terms of the corrected item correlation, a coefficient value of 0.30 and above indicates that each individual item score correlates with the total score (Field, 2013).

Ethical considerations

Ethical clearance for the study was obtained from the Research Ethics Committee of the Department of Industrial Psychology and People Management at the University of Johannesburg. Clearance number: IPPM 2018-260 (D).

Results

Thematic analysis uncovered four central themes: (1) empowerment (and lack thereof), (2) window dressing, (3) ineffective policy and (4) unethical behaviour (see Table 1), thus addressing the research question and partly supporting Hypothesis 1.

Descriptive statistics

Table 2 shows the descriptive statistics that were used to evaluate the distribution of the data. More specifically, the mean, standard deviation, skewness and kurtosis were evaluated. For all items, the descriptive analysis revealed that the data were normally distributed.

For all items, the descriptive analysis revealed that the data were normally distributed, >2 for skewness and for kurtosis of >4 . Further analysis was performed on the items.

Factor analysis

The KMO (MSA) and Bartlett’s test of sphericity, using iterative principal axis factoring (PAF) (Thurstone, 1935, 1947), were performed on the 38 items of the BBBEE Fairness Perception Questionnaire. The measure obtained a KMO (MSA) value of 0.952 with a significant Bartlett’s test of sphericity value of $p = 0.000$, thus suggesting that the data were eligible for factor analysis. Subsequently, an EFA in SPSS, using PAF for purposes of determining the number of factors to extract, was performed on all items of the measure. From the EFA, a scree plot (Figure 1) was generated, which can be seen below.

Two factors were recommended for retention. The proportion of variance for the two-factor model was examined. Thereafter, a parallel analysis in R Studio was performed on all 38 items.

The analysis revealed that a four-factor solution would best fit the data. Following from there, a parallel analysis using the Monte Carlo principal component analysis for parallel analysis was performed. Here, the eigenvalues obtained from the EFA performed on the actual dataset were compared with the randomly produced eigenvalues of the parallel analysis.

The principal analysis indicated that four factors have eigenvalues higher than those randomly produced. Specifically, the four eigenvalues (see Table 3) were 18.566, 5.607, 2.372 and 1.581. The four factors explained a total of 74.02% of the cumulative variance (factor 1: 48.86%; factor 2: 14.76%; factor 3: 6.24% and factor 4: 4.16).

TABLE 1: Transcripts of qualitative themes.

| Themes | Description of theme | Frequency | Example of a theme from interview |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Empowerment (or the lack thereof) | Access to opportunities, resources and support. | 9 | <p>'The intention behind BBBEE is that it is there to empower black affiliated businesses.'</p> <p>'Today in many organisations we have black Managing Directors and Chief Executive Officers. Black people or suppliers are always given first preference.'</p> <p>'Our people have not been in the driver's seat. BBBEE gives them the opportunity to own these companies, to direct and control what happens to these companies. I am for this.'</p> <p>'With my experience in my organisation of employment, I have seen black people being empowered, I have seen disadvantaged people being brought into our organisation.'</p> <p>'As of late we have been hiring people off the streets. We just ask them if they can speak English and we hire them.'</p> <p>'This is achieved by expenditure on learning programmes for black people, learning programmes on disadvantaged black people.'</p> <p>'I have seen people being developed in terms of skills development.'</p> <p>'Honestly, the organisation will take you to school in order for you to develop your skills.'</p> <p>'BBBEE can create conflict between individuals in organisations. People can get upset because a black person was hired or promoted. It can also create conflict amongst black people, who may feel that they are not given equal opportunities in relation to other black people. But I think, BBBEE tries to bring qualified people into companies, tries to give equal opportunities. So, if you truly understand what its' trying to achieve, it can be used as a tool to impartially resolve the brewing conflict.'</p> <p>'We train our employees heavily.'</p> <p>'To me, BBBEE gives black people a chance they never had before. It validates their worthiness in the workplace, their ideas. That their ideas should be listened to just as much their white counterparts.'</p> <p>'I think BBBEE is a fair policy because it encourages people of other races like whites to be empathetic to black people. That's somewhat empowering.'</p> <p>'BBBEE is fair I think because it's about respecting black people and seeing them as people that are deserving of opportunities just as much as any other individual from another race. It's about being empathetic and showing respect to the past challenges black people have endured and overcome.'</p> <p>'We have started a development programme where we look for previously disadvantaged candidates.'</p> |
| Window dressing | The employment of people belonging to designated groups in order to portray the illusion of racial and gender equality. | 9 | <p>'The intentions of white corporations from what I can see are not to bring about true transformation. It is about filling quotas.'</p> <p>'Corporate are hiring black people for quotas and not to bring about transformation.'</p> <p>'From where I am standing I can only and honestly say that its more about quotas.'</p> <p>'Organisations are focused on meeting a quota.'</p> <p>'In corporate, most of the senior executives are 90% white and then there are sprinkles of black people. But top management are white men, and those sprinkles of black people are black men.'</p> <p>'We also throw money at certain initiatives in order to get points.'</p> <p>'You as an individual might be brought in because you fit the BBBEE criteria, not to progress across the organisation.'</p> <p>'For most organisations it is about getting the BEE certificate than anything else.'</p> <p>'It is a numbers game.'</p> |
| Ineffective policy | A policy that fails to achieve its intended goal. | 13 | <p>'I think the implementation is still lacking. You do not see the implementation.'</p> <p>'I think individuals do not want to do much to make it work unless they get instructions from whoever it is that owns the company.'</p> <p>'It can only work when blacks own the companies and run the companies.'</p> <p>'The structure of the business is such that whites are meant to be at the top while blacks are meant to be at the bottom. There isn't much transformation. Hire an equitable representation of people from designated groups across a variety of occupations.'</p> <p>'I think where the struggle is, is with implementation.'</p> <p>'I was expecting BBBEE to work but it never has worked. For example, take myself, I have been working for this current organisation for 10 years now. When an available position in my line of work becomes available, I am expecting preferential treatment as opposed to going through the entire recruitment process. I feel that I am not given a chance to sell my skill and to prove my worth to the company and I feel that it is a result of BBBEE.'</p> <p>'I would say that BBBEE is working but it does not work in each and every organisation.'</p> <p>'What tends to happen is that you are not recognised when vacant senior positions become available, so that is the problem I have with BBBEE.'</p> <p>'When it comes to senior positions, black people are not given equal opportunities.'</p> <p>'BBBEE is narrowly focused and it should not be that way, it is supposed to be broad.'</p> <p>'I still cannot fathom the success rate of BBBEE. If at any stage individuals are made to feel that they have an opportunity to make it a success, then it is an illusion that has been created. I say this because the individuals are not the decision makers, they are not the policy makers, the strategy developers, the ones who set the directional agenda of the entire business.'</p> <p>'The policy itself favours black people the least. The purpose of the policy is to empower the previously disadvantaged but right now it does not seem to do that.'</p> <p>'Blacks are being hired but they are still kept at the bottom. They give our black children mundane work and that is why they end up with depression.'</p> |
| Unethical behaviour | Unethical behaviour refers to when the behaviour of an individual or groups of individuals negatively affects others. | 4 | <p>'If as an individual I am working in the procurement department, I need to make sure that our company makes use of black suppliers. What normally happens with us as employees, we tend to think of our own pockets and how we can individually benefit from using a specific supplier, by doing so, we put our personal interests before the interests of the company.'</p> <p>'Some people are handed positions because they are token people. It all depends on who you know that can get you hired or promoted.'</p> <p>'I think that BBBEE is not that broad. Few people have actually benefitted from BBBEE.'</p> <p>'You need to empower more people and not just 100 people.'</p> |

BBBEE, Broad-Based Black Economic Empowerment.

TABLE 2: Descriptive statistics for the evaluation of the distribution of the data.

| Item | Mean | SD | Skewness | Kurtosis |
|------|------|-------|----------|----------|
| 1 | 3.89 | 1.183 | -0.964 | 0.144 |
| 2 | 4.18 | 1.139 | -1.528 | 1.659 |
| 3 | 4.11 | 1.184 | -1.273 | 0.648 |
| 4 | 4.06 | 1.193 | -1.300 | 0.838 |
| 5 | 4.33 | 1.076 | -1.919 | 3.153 |
| 6 | 3.58 | 1.302 | -0.622 | -0.655 |
| 7 | 4.14 | 1.155 | -1.450 | 1.350 |
| 8 | 3.90 | 1.163 | -0.942 | 0.148 |
| 9 | 4.06 | 1.148 | -1.274 | 0.893 |
| 10 | 4.05 | 1.171 | -1.355 | 1.113 |
| 11 | 4.22 | 1.152 | -1.607 | 1.817 |
| 12 | 4.11 | 1.176 | -1.333 | 0.908 |
| 13 | 4.14 | 1.158 | -1.402 | 1.177 |
| 14 | 4.19 | 1.161 | -1.559 | 1.631 |
| 15 | 3.02 | 1.158 | -0.124 | -0.666 |
| 16 | 3.15 | 1.189 | -0.191 | -0.764 |
| 17 | 4.03 | 1.075 | -1.302 | 1.381 |
| 18 | 3.79 | 1.095 | -0.908 | 0.409 |
| 19 | 3.24 | 1.273 | -0.273 | -0.909 |
| 20 | 3.00 | 1.235 | -0.021 | -0.883 |
| 21 | 4.18 | 1.111 | -1.532 | 1.824 |
| 22 | 4.16 | 1.054 | -1.324 | 1.366 |
| 23 | 3.02 | 1.268 | -0.012 | -0.940 |
| 24 | 3.06 | 1.275 | -0.119 | -0.965 |
| 25 | 3.09 | 1.261 | -0.076 | -0.938 |
| 26 | 3.08 | 1.284 | -0.068 | -1.001 |
| 27 | 3.04 | 1.282 | -0.085 | -0.995 |
| 28 | 3.90 | 1.000 | -0.727 | 0.265 |
| 29 | 4.11 | 1.015 | -1.195 | 1.212 |
| 30 | 3.52 | 1.111 | -0.397 | -0.237 |
| 31 | 3.67 | 1.095 | -0.616 | 0.007 |
| 32 | 3.48 | 1.239 | -0.535 | -0.530 |
| 33 | 3.42 | 1.250 | -0.440 | -0.687 |
| 34 | 3.95 | 1.175 | -1.053 | 0.399 |
| 35 | 3.68 | 1.282 | -0.755 | -0.442 |
| 36 | 3.90 | 1.182 | -1.034 | 0.375 |
| 37 | 3.98 | 1.129 | -1.175 | 0.878 |
| 38 | 3.96 | 1.169 | -1.193 | 0.799 |

SD, standard deviation.

Factor solution

Based on the results obtained from the KMO statistic and Bartlett's test, the iterative PAF analysis, using the promax rotation method (Hendrickson & White, 1964; Thompson, 2004), was performed to correlate and rotate the factor structure. From this process, a pattern matrix was produced, as shown in Table 4.

The rotated pattern matrix for the 38 items of the measure revealed double factor loadings for the following items: 6, 21, 28, 29, 32 and 33. What is worth mentioning is that items 21, 26, 32 and 33 were reported to have residual correlations that exceeded the 0.10 residual correlation, which may strengthen the argument that these items should be considered for deletion. Despite this, the communality estimates for these reported items varied between 0.628 and 0.796. The corrected item-total correlations for the cross-loaded items were above 0.50 and varied between 0.634 and 0.702, with an overall alpha of 0.965 (Bearden & Netemeyer, 1998). Although the

overall Cronbach's alpha coefficient of the questionnaire was 0.965, based on the double loadings, these items were removed from inclusion in the questionnaire.

After the removal of those items, it appeared that a four-factor solution, consisting of 31 items, best fits the data. All four factors are reported to have acceptable reliabilities as recommended by Nunnally and Bernstein (1994), $\alpha > 0.70$. To demonstrate, the Cronbach's alpha coefficients are as follows: factor 1 $\alpha > 0.969$; factor 2 $\alpha > 0.947$; factor 3 $\alpha > 0.936$ and factor 4 $\alpha > 0.874$. For the items that presented a unidimensional structure, the item loadings fell well above the recommended cut-off point of 0.30. More specifically, the factor loadings varied between 0.503 and 0.977. The communalities varied between 0.545 and 0.856. The corrected item-total correlations varied between 0.565 and 0.763.

Upon an examination of the items that loaded on factors 1 and 2, we discovered that these items aligned to the BBBEE indicator of skills development, as the items referred to empowerment and the professional development of black people in workplaces.

For example, the items measuring factor 1 related to topics such as the skills development of black people, appointing suitably qualified black individuals in executive management positions and appointing an equitable representation of people from designated groups across a variety of occupations. As a result, it was deemed appropriate to label factor 1 as empowerment.

The items that loaded on factor 2 revealed that the common theme underpinning the items was professional development. The content of the items relates to topics such as opportunities to improve on the self and gain confidence to perform work tasks. Factor 3 was named effectiveness, given that the items that loaded on the factor related to the implementation of BBBEE, more specifically striving towards achieving BBBEE and promoting the effectiveness of BBBEE. Factor 4 was named fair treatment on the basis that the items that loaded on the factor related to the interactions among individuals and ensuring that respect and fairness are maintained. Factors 3 and 4 while not directly related to specific BBBEE indicators align with the overarching objectives of promoting effective economic participation and ensuring the equitable treatment of previously disadvantaged groups in the workplace. It is worth observing that the names given to the factors were descriptive in nature based on the common theme that had been identified to unify the item variables.

Discussion

The goals of this study were to explore the fairness perceptions of BBBEE, to develop and validate the BBBEE Fairness Perception Questionnaire.

TABLE 3: Eigenvalues and total explained variance.

| Component | Initial eigenvalues | | | Extraction sum of squared loadings | | | Randomly produced eigenvalues |
|-----------|---------------------|-------------|------------|------------------------------------|-------------|------------|-------------------------------|
| | Total | % Explained | % Variance | Total | % Explained | % Variance | Total |
| 1 | 18.566 | 48.859 | 48.859 | 18.285 | 48.118 | 48.118 | 1.745 |
| 2 | 5.607 | 14.756 | 63.614 | 5.355 | 14.091 | 62.210 | 1.650 |
| 3 | 2.372 | 6.241 | 69.856 | 2.109 | 5.551 | 67.760 | 1.586 |
| 4 | 1.581 | 4.161 | 74.017 | 1.265 | 3.329 | 71.090 | 1.525 |

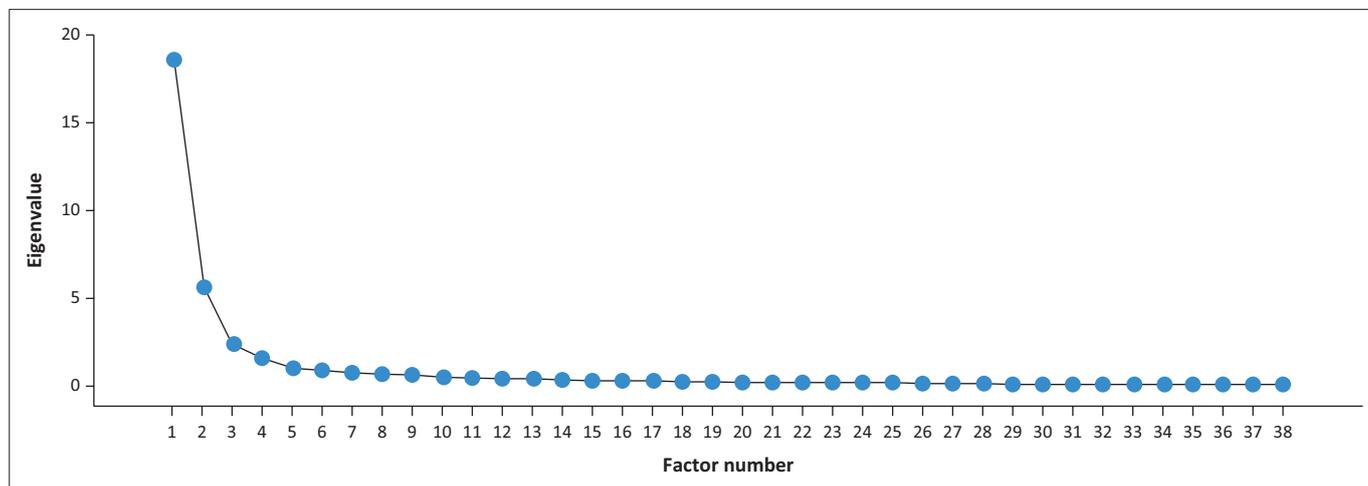


FIGURE 1: Scree plot for the proposed two-factor model.

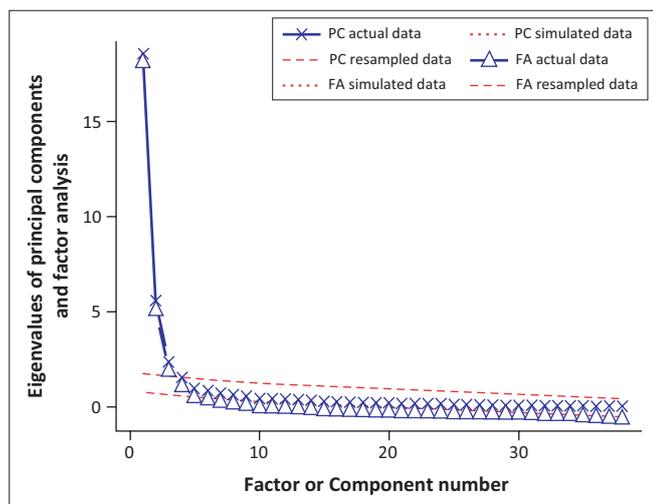


FIGURE 2: Parallel analysis scree plot.

Considering the study’s aim to bring to light employees’ perceptions of the fairness of BBBEE within the workplace, the results revealed disparities. For example, black South Africans were seen as underrepresented in the workplace, aligning with Uppal’s (2014) findings that most black South Africans have fewer job prospects. Participants believed that organisations prioritise quota fulfilment through window dressing. Bracking (2019) similarly identified that women are co-opted into companies to satisfy the headcount requirement of BEE.

The narrations also revealed that the rate of transformation is perceived to be slow (Tangri & Southall, 2008), and that recruitment and promotion procedures of black hires are considered unethical, thus playing a key part in the formation of unfairness perceptions of BBBEE and supporting Hypothesis 1.

Conversely, participants expressed that BBBEE contributes towards providing equitable opportunities to black South Africans, implying that BBBEE is perceived to be both fair and unfair by the participants. A probable explanation could be that organisational leaders fail to provide employees with sufficient justifications as to why certain recruitment and promotion decisions were made, resulting in employees perceiving themselves to be insufficiently utilised within the context of the organisation.

To test Hypothesis 2, an EFA was performed on the data to assess the validity of the items. The scree plot, which was one of the several outputs of the analysis, suggested that a two-factor model would likely fit the data well. Inspection of the parallel analysis, however, suggested a four-factor solution.

The item loadings of the four-factor solution were inspected. The current research observed that items 6, 21, 28, 29, 32 and 33 had cross-loadings. Cross-loadings suggest that an item measures more than one factor (Rao, 1977). This is a common occurrence in the social science field, as items are not perfect indicators of psychological constructs (Asparouhov et al., 2015). However, despite not being perfect indicators, cross-loading items are less preferred, as such items do not represent conceptual clarity (Thurstone, 1947), suggesting that the items were not unidimensional.

To be considered unidimensional, the correlations among a set of items should be accounted for by a single common latent construct (Lord et al., 1968). A violation of this assumption suggests that the relationship between the

TABLE 4: Factor loadings for the 38 items of the Broad-Based Black Economic Empowerment Fairness Perception Questionnaire.

| Item | F1 | F2 | F3 | F4 | H2 | Corrected item-total correlations |
|---------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|-------|-------|-------|-----------------------------------|
| 1. I am in support of qualified black people having majority control of an organisation. | 0.684 | - | - | - | 0.571 | 0.679 |
| 2. I am in support of qualified black people appointed in executive management positions. | 0.808 | - | - | - | 0.714 | 0.716 |
| 3. I am in support of organisations employing black people on all organisational levels. | 0.865 | - | - | - | 0.709 | 0.681 |
| 4. I am in support of organisations employing an equitable representation of people from designated groups across a variety of occupations. | 0.711 | - | - | - | 0.545 | 0.631 |
| 5. I am in support of the skills development of black people. | 0.833 | - | - | - | 0.799 | 0.755 |
| 6. I am in support of the preferential procurement from black-owned enterprises. | 0.599 | - | 0.347 | - | 0.628 | 0.702 |
| 7. I am in support of the development of black-owned enterprises. | 0.826 | - | - | - | 0.781 | 0.763 |
| 8. I am in support of collectively resolving conflict with my team members who are black. | 0.777 | - | - | - | 0.628 | 0.634 |
| 9. I am in support of listening attentively to the ideas developed by my colleagues who are black. | 0.884 | - | - | - | 0.777 | 0.703 |
| 10. I am in support of being empathetic about the personal challenges faced by my colleagues who are black. | 0.862 | - | - | - | 0.740 | 0.708 |
| 11. I am in support of being respectful towards my colleagues who are black. | 0.862 | - | - | - | 0.850 | 0.740 |
| 12. I am in support of being transparent about my decision making to my colleagues who are black. | 0.867 | - | - | - | 0.806 | 0.729 |
| 13. I am in support of coaching colleagues who are black. | 0.815 | - | - | - | 0.729 | 0.726 |
| 14. I am in support of valuing the opinions of my colleagues who are black. | 0.825 | - | - | - | 0.821 | 0.751 |
| 15. I feel that BBBEE has provided me with the opportunity to foster positive relations with my black colleagues. | - | 0.771 | - | - | 0.586 | 0.556 |
| 16. I feel that BBBEE has encouraged me to make ethical personnel decisions. | - | 0.723 | - | - | 0.558 | 0.583 |
| 17. I feel that I am willing to show concern about the general well-being of my black colleagues. | - | - | - | 0.602 | 0.747 | 0.732 |
| 18. I feel that I positively adjust how I cope with relational differences between my black colleagues and myself. | - | - | - | 0.503 | 0.578 | 0.667 |
| 19. I feel that BBBEE has provided me with the opportunity to become aware that, how I behave may affect my black colleagues. | - | 0.658 | - | - | 0.546 | 0.621 |
| 20. I feel that BBBEE has provided me with the opportunity to resolve workplace conflict impartially. | - | 0.809 | - | - | 0.648 | 0.606 |
| 21. I feel that I am respectful towards my black colleagues. | 0.353 | - | - | 0.641 | 0.796 | 0.701 |
| 22. I feel that I do not allow my negative feelings prevent me from working with my black colleagues. | - | - | - | 0.694 | 0.693 | 0.630 |
| 23. I feel that BBBEE has provided me with the opportunity to gain confidence to successfully perform my work. | - | 0.902 | - | - | 0.823 | 0.634 |
| 24. I feel that BBBEE has provided me with the opportunity to realise my potential at work. | - | 0.907 | - | - | 0.816 | 0.619 |
| 25. I feel that BBBEE has provided me with the opportunity to motivate myself to perform my work tasks. | - | 0.977 | - | - | 0.856 | 0.576 |
| 26. I feel that BBBEE has provided me with the opportunity to express my ideas to my black colleagues. | - | 0.912 | - | - | 0.785 | 0.586 |
| 27. I feel that BBBEE has provided me with the opportunity to be efficient when I perform my work. | - | 0.950 | - | - | 0.818 | 0.569 |
| 28. I think that I abide by the organisation's BBBEE policies and practices. | - | - | 0.509 | 0.470 | 0.584 | 0.634 |
| 29. I think that I offer work-related assistance to my black colleagues. | - | - | 0.423 | 0.548 | 0.672 | 0.670 |
| 30. I think that I ensure that BBBEE is effective at my place of work. | - | - | 0.383 | - | 0.458 | 0.603 |
| 31. I think that I align my work values with the BBBEE principles of my workplace. | - | - | 0.530 | - | 0.657 | 0.734 |
| 32. I think that the implementation of BBBEE will result in the acquisition of skilled workers at my place of work. | - | 0.371 | 0.603 | - | 0.717 | 0.714 |
| 33. I think that the implementation of BBBEE will alleviate the skills shortage at my place of work. | - | 0.441 | 0.557 | - | 0.695 | 0.668 |
| 34. I think that it is important for my place of work to comply with the BBBEE scorecard. | - | - | 0.823 | - | 0.726 | 0.705 |
| 35. I think that the implementation of BBBEE is an example of ethical governance. | - | - | 0.684 | - | 0.714 | 0.750 |
| 36. I think that my place of work must strive towards achieving BBBEE. | - | - | 0.948 | - | 0.843 | 0.730 |
| 37. I think that my place of work must constantly evaluate efforts towards achieving BBBEE. | - | - | 0.896 | - | 0.782 | 0.706 |
| 38. I think that my place of work must develop clear plans to achieve BBBEE. | - | - | 0.894 | - | 0.819 | 0.742 |

BBBEE, Broad-Based Black Economic Empowerment.

items can be explained by something else other than the effects of the common latent construct (Marais, 2013; Netemeyer et al., 2003). Based on this literature, it was decided upon by the present researcher to remove the items that cross-loaded, as including such items in the final scale could lead to inflated reliability and creates the sense that estimations are more accurate and precise than they

are (Marais, 2013). As a result, the final measure consisted of 31 items, thus proving that the four-factor solution fits the data best.

The validated measure proved to be reliable; thus Hypothesis 2 was accepted. Psychological instruments with a high-reliability score are favoured because such measures provide

a more accurate assessment of peoples' psychological attributes than a psychological instrument with a low-reliability score (Furr, 2021). Thus, precise inferences and interpretations of results can be drawn from the results (Montoya & Edwards, 2020).

Practical implications

Businesses measured under the Codes of Good Practice are required to satisfy the objectives and targets specified under the relevant codes. To this end, such organisations can do very little to influence the perceived fairness of the outcome of a decision, which is to enforce the indicators to measure BBBEE. What organisations have influence over, from a fairness perspective, are the processes applied in the practice of BBBEE and, thus, should consider the extent to which employees perceive those processes by which decisions are made as either fair or unfair.

While practising BBBEE, organisations will also need to consider how fairly they treat employees. Administering the valid and reliable BBBEE measure can assist to accurately determine fairness perceptions. In doing so, both employers and researchers can be afforded the opportunity to gain insight into the influence of BBBEE perceptions on organisational outcomes in the workplace.

Limitations

This study is not without its limitations. An example of such a limitation is the use of the non-probability convenience sampling method. The application of this technique restricted the opportunity for a randomly selected sample to partake in this study. A second limitation of this study was that majority of the participants mostly constituted of Africans and participants working in the education industry, thereby suggesting the underrepresentation of other races and industry groups. Thus, it is important to exercise caution when generalising these results to other populations and contexts.

Recommendations

There may be a possibility for people of other racial backgrounds and diverse backgrounds to perceive BBBEE quite differently from the study's sample. Through the use of CFA, future studies could consider validating the measure with a much more diverse sample of participants. Researchers are encouraged to build on this existing measure, by adding more items to it.

Conclusion

The study identified subjective experiences towards BBBEE and further built on these findings through the development of the BBBEE fairness perceptions measure. The psychometric properties were evaluated and it was proven that the instrument is valid and reliable for use in the South African context. The BBBEE fairness perceptions measure can assist organisations in better understanding the perceptions of the policy as well as how these perceptions influence work outcomes.

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Competing interests

The authors have declared that no competing interest exists.

Authors' contributions

This study forms part of T.M.'s doctoral study. T.M. was responsible for the conceptualisation of the study. T.M. was also responsible for the writing of the original study, which included the methodology, investigation (collection of data and project administration), validation and formal analysis. M.G. and K.L. oversaw the supervision of the study and together with T.M., conceptualised the study and assisted with the formal analysis of the study.

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Data availability

List of tables and figures with associated raw data is provided.

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