

At the edge of the Fourth Industrial Revolution: Employees' perceptions of employment equity from a CIBART perspective



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Orientation: In accordance with global trends, South Africa is striving for the Fourth Industrial Revolution (4IR). Discourses of employees' employment equity (EE) perceptions within the 4IR context are studied 25 years after apartheid.

Research purpose: The purpose of the study was to understand the systems psychodynamics underneath the surface of employees' perceptions of EE in South Africa within the context of the 4IR.

Motivation for the study: South African workplaces are debated nationally and urged to compete with 4IR changes on a global level. This research focuses on employees' perceptions of EE underneath the surface and aims at understanding employees' perceptions through the conflict, identity, boundaries, authority, roles, task (CIBART) model.

Research approach/design and method: Altogether 83 employees in 11 organisations in South Africa participated in qualitative interviews regarding their perceptions and experiences within their changing work contexts.

Main findings: The findings indicate employees' perceptions of EE in terms of conflict, identity, boundary, authority, roles and tasks of the CIBART model. The discourses highlight EE, race and gender within contemporary South Africa, and show a lack of drive to engage with the discourses of the 4IR on a global level.

Practical/managerial implications: The findings show that employees and organisations in South Africa need to open up their internal discourses anchored in the country's past to become key players in the 4IR; apartheid categories need to be overcome to develop context-specific visions and original ideas on how to create 4IR workspaces in the future.

Contribution/value-add: This article emphasises the gap between national discourses and global trends in employees' perceptions of EE and discusses transformational ideas from after apartheid to 4IR visions.

Keywords: Employment Equity (EE); workplace perceptions; below the workplace surface; CIBART model; Fourth Industrial Revolution.

Introduction

South African workplaces are striving towards the Fourth Industrial Revolution (4IR) (Jansen van Rensburg, Telukdarie, & Dhamija, 2019), a term created in Germany, relating to cutting-edge technology activity, innovations, digital physical frameworks, the Internet of things and distributed computing (Calitz, Poisat, & Cullen, 2017). South African workplaces are affected by global changes and trends towards the 4IR, while conducting national discourses on employment equity (EE).

Organisations are encountering both cost decreases and income gains from their propelled digitalisation endeavours (Geissbauer, Vedsø, & Schrauf, 2016), including the full digitalisation of an organisation's tasks and the upgrade of items and administrations. Also, a closer connection with clients (Ind4.0, 2016), influencing the accompanying regions, such as administration and plans of action, unwavering quality and constant efficiency and the employees' instruction and abilities (training) and financial components (Calitz et al., 2017). The idea of the 4IR further portrays the subsequent interconnection of individuals and constant information trade (Spath et al., 2013), as well as smart objects becoming inserted in more extensive frameworks (Hecklau, Galeitzke, Flachsa, & Kohl, 2016). The concept of the 4IR describes the increasing digitisation of

the entire value chain and the resulting interconnection of people, objects and systems through real-time data exchange (Spath et al., 2013).

This manuscript centres around the perspectives of employees on work and organisation within the 4IR changes. As from the execution of the Employment Equity Act (EEA) (Basson, 2017), changes towards a progressively comprehensive, vote-based workforce has been actualised (Moraka & Jansen van Rensburg, 2015). These progressions appear to be 'superficial' as far as hierarchical changes and acclimation to 4IR necessities are needed (Herman, 2017). Organisations in South Africa are required by law to display EE; however, racial workplace segregation in South Africa continues (Zulu & Parumasur, 2009). Racial standards still do not coordinate with the societal statistic profile (Mayer & Barnard, 2015; Surtee & Hall, 2009) and solid discourses on expansionism, politically sanctioned racial segregation and workplace post-colonialism have emerged (Masombuka, 2016). A gradual change towards EE appears in workplaces (Breetzke & Hedding, 2016); however, how to address EE in a 4IR context remains in question (Louw, 2015; Oosthuizen, Tonelli, & Mayer, 2019).

Purpose and contribution

South African workplaces find themselves in national discourses on EE and 4IR transformations. This research focuses on employees' perceptions of EE under the surface, through the systems psychodynamic conflict, identity, boundaries, authority, roles, task (CIBART) model within the context of the 4IR. It provides new insights in burning issues in South African workplaces through the lens of the CIBART model.

Employment equity and the Fourth Industrial Revolution in South Africa

In a way, international trends define South Africa's ways of doing business and executing collaborative EE work practices. Automotive suppliers and component manufacturers have actualised community-orientated workspaces and the broad utilisation of collaborative robots (cobots), which are progressively seen as colleagues. A South African workforce that must create trust, having a culture of human-human coordinated effort and dread of joblessness, will require new EE practices in a cutting-edge 4IR workplace (Calitz et al., 2017). The South African government, organisations and society need to collaborate to develop a responsible EE approach and policies that govern the impact of the 4IR and create a pool of leaders with a deep and complex understanding of the interplay between 4IR technology and its effect on society (Hecklaua et al., 2016; Porter & Heppelmann, 2015; Stubbings, 2018).

The South African government will need to address topics such as unemployment, testing social safety nets, questions around universal basic income and identifying new income sources. South Africa will increasingly have to visualise radical new workplace trends and adjust EE approaches (Stubbings, 2018). As the 'typical' linear career path ceases to

exist, perceptions of the value of the new norm of a 'portfolio career' must change. For many employees, job mobility, constant retraining and rotation will become a crucial way of improving their adaptability, employability and usefulness to society (Kagermann et al., 2013) while adjusting EE policies and racial transformation in workplaces (Oosthuizen et al., 2019). Organisations are faced with an array of choices when contemplating the future of the 4IR, requiring an understanding of the future workplace options (Ind4.0, 2016).

Organisations can build a future-orientated understanding of humans-machines collaboration to deliver a corporate purpose. The values and behaviours that underpin EE policies, processes, decision-making and priorities should be clarified. Organisations should develop sophisticated EE policies that support workforce planning and predictive analytics to manage talent in multiple future scenarios and explore how technology can enhance people offering for potential and existing employees (Dorst, Hahn, Knafla, Loewen, & Rosen, 2015). Organisations should think beyond simplistic concepts such as 'complying with EE targets and quotas'. New ways of working and learning and radically different career paths are imperative. Organisations ought to have the freedom to redesign traditional 'one-size-fits-all' EE programmes and policies to deliver on new learning and development models, career paths, capability models and the redesign of EE jobs and compensation frameworks (Porter & Heppelmann, 2015). Future work relations in South Africa will be widely affected by EE and 4IR improvements on conscious and unconscious levels.

Systems psychodynamics and the CIBART model

Systems psychodynamic theories give a hierarchical way to deal with the comprehension and clarifying of systemic structures (Steyn & Cilliers, 2016) and the study of affect in organisations (Dashtipour & Vidaillet, 2017). Anxiety is seen as a noteworthy power in open systems and is relied upon to cause mental agony, which the system at that point guards itself against. Defence mechanisms may fluctuate in responses, for example, splitting, projection, projective identification and idealisation (Blackman, 2004). Only if the system addresses the anxiety and integrates positive and negative aspects of itself can it cater for objective human relations to finally contain the anxiety (Cytrynbaum & Noumair, 2004; Mayer, Oosthuizen, Tonelli, & Surtee, 2018a; Mayer, Tonelli, Oosthuizen, & Surtee, 2018b; Geldenhuys, 2012).

Steyn and Cilliers (2016) provide an overview of five possible group behaviour reactions to manage anxiety in the system, such as: (1) relating to an imaginative caring parental figure, (2) pairing up of individuals and/or powerful objects to manage the pain of anxiety, (3) fight or flight against an (imaginative) enemy, (4) oneness or we-ness to create individuality, while joining in a force to experience health, and (5) me-ness, in the way of denouncing or detaching from the group affiliation to cope with emotional demands. In this study, the researchers used the CIBART model to analyse and

interpret the potential impact of system psychodynamics in EE in the 4IR South African context (Cilliers & Koortzen, 2005). The model consists of six interrelated constructs in exploring intrapersonal, interpersonal and inter-group conflicts. The constructs are conflict, identity, boundary, authorisation, role and task. These can be described as follows:

C – Conflict: Conflict refers to splits experienced within the self, between the self and others, inside groups and between groups (Cilliers & Koortzen, 2005; Koortzen & Cilliers, 2007). Conflict arises because of the unconscious anxiety inherent in the workplace and employees' exposure to the good and bad parts of the system (Steyn & Cilliers, 2016). Conflict may show intra-psychologically (inside the employee), for instance, between own dynamics and values and those required by the EE job of an employee. The conflict can conceivably additionally be relational, between the employee and the business or between the employee and direct line supervisor. Employees may likewise utilise defence mechanisms, for example, projection to guarantee that the EE work environment is protected and tolerating. Employees will endeavour to make tracks in an opposite direction from this uneasiness by utilising fight or flight as defence mechanism (Mayer et al., 2018a, 2018b).

I – Identity: Identity refers to the realisation of what the individual leader stands for and what lies within one's own boundary (Cilliers & Koortzen, 2005; Koortzen & Cilliers, 2007). Thus, Identity refers to the integration of the right to perform the primary task as officially sanctioned by the system represented by leaders from above, colleagues from the side, subordinates from below and by employees themselves from within – the system's uniqueness through its psychological characteristics (Mayer et al., 2018a, 2018b). A challenge, which employees may have in such a manner, identifies with employees' endeavours to incorporate the character elements of being an EE employee, into their current personality. This incorporates better approaches for being, having new mental models and coordinating various new capabilities, abilities and practices, which are not customarily part of their organisational roles (Mayer et al., 2018a, 2018b). The reconciliation of these and the introduction of this 'new' personality in the organisation, just as the acknowledgement of this by the organisation, are a portion of the difficulties which employees need to cope with (Steyn & Cilliers, 2016).

B – Boundaries: Boundary refers to the line and/or space between parts of the system, the individual, the interpersonal relationship as well as the group of individuals (Cilliers & Koortzen, 2005; Koortzen & Cilliers, 2007). The contentions and anxiety related to dealing with the time boundaries may identify with fitting in the extra EE errands into the functional roles of employees. With respect to the space boundary, employees should cross into the region of different departments in the organisation to direct EE evaluations and may encounter tension with regard to the manner in which they expect to be acknowledged in these boundaries and the dimension of authorisation they will get here (Mayer et al., 2018a, 2018b; Steyn & Cilliers, 2016).

A – Authority: Authority refers to the right to perform the primary task as officially sanctioned by the system represented by leaders from above, colleagues from the side, subordinates from below and by employees themselves from within (Cilliers & Koortzen, 2005; Koortzen & Cilliers, 2007; Mayer et al., 2018a, 2018b; Steyn & Cilliers, 2016). In the event that every one of the three dimensions is absent, the employee will experience issues when fulfilling an EE agent role successfully.

R – Role: Role refers to the boundary around a set of tasks, duties and responsibilities on a specific level of authority and manifests as the normative (the conscious and explicit content), the existential (the employee's introjected past experiences and personality traits such as values and preferences) and the phenomenal part (the projections that the employee receives significantly from others in the organisational system) (Cytrynbaum & Noumair, 2004; Czander, 1993; Obholzer & Roberts, 1994), for instance, EE agent versus psychologist, EE agent versus tutor and EE agent versus functional manager. The apprehensions of role perplexity, role overlap and role conflicts may possibly affect the adequacy with which employees take up their roles (Cilliers & Koortzen, 2005; Koortzen & Cilliers, 2007; Mayer et al., 2018a, 2018b; Steyn & Cilliers, 2016).

T – Task: Task is the basic building block of work. Employees may be involved in primary and secondary task functioning as well as off-task and anti-task behaviour (Steyn & Cilliers, 2016). Task boundaries are a standout amongst the most essential boundaries that provide guidance to employees and contain their anxiety. It is important to get lucidity about EE task execution. Perplexity may prompt anti-task behaviour and off-task behaviour (Cilliers & Koortzen, 2005). Off-task behaviour can, for instance, manifest when the EE agent assumes liability for the advancement and learning of employees, while anti-task behaviour can manifest if the EE agent associates with the authoritative governmental issues and relational conflict of workers (Mayer et al., 2018a, 2018b).

Research design

This study is based on a qualitative research approach inside the hermeneutic-phenomenological inquiry about the world view (Collins & Hussey, 2014) to investigate people's work lives and social universes in-depth (Hassan & Ghauri, 2014) from a social constructivist point of view (Creswell, 2013). This point of view is orientated towards lived encounters to yield rich and detailed depictions of EE (Ramgoolam, 2005) – along these lines concentrating on the *verstehen* (understanding) of the lived involvement (Dilthey, 2002). Phenomenology refers to an interpretive procedure where the researchers intervene between various implications of the significance of lived encounters (Creswell, 2013).

A hermeneutic way to deal with the various contextual analyses (Yin, 2009) enabled the researchers to investigate the information from the viewpoint of the researcher and the context created (Grix, 2010; Hoggett & Clarke, 2009). This study used twofold hermeneutics to interpret the voices of

the participants and their comprehension of EE in the 4IR changes. Twofold hermeneutics include the reflexivity of the researchers and the inclusion of the voices of the researched within their context (Hoggett & Clarke, 2009).

Research method

A qualitative study reflects that the diversity of individual viewpoints on the specified topic of EE in the 4IR will potentially reveal new or dissimilar themes (Yin, 2009; Zach, 2006).

Research setting

The study is based on South African public and private organisations (see Table 1; Department of Labour, 2002; Government Gazette, 2014; Thomas, 2003).

Entrée and establishing researcher roles

Organisations from both the public and private sectors that agreed to EE enactment were approached by the researchers and welcomed to take part in the research. Consent was obtained from the organisations to conduct the study. The researchers introduced themselves and a trusting relationship was created between the organisation and the researchers and the participants and the researchers. The researchers made themselves known to the participants, responded to all questions and explained ethical considerations of the study.

Sampling

Eleven organisations took part in this research. Employees from these organisations were acquired through purposeful sampling procedures (Welman, Kruger, & Mitchell, 2012), which depended on consideration criteria, for example, race, gender, language competency (employees were required to speak English) and general availability. Three separate organisations were arranged under the 'conflict themes' heading in Table 1, 'Human resources and private sector' (Oosthuizen et al., 2019).

The participants included employees from nine different forms of organisations, as well as 13 African male, 17 African female, five mixed race male and seven mixed race female (mixed race), three Indian male and six Indian female as well as 22 white male and six white female participants across the organisations. Altogether 23 employees worked in human

TABLE 1: Conflict themes.

Conflict themes	Categories and sub-themes
EE-related conflicts	<ul style="list-style-type: none"> • Race • Gender
Skills	<ul style="list-style-type: none"> • Lack of skills • Questioned skills because of EE • Brain drain and work effectiveness or performance
No growth opportunities	<ul style="list-style-type: none"> • Within the organisation • Within South Africa • Globally • Focus on internal conflicts instead of external vision (4IR)
Emotions	<ul style="list-style-type: none"> • Anxieties of being reduced to internal categories • Fear of missing the global advancements • Fear of losing global standards due to EE

EE, Employment Equity; 4IR, fourth industrial revolution.

resources and the private sector, 16 employees worked in the banking sector, eight in short-term insurance, six in human resources in the public sector, six in medical insurance, six in professional management, five in consulting, five in the motor industry and four in fast-moving consumer goods.

Data collection methods and recording

Data were gathered over a year, which comprised 79 face-to-face semi-structured interviews of 30–60 min each. Interviews were held in English. Employees were guaranteed privacy. Ethical considerations were followed. The semi-structured interviews began with the question: 'What is your own story as far as EE inside the setting of 4IR changes?' Further questions included: 'How do you see the contemporary and the future workplace?', 'Please explain your workplace experiences', followed by questions of further clarification (Pietersen, 2007).

Data were recorded through field notes and audio recordings as indicated by participants' inclinations. Audio recordings were transcribed verbatim and data are stored electronically for a period of 5 years in password-encrypted data files. Printed copies were stored away by the university under the examination arrangements and methodology of the university with no entrance to the undertakings by the general population.

Strategies employed to ensure data quality and integrity

The trustworthiness of the data was ensured by using credibility, transferability, dependability and confirmability as main quality criteria (Guba & Lincoln, 1982), contributing to the rigour of the study by including an audit trail and confirming the results with research informants (Guba, 1981; Guba & Lincoln, 1982; Lincoln & Guba, 1985; Morse, Barrett, Mayan, Olson, & Spiers, 2002; Pietersen, 2007). Credibility was established by providing insight into the research process and the research methodology, also providing the statements and voices of the participants and interpreting them. Transferability is based on the description of the research contexts and the central aspects of the study. Dependability is ensured by the replicability of the study, which is given based on the description of the study and its methodological process. Confirmability is addressed by reflecting the findings of this study with regard to previous studies in the discussion.

Data analysis

Data were examined as suggested in phenomenology (Creswell, 2013; Hoggett & Clarke, 2009) by applying the accompanying advances: (1) the information was exposed to an underlying, starter and all-encompassing appraisal, arranging and perusing; (2) topics were created; (3) information was coded to portray the manner in which the content was spoken to through inductive and deductive reasoning; (4) the body of the content was separated into

significant pieces that were named; and (5) closer consideration was paid to the nuances and subtleties of the importance of inalienability in the information, through the 'twofold hermeneutics' abstracting past codes and subjects by staying inside the hermeneutic qualities of depiction, decrease and deliberateness through an iterative procedure of sense production of the information (Kafle, 2013). Data were analysed and interpreted through the reflexivity of the researchers (Hoggett & Clarke, 2009).

Ethical consideration

Approval of the research ethics was obtained from the University of South Africa (UNISA). Employees provided written consent and were informed about confidentiality and the possibility of withdrawal from the research participation.

Findings

The findings provided new and original ideas on how to drive 4IR trends in South Africa by transforming aspects of the evaluated, unconscious CIBART issues, which challenge the transformation towards new 4IR visions. The data show that conflict, identity, boundaries and boundary management, defining and working with authorities, roles and tasks are important issues for the employees researched.

Conflict

The data show four major conflicting themes that include different sub-themes (Table 1). Employees experience primarily EE-related conflicts within the contemporary workplace and are worried about future transformation and innovation, with regard to not only EE, but also regarding global changes and competitiveness of organisations. Racial and gender conflicts are addressed with regard to their implication within the 4IR context. One white female person emphasised:

'It is not that I do not have the qualifications ... I could really drive the innovation ... I do not have the right skin colour to lead this organisation.' (White female, employee)

This statement shows that the participant experiences that she is limited to drive 4IR innovations with regard to her organisation based on racial implications and EE policies, which remove her from agency to drive change and transformation in the workplace actively forward.

The data show that race and gender limit the individuals and their agency and innovation and transformation in the workplace. A white male employee emphasised:

'Particularly as a white man it is difficult to find a job ... it is to make us white men [*to*] suffer for what we did in apartheid ... the white man has become the black man ... but everyone has the same memo: 'Reject the white man'. And it must be difficult not to give the job to the best candidate.' (White male, employee)

Again, like the white female employee, this male employee stressed that the EE policies limit his influence within

the organisation. The limitations are experienced with regard to race and gender categories and the participant seems to be occupied with the experience of limited influence in the workplace because of EE policies when driving the organisation into future 4IR contexts.

The conflicts show the underlying, intra-psychological issues that arise for the employees. Many conflicts reported in the interviews, beside EE-related issues, refer to skills and skill management: they do not feel prepared for global changes and transformation within their own organisation, particularly because they feel that they experience a 'brain drain' of people who could drive the 4IR forward. These discourses are mainly led by white employees and cause conflict for them. One white male employee remarked:

'EE will chase away many professionals and as a result, the whole country will suffer. South Africa will remain a developing country – not a country at the heartbeat of advancement and global trends.' (White male, employee)

Underlying the conflict experience is a strong fear, which relates to the feeling of 'being left behind' and of not making the transition into the 4IR as other countries do with regard to global trends. Several participants of the previously disadvantaged groups¹ state that their skills are questioned because of their employment through EE procedures and programmes. This situation results in feelings of inferiority and discrimination and employees are of the opinion that they are not trusted of being able to drive 4IR advancements. A mixed race employee said:

'It really hurts when one is working hard on a career and when you think hard work has paid off ... and then someone says you were appointed due to colour ...' (Mixed race male, employee)

It is further conflictual for employees to experience a lack of growth opportunities within the organisations and external visions on the 4IR and global competitiveness. One white employee emphasised:

'We talk about industrial advancement ... what will happen when all the doctors leave? Even black doctors are leaving the country!' (White male, employee)

This employee questions the idea of focusing on the 4IR when basic problems and conflicts are not resolved within their organisations and in primary care. The reference to the fulfilment of basic needs shows that these needs need to be fulfilled before addressing future 4IR issues. Finally, negative emotions such as anxieties of being reduced to internal (racial, gendered and EE-related) categories, fear of missing global advancements and trends of losing global standards – because of EE – cause employees to worry and create intra-psychological as well as inter-psychological conflicts. The employees refer to negative emotions only and do not transform these emotions into constructive emotions and resources. A black male employee emphasised:

¹African, mixed race and Indian employees.

'You know, there are many resentments and negative feelings towards colleagues perceived to be EE candidates.' (Black male, employee)

The negative emotions with regard to EE from members of all groups have a strong effect on employees who are entangled in the intra-societal discourses. These conflictual discourses seem to hold employees back and limit their creativeness and ideas for the transformation into the 4IR. Conflicts do not refer so much to common anticipated conflicts and problems expected in the 4IR organisational settings, but rather to apartheid categories and past problems.

Identity

Identity in employees is strongly determined by race, gender and the generational belonging, which relate to the individuals born during apartheid and the post-apartheid generation. Altogether 63 statements refer to the generation of the born-frees, the individuals born from the year 2000 onwards (Table 2).

Identity is strongly defined by race, gender and birth year, aiming to respond to the question of 'who am I?' within the South African workplace. The born-frees define themselves with orientation to the present and the future workplace and promote new identity concepts, which do not reverse apartheid categories, but they see themselves as the new South African employee generation which is driven by new self-definitions, quality of work performance and achievement. One mixed race employee says:

'I want to be respected for who I am and for the quality of my work. Not for the way I look.' (Mixed race male, employee)

Most of the statements towards identity mention a 'turn-away' from apartheid and a focus on the contemporary workplace which needs performance and achievement based on the education. However, employees do not make further statements with regard to their identity and the changes it could bring for them in the context of the 4IR, but they emphasise that there will be changes with regard to future workplaces. Yet, they do not connect it to themselves and/or their own identity and the possibilities it could bring for them. Identity is, on the one hand, defined by achievement, performance and success on the job and, on the other hand, by EE-related job positions. Employees feel that their identity is defined by getting a job through EE or they feel that their identity is reduced by EE policies. One white employee defines himself through self-ascribed values:

TABLE 2: Identity definition themes.

Identity definitions themes	Categories or sub-themes
Defined by external categories	<ul style="list-style-type: none"> • Race • Gender • EE classifications
Defined by generation	<ul style="list-style-type: none"> • Born in apartheid • Born after apartheid (born-free)
Work identity	<ul style="list-style-type: none"> • Defined in relation to organisational culture • Performance versus EE categories

EE, Employment Equity.

'In my culture ... we do not just sit and blame others for opportunities or the lack thereof. We go and create opportunities. This is where I inherit the ability to work hard. It is part of me.' (White male, employee)

This employee feels that he is part of creating workplaces, of making things possible. He also refers to it with regard to future workplaces and highlights that he plays an active role in managing the workplace, which can influence personal opportunities, also with regard to the 4IR. The belief in the personal agency is strongly interlinked with boundary management.

Boundary

Employees experience boundaries within their job context with regard to different themes (Table 3), such as physical features, EE-related opinions, attitudes and emotions. The physical features are bound to race, gender, disability and stereotypes.

'Disabled people feel stigmatised by the ignorance of people. They are discriminated against. We need a platform of equality for the disabled. That is where we stand.' (Black female, employee)

Within the inner discourse on boundary management, employees focus on diversity issues such as race, gender, disability and age. Thereby, the boundaries are mainly created in the mindset of apartheid categories and EE and appear to be related to stereotypes and stigmatisation. This boundary constructed shows that boundaries for the employees are again drawn very tight regarding apartheid issues, and employees do not seem to have the ability to delve into future-related work issues, such as 4IR, as they are caught up in past mindsets and categories. Employees criticise themselves and others for a lack of inclusiveness with regard to diversity criteria, while they display the exclusiveness of employment and workplace topics by cutting future topics out of the discourse. It rather seems as if the employees are still preoccupied with past employment and exclusiveness issues and that they are not yet prepared to deal with new challenges. Members of all groups highlight diversity as important, but not the possibility to see beyond the surface. One Indian female employee said:

'It is everyone's responsibility to drive and promote diversity in the company ... That is the main thing to do now ... When we get this right now, we can move forward.' (Indian female, employee)

This means that the preoccupation with apartheid-related topics and EE must be dealt with before the employees will

TABLE 3: Boundary themes.

Boundaries themes	Definitions
Physical features	<ul style="list-style-type: none"> • Internally and externally ascribed boundaries to race, gender and stereotypes
EE-related opinions	<ul style="list-style-type: none"> • Experienced exclusions because of EE
Attitude	<ul style="list-style-type: none"> • Internalised boundaries and inner attitudes • No boundary-spanning attitudes • No foresight or vision regarding the future and the outside world
Emotions	<ul style="list-style-type: none"> • Anxieties to mismatch (global) advancement (technological, economic, value-based, and so on)

EE, Employment Equity.

be able to manage their boundaries towards new topics differently. Underlying this tight boundary management with regard to the topics of the 4IR and future workplace orientation are negative emotions. Employees seem to be driven strongly by unconscious fears and anxieties of job loss or inferiority issues. These anxieties are associated with their standing in their own situation, fear of losing their jobs or failure that they do not strive to match global topics or even advancements. Based on these fears, a self-centeredness crops up which limits the thoughts and ideas within the context which is perceived as 'given'. Instead of seeing the opportunities in the technological, economic or value-based advancement outside their immediate work and living context, employees limit themselves to negative self-perceptions that exclude advancements that are connected to the 4IR. One female employee remarked:

'Women feel inadequate to do the job. We are too anxious to just do it. They think we do not know anything about cars ... about technology, innovation ... so we are limited. I would love companies to hire more females as we are dominated by males and cannot move forward as we would like to. We are sidelined.' (Mixed race female, employee)

Female employees feel unacknowledged and not entitled to drive change in organisations towards the 4IR – and they connect technology advancements with the 4IR. Because they feel dominated by male employees, they think that they cannot move forward in the 4IR and do not take on the agency to manage or even talk about 4IR topics. They do not feel that this is their territory, particularly because of not having authority and agency in organisations.

Authority

Authority is connected to the themes in this study: compliance, race and authority and system authority versus individual authority (Table 4). Compliance is discussed with regard to legislation and impact, internal governance compliance and compliance to quota. Employees feel that authority is established through the legislation and its interpretation, the impact of the legislation and the quota in terms of EE. It is presented through the internal governance of compliance or non-compliance and connects strongly to categories of apartheid. Again, authority issues are not future-bound, but rather past-related. A black female employee stated:

'An individual should be given a fair chance to compete for certain positions ... EE is not always practised equally within the organisations. But we have to comply with the rules, taking the Constitution into account. And there should be penalties for non-compliance when EE is not properly enforced.' (Black female, employee)

TABLE 4: Authority themes.

Authority themes	Categories
Compliance	<ul style="list-style-type: none"> • Legislation, impact and quota • Internal governance compliance
Race and authority	<ul style="list-style-type: none"> • Absence of black people in senior management
System authority versus individual authority	<ul style="list-style-type: none"> • System authority • Individual authority
Emotions	<ul style="list-style-type: none"> • Anxiety of uncertainty • Fear for loss of power

Again, competition relates to apartheid-related categories and EE and authority is ascribed to rules and the Constitution that were created as a reaction to apartheid. Authority further refers to race and the absence of black people in senior management within organisations. A black male employee said:

'How do you expect us to be ready for management positions, if they do not train you?... We are represented at management level, but this is where it stops ... they speak about training empowerment and succession planning, but nothing is happening.' (Black male, employee)

Authority is not bound to future orientation, insight and advancement and innovation, but rather to questions relating to race. This employee, as the voice of black employees, feels that authority is still in the hands of members of other groups and access to reach positions of authority is denied or at least limited in terms of experience and training for higher positions of authority. One male Indian employee pointed out:

'Mentoring programmes should be installed to move people beyond the ordinary so that they are supported by the leaders to focus on excelling in their positions and move forward in the context of global advancements. Take agency and feel empowered to get into a new era of workplaces.' (Indian male, employee)

Employees express a strong wish to move out of the previously defined categories and to strive for new visions and global connection. It appears as if they would like to step out of the previously defined categories, but because of strong boundary management, they do not seem to be able to take on the authority to do so and move forward into the 4IR. The findings show that there is a struggle about system authority and individual authority regarding decision-making, value implementation and employment, as well as EE. One individual remarked:

'Managers should be the drivers of new processes and they are the decision makers for the company to move forward. Human Resources should be responsible for EE processes ... They should further help to move companies and employees towards new topics and issues.' (White male, employee)

Employees wish for the authority anchored in the system to move forward into a new era of workplace and organisational development. It seems as if they feel that there is no possibility to move forward themselves, but that they should rather seek support in moving forward.

Role

In terms of their roles within the organisations, employees feel that it is defined by role determinations (Theme 1) and the sub-categories of race and gender, performance and mentorship (Table 5). One white female employee said:

'I believe we need to change attitudes first. Then we can mentor and assure quality in our roles as employees and managers.' (White female, employee)

Roles are strongly defined and limited by inner attitudes. They are impacted through role conflicts, which are anchored

TABLE 5: Role themes.

Role themes	Categories
Role determinations	<ul style="list-style-type: none"> Race and gender Performance Mentorship
Role conflicts	<ul style="list-style-type: none"> EE-related role conflicts Role conflicts regarding advancement of work No roles to manage 4IR – future-related work development

EE, Employment Equity; 4IR, fourth industrial revolution.

TABLE 6: Task themes.

Task themes	Categories
Task management	<ul style="list-style-type: none"> Questioning of task-related promotion Inability to manage tasks Individual versus EE-related task management Missing of future-orientated task management (4IR)

EE, Employment Equity; 4IR, fourth industrial revolution.

in the realm of EE-related role conflicts and the idea that work is not advanced to the contentment of employees because of their involvement in EE discourses and political discussions at work. One employee emphasised:

'No rules and acts can change peoples' perceptions. EE is a forced approach and what we actually need to fulfil our roles is that we implement a paradigm shift, that people are not stereotyped. EE gives the country direction. But we also have to look beyond it. We must drive for an economic future.' (Black female, employee)

Again, the statement shows that there is a strong wish to move beyond (post-)apartheid discourses and become part of the future-orientated, global community. They know that there are topics which must be addressed – now and in future but do not have a clear idea about roles and how to manage new and innovate influences and identities and 4IR-related topics. A white male employee pointed out:

'We need to work twice as hard. Often, talented EE staff are headhunted by other companies or jump between departments. We need to use all of our talents to compete globally.' (White male, employee)

White employees feel that they have to organise the talented staff to work towards a global future and to compete globally. This takes effort and talent. White employees feel that employees across cultures need to work together for the future goals of the organisation and workplaces and must use EE practices to work for the good of the organisation.

Task

Tasks and the management of tasks play a role as employees question task-related promotions within the organisation and blame EE for promoting selected employees (Table 6). An employee remarked:

'Company standards are jeopardised and people don't do their jobs. Policies in organisations must be flexible enough to fit practice. What do we do with people who do not do their tasks and move forward?' (White male, employee)

This employee, like others, complains about employees being unable to manage tasks while defining themselves with regard to the discourses on individual and EE-related task management to move towards future organisational topics.

Employees hardly address task management, which supports them to develop new, creative and original ideas. They are anchored within their present day-to-day task management, but they do not allocate time to task management that could support them to manage future-orientated tasks needed in the 4IR. One mixed race female employee said:

'We want to strive and move on, but we are only given very easy tasks which do not help us to strive for the best. When we get positions, we do not have influence. Like this, we will not make the ends meet out there in the globalised world.' (Mixed race female, employee)

This employee fears that South African organisations will not take the step into the 4IR when there is still too much inequality amongst employees. She feels that mixed race female employees are not even given the chance to strive for the best and for the future because mixed race females are not trusted with tasks related to future developments.

Discussion

The study aimed at focusing on employees' perceptions of workplaces in contemporary South Africa and the issues underneath the surface of daily systems psychodynamic discourses (Steyn & Cilliers, 2016). According to the employees, systemic structures (Steyn & Cilliers, 2016) are strongly defined by EE models. The core themes, which cause *conflict* within the organisation, relate to race and gender in most of the work-related experiences. Conflict is defined by experiences of splitting (Blackman, 2004), which is primarily caused and enforced by EE policies and the splitting of employees of a certain race, gender and (ascribed) skills. Furthermore, there is a split within the group of employees with ascribed skills: the ones staying in South African organisations and the ones leaving the country. The findings also show a split in the perceptions of employees: the ones who do not have enough growth opportunities within South Africa and the idea that growth is possible elsewhere. Additionally, a split occurs with regard to the idea of the 4IR. Employees express the wish to occupy themselves with future work-related issues of the 4IR and to create new work visions and opportunities, but at the same time, they are stuck in their internal (post-)apartheid discourses. Further, as noted in Blackman (2004), employees idealise global work contexts where work conditions are thought to be better than in their own contexts. Employees focus strongly on their internal conflicts and challenges, thereby losing sight of external workplace developments and the 4IR vision and opportunities.

As described by Armstrong (2005) and Dashtipour and Vidaillet (2017), anxiety and fear play a crucial role in the described systems psychodynamics. Employees are anxious of being stigmatised because of racialisation, gendered categories and their fear to lose the connection to global advancements and the 4IR. This fear might even be the core of the above-mentioned splitting and idealisation, which are strong defence mechanisms. Anxiety is not dealt with on an organisational level, thereby creating uneasiness, idealisations

and split employee connections based on racial and gendered categories, as previously described by Mayer et al. (2018a), Mayer et al. (2018b) and Geldenhuys (2012).

This study shows that, as in Steyn and Cilliers (2016), employees pair within their racial groups to manage the impulse to fight or flee with regard to an (imaginative) enemy. Several employees, out of fear, attack the EE system, while others imagine leaving the country (as described in Bion, 1961). Findings also show that some employees (EE employees and born-frees) link up with influential sub-groups and people in power. The employees who have gained their position through EE are primarily at ease with the system, while the employees who see themselves as 'born-free' take the sides of the previously advantaged employees: they do not need EE to be equal but prefer to compete based on achievement and performance. They line up with the powerful previously advantaged employees to overcome fear, disadvantages and racial splits (Cilliers & Koortzen, 2005; Mayer et al., 2018a). This might be the first step taken by the born-frees to free themselves from previous racial categories and post-apartheid concepts to compete on a global level and in future to open up to transformations towards the 4IR. However, at present, this does not seem to be the time yet.

In terms of *identity*, several of the categories are defined by previously defined categories of race, gender and EE classifications. The 'born-frees' create a split between the employees born during apartheid (in captivity) and themselves. Thereby, they idealise the new freedom and define themselves as 'free' and advantaged. This seems to be a good base for turning towards future work-related issues, such as the 4IR. Both generations seem to use the concept of 'work identity' to define themselves in relation to their organisation, their organisational culture and achievement. By creating a work identity based on organisational culture and performance, employees turn away from the past and the conflictual identities of EE. This might indicate a split from the past and a step into the fear-free future anchored in achievement and performance. The organisation becomes a parental figure to manage the fear (as in Steyn & Cilliers, 2016) and to cope with the challenges of the 4IR (Cilliers & Koortzen, 2005; Mayer et al., 2018b). This newly defined identity could become a foundation for creating self-assured and self-reliable employees. However, findings show clearly that employees are still in search of their identity (as in Mayer, 2005, 2008) and struggle to re-imagine their future in the 4IR.

Boundaries are primarily defined by physical features and limited by racial and gendered categories and the stereotypes associated with racial ascriptions. Employees from all backgrounds experience exclusion because of EE: either they feel excluded as previously advantaged employees who fear for their jobs or they feel excluded by holding an 'EE quota position'. They have internalised the splitting based on ascribed physical features and split themselves from their future of the 4IR by mainly referring to past categories. The

challenging, global and unknown future beyond the boundary might evoke too much anxiety because of high levels of insecurities (Cilliers & Koortzen, 2005; Mayer et al., 2018a, 2018b). Employees do not want to mismatch global advantages because of the inability to compete and internalised boundaries, which keep employees from seeing themselves in a new, free and unlimited world of work of the 4IR.

With regard to *authority*, employees highlight that authority might be undermined by compliance to the system or be strengthened by legislation, depending on how compliant the authority within the system is. It is noticeable through the absence of black people in senior management positions, emphasising that authority is (still) with white employees mainly. Findings show a discourse about what employees' preference is (system or individual authority) relating to EE processes. It appears as if the EE system is the dominant issue and has become the authority within the organisation. The fight for authority is still raging and employees find themselves in a struggle around issues of authority (Cilliers & Koortzen, 2005), connected to anxiety, uncertainty and fear of loss of power. They are not willing to give the authority to new issues, such as the 4IR, but rather keep the authority by interlinking it only with past categories.

Employees feel that their *roles* are defined by race, gender, performance and mentorship. Further, they are of the opinion that to develop abilities to fill their roles they need mentorship to overcome role conflicts (Mayer et al., 2018a). These are connected to EE-defined roles on the one hand, and role conflicts on the other hand, which arise from wanting to advance organisations into 4IR topics but being held back by EE structures. Employees do not like the idea of holding roles to manage the 4IR or to dive into future-related work development. The roles and role conflicts employees struggle with are anchored in South Africa's past rather than in the organisation's future.

Finally, task-related promotions are questioned and employees feel that other employees are unable to do their tasks; there is a discourse about individual and EE-related task management and how employees manage their tasks is again related to racial belongingness. Finally, there are a number of employees referring to managing tasks with regard to the organisational future orientation and 4IR issues.

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The 4IR and future workplace issues do not play a major and explicit role in the data. Findings show that employees are mainly concerned with EE issues that keep them from striving to conquer new, global 4IR challenges. They do not occupy themselves yet with the 4IR and what it requires from them in terms of mindset, skills and expertise. Employees are mainly reflecting on apartheid and post-apartheid categories and issues with regard to CIBART categories. They comment vaguely on the future of workplaces and rather struggle with

defining themselves in connection with the country's past. Underlying the conflictual discourses, employees are aware that – to stay within the contemporary global 4IR trend – they need to change the inner South African discourses towards a more open, advanced and visionary discourse. Emotionally, employees experience strong negative emotions, such as anxiety and fear, which relate to stereotyping, stigmatisation and discrimination anchored in apartheid categories, and which prevent them from having a future-orientated vision of a 4IR-related South Africa.

Findings do not show that employees strive for the 4IR consciously, as stated in Jansen van Rensburg et al. (2019). Within the research context, the 4IR digitalisation, artificial intelligence and computerisation do not seem to be urgent and emotionally touching workplace topics (Calitz et al., 2017). Discourses of EE are prevalent (Moraka & Jansen van Rensburg, 2015) and acclimatisation to 4IR issues seems to be taken into account gradually (Herman, 2017). Employees in South Africa do not consciously realise their affectedness and involvement within the 4IR but rather seem to view it as an external process. This might be because of the fact that anxiety levels within South African organisations are high already, and employees rather opt to cut out any further external challenges demanding attention or bringing insecurities. Employment equity policies, however, need to take the advancements of the 4IR into account (Leonard & Grobler, 2006; Oosthuizen et al., 2019) and integrate EE and 4IR processes. The idea to create open and social discourses on the integration of the 4IR (Stubblings, 2018) has not yet been integrated into EE reflections and the discourses still seem to refer rather to post-apartheid issues and categories than to future-related 4IR advancements.

Conclusions and recommendations

This study provides insights for industrial psychologists and management practitioners to address urgent issues pertaining to transforming South African workplaces with regard to EE and 4IR contexts. Discourses in South African organisations are driven by post-apartheid categories relating to race, gender and EE practices, which re-emphasise the historical split within the South African society.

Findings show that only when employees overcome previously and historically defined categories and fears they are able to focus on new and challenging topics. They only produce visions in 4IR-related issues when they free themselves from systems psychodynamics anchored in apartheid structures, preliminary categories and limitations to consciously turn to future-orientated thinking towards the global 4IR discourse.

This study is limited to the subjective experiences and descriptions of employees researched in 11 organisations, which may not be representative because the number of participants is small and based on convenience sampling. The study further focused on issues of EE and the 4IR and most responses referred to EE issues, limiting the responses to 4IR issues. However, this is a finding in itself.

Future research needs to take different industries into account and study impact, perceptions and experiences of the 4IR in workplaces in greater detail. Visions of the 4IR in South Africa and other countries must be researched to establish employees' experiences. Future research must tackle the question of how EE and 4IR changes in organisations can join forces in order to advance employees, organisations and society. Research-based strategies need to be developed to address the transformation of negative emotions in the workplace.

On a practical level, the 4IR must be addressed openly. Organisations need to plan for multiple and emerging visions of the 4IR, using a scenario approach. They should understand clearly how the 4IR creates different workforce challenges and what EE implications are, and train employees to deal with both issues competently. Anxiety levels need to be reduced through open discussions and by valuing the pros and cons of EE and the 4IR. Training and information campaigns as well as positive and negative examples of EE and the 4IR must be explored and discussed. Experts need to be incorporated into organisational and governmental processes to smooth the integration of EE and the 4IR for the advancement of all future employees, organisations and society as a whole.

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Authors' contributions

R.M.O. conceptualised the study and wrote the first draft. C-H.M. did the data analysis. All authors reviewed and approved the final manuscript.

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References

- Armstrong, D. (2005). *Organization in the mind: Psychoanalysis, group relations and organizational consultancy*. London, England: Karnac.
- Basson, Y. (2017). Selected developments in South African labour legislation related to persons with disabilities. *PER/PELJ*, 20, 2–21. <https://doi.org/10.17159/1727-3781/2017/v20i0a1216>

- Bion, W.R. (1961). *Experiences in groups*. London: Routledge.
- Blackman, J.S. (2004). *101 defenses: How the mind shields itself*. New York: Brunner-Routledge.
- Breetzke, G.D., & Hedding, D.W. (2016). The changing racial profile of academic staff at South African Higher Education Institutions (HEIs), 2005–2013. *Africa Education Review*, 13(2), 147–164. <https://doi.org/10.1080/18146627.2016.1224114>
- Calitz, A.P., Poisat, P., & Cullen, M. (2017). The future African workplace: The use of collaborative robots in manufacturing. *SA Journal of Human Resource Management/SA Tydskrif vir Menslikehulpbronbestuur*, 15(0), a901. <https://doi.org/10.4102/sajhrm.v15i0.901>
- Cilliers, F., & Koortzen, P. (2005). Working with conflict in teams – The CIBART model. *HR Future*, 52–53.
- Collins, J., & Hussey, R. (2014). *Business research: A practical guide for undergraduate and postgraduate students*. New York: Palgrave Macmillan Higher Education. ISBN: 978-0-230-30183-2.
- Creswell, J.W. (2013). *Qualitative inquiry & research: Choosing among five approaches* (3rd edn.). London: Sage.
- Cytrynbaum, S., & Noumair, A. (2004). Group dynamics, organizational irrationality, and social complexity: Group relations reader 3. Jupiter, FL: A. K. Rice Institute.
- Czander, W.M. (1993). *The psychodynamics of work and organizations*. New York: Guilford.
- Dashtipour, P., & Vidaillet, B. (2017). Work as affective experience: The contribution of Christophe Dejours' "psychodynamics of work." *Organization*, 24(1), 18–35. <https://doi.org/10.1177/1350508416668191>
- Department of Labour. (2002). *Employment equity register*. Retrieved from <http://www.labourtesting.labour.gov.za/DOL/documents/useful-documents/employment-equity/employment-equity-registry-2002>.
- Dilthey, W. (2002). *The formation of the historical world in the human sciences*. In R.A. Makkkreel & F. Rodi (Eds.), *Wilhelm Dilthey selected works* (vol. 3). Princeton, NJ: Princeton University Press.
- Dorst, W.C., Hahn, T., Knafla, F., Loewen, U., & Rosen, R. (2015). *Umsetzungsstrategie Industrie 4.0 – Ergebnisbericht der Plattform Industrie 4.0*. Bitkom Research GmbH.
- Geissbauer, R., Vedsø, J., & Schrauf, S. (2016). *A strategist's guide to Industry 4.0*. Retrieved from <https://www.strategy-business.com/article/A-Strategists-Guide-to-Industry-4.0?gko=a2260>.
- Geldenhuys, D.J. (2012). Group-as-a-whole as a context for studying individual behaviour: A group diagnostic intervention. *SA Journal of Industrial Psychology*, 38(2), 1–12. <https://doi.org/10.4102/sajip.v38i2.1011>
- Government Gazette. (2014). *Employment Equity Act (55/1998): As amended: Draft employment equity regulations*, 2014. Regulation Gazette, 10127(584), Pretoria, 28 February 2014, No. 37338 Labour Department of Government Notice R. 124.
- Grix, J. (2010). *The foundations of research* (2nd edn.). Chippenham: Palgrave and Macmillan. ISBN 978-0-230-24897-7.
- Guba, E.G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiry. *Educational Communication and Technology Journal*, 29(2), 75–91.
- Guba, E.G., & Lincoln, Y.S. (1982). Epistemological and methodological bases of naturalistic inquiry. *Educational Communication and Technology Journal*, 30(4), 233–252.
- Hassan, I., & Ghauri, P.N. (2014). *Evaluating companies for mergers and acquisitions*. Book series: *International Business and Management* (Vol. 40, pp. 75–89). Bingley, England: Emerald.
- Hecklaua, F., Galeitzke, M., Flachs, S., & Kohl, H. (2016). Holistic approach for human resource management in Industry 4.0. *Procedia CIRP*, 54, 1–6. <https://doi.org/10.1016/j.procir.2016.05.102>
- Herman, H.D. (2017). *Affirmative action in education and black economic empowerment in the workplace in South Africa since 1994: Policies, strengths and limitations*. Bulgarian Comparative Education Society, Retrieved from <https://eric.ed.gov/?id=ED574231>
- Hoggett, P., & Clarke, S. (2009). *Researching below the surface. Psycho-social research methods in practice*. London: Karnac.
- Ind4.0. (2016). *Industry 4.0*. Retrieved from https://en.wikipedia.org/wiki/Industry_4.0.
- Jansen van Rensburg, N., Telukdarie, A., & Dhamija, P. (2019). *Society 4.0 applied in Africa: Advancing the social impact of technology*. Technology in Society. <https://doi.org/10.1016/j.techsoc.2019.04.001>
- Kafle, N. (2013). Hermeneutic phenomenological research method simplified. *Bodhi: An Interdisciplinary Journal*, 5, 181–200.
- Kagermann, H., Wahlster, W., Helbig, J., Hellinger, A., Stumpf, V., & Kobsda, C. (2013). *Umsetzungsempfehlungen für das Zukunftsprojekt Industrie 4.0 -Abschlussbericht des Arbeitskreises*. Berlin: Industrie 4.0.
- Koortzen, P., & Cilliers, F. (2007). Symbolism associated with leadership: A systems-psychodynamic perspective. *Myth & Symbolism*, 4, 28–45. <https://doi.org/10.1080/10223820701673981>
- Leonard, A., & Grobler, A.F. (2006). Exploring challenges to transformational leadership communication about employment equity: Managing organizational change in South Africa. *Journal of Communication Management*, 10(4), 390–406. <https://doi.org/10.1108/13632540610714827>
- Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Louw, A.M. (2015). I am not a number! I am a free man! The Employment Equity Act, 1998 (and other myths about the pursuit of "equality," "equity" and "dignity" in post-apartheid South Africa) Part 1. *P.E.R.*, 18(3), 668–735. <https://doi.org/10.4314/pelj.v18i3.05>
- Masombuka, S. (2016, March 22). Varsitys down on women. *Times Lives*.
- Mayer, C.-H. (2005). *Artificial walls. South African Narratives on Conflict, Difference and Identity. An Exploratory Study in Post-Apartheid South Africa*. Stuttgart: Ibidem Verlag.
- Mayer, C.-H. (2008). *Managing conflict across cultures, values and identities. A case study in the South African automotive industry*. Marburg: Tectum Verlag.
- Mayer, C.-H., & Barnard, A. (2015). *Balancing the scales of gender and culture in contemporary South Africa*. In S. Safdar & N. Kosakowska-Berezecka (Eds.), *The psychology of gender and culture* (pp. 327–352). New York: Springer.
- Mayer, C.-H., Oosthuizen, R.M., Tonelli, L., & Surtee, S. (2018a). Women leaders as containers: Systems psychodynamic insights into their unconscious roles. *Géneros. Multidisciplinary Journal of Gender Studies*, 7(2), 1606–1633. <https://doi.org/10.17583/generos.2018.3217>
- Mayer, C.-H., Tonelli, L., Oosthuizen, R.M., & Surtee, S. (2018b). "You have to keep your head on your shoulders": A systems psychodynamic perspective on women leaders. *SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde*, 44(0), a1424. <https://doi.org/10.4102/sajip.v44i0.1424>
- Moraka, N.V., & Jansen van Rensburg, M. (2015). Transformation in the South African mining industry – Looking beyond the employment equity scorecard. *The Journal of the Southern African Institute of Mining and Metallurgy*, 115, 669–678.
- Morse, J.M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative methods*, 1(2). Retrieved from <https://doi.org/10.1177/160940690200100202>
- Obholzer, A., & Roberts, V.Z. (1994). *The unconscious at work*. London, England: Routledge.
- Oosthuizen, R.M., Tonelli, L., & Mayer, C.-H. (2019). Subjective experiences of employment equity in South African organisations. *SA Journal of Human Resource Management/SA Tydskrif vir Menslikehulpbronbestuur*, 17(0), a1074. <https://doi.org/10.4102/sajhrm.v17i0.1074>
- Pietersen, C. (2007). Interpersonal bullying behaviours in the workplace. *South African Journal of Industrial Psychology*, 33(1), 59–66. <https://doi.org/10.4102/sajip.v33i1.256>
- Porter, M.E., & Heppelmann, J.E. (2015). How smart, connected products are transforming companies. *Harvard Business Review*, 93(10), 96–114.
- Ramgoolam, S. (2005). *Experiences of employment equity in the coal mining industry*. Unpublished master's dissertation. University of South Africa, Pretoria.
- Spath, D., Ganschar, O., Gerlach, S., Hämmeler, M., Krause, T., & Schlund, S. (2013). *Produktionsarbeit der Zukunft - Industrie 4.0*. Stuttgart: Fraunhofer Verlag.
- Steyn, M., & Cilliers, F. (2016). The systems psychodynamic experiences of organisational transformation amongst support staff. *South African Journal of Industrial Psychology*, 42(1), 1–10. <https://doi.org/10.4102/sajip.v42i1.1367>
- Stubnings, C. (2018). *Workforce of the future: The competing forces shaping 2030*. PriceWaterhouse Coopers report. Retrieved from <http://www.pwc.com/people>.
- Surtee, S., & Hall, M. (2009). *Transformation: African people in the Western Cape*. Commissioned by the Development Policy Research Unit. Cape Town: University of Cape Town.
- Thomas, A. (2003). Employment equity practices at selected companies in South Africa. *South African Journal of Labour Relations*, 27(3 & 4), 6–40.
- Welman, C., Kruger, F., & Mitchell, B. (2012). *Research methodology*. OUP Southern Africa. ISBN 0195789016, 9780195789010.
- Yin, R.K. (2009). *Case study research design and methods* (4th edn.). Thousand Oaks, CA: Sage.
- Zach, L. (2006). Using a multiple-case studies design to investigate the information-seeking behavior of arts administrators. *Library Trends*, 55(1), 4–21. <https://doi.org/10.1353/lib.2006.0055>
- Zulu, P.S., & Parumasur, S.B. (2009). Employee perceptions of the management of cultural diversity and workplace transformation. *South African Journal of Industrial Psychology*, 35(1), Art. #426, 9 pages. <https://doi.org/10.4102/sajip.v35i1.426>