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# Pseudo-scientific intellectual theories of the African child during the 20<sup>th</sup> century

### **Abstract**

With the ascent of the National Party to power in South Africa in 1948, education reflected apartheid thinking and practices and implemented the ideology of separate development in educational institutions. Pronouncements of the African child's inferiority were reflected in government policy and legislation. The origins of this thinking and practice however can be traced to prevalent and pervasive existing racist pseudo-scientific theories where the African child was categorised and seen as intellectually inferior. Pseudo-scientific theories on the human intellect had become part of the thinking and practice of racial superiority thinking and practices propagated especially during the first part of the 20th century. These assertions rationalised social, political and ideological arrangements of segregation at the time and formed part of the contextual mind-set in South Africa. Yet even today where a democratic and inclusive society, in which the development and recognition of the whole child is advocated, racist thinking and practices still emerge, especially in education. The aim of this paper is to examine some of these pseudo-scientific theories on the intellect of the African child from a historical-educational perspective, their reflection in educational policy documents and practices and diverse perceptions thereof. Some thoughts on the way forward for education practice, based on this discussion are also presented.

**Keywords:** Intellectual theories, Mental testing, Pseudo-science, Racism, African child

## 1. Introduction

The 1994 transition to democracy for South Africa was most welcome, but in no way easy and not without its own set of challenges (Christie, 2008:2-3). Government responded to these challenges in several ways, notably that of inclusive education which included disadvantaged learners, most notably the African child, who, during apartheid, received a racially-infused and inferior type of education which neglected their needs. Lesufi (2017:21) highlights the importance of an inclusive education system:

After all, education is a catalyst for change in any society and a non-racial society cannot be realised without an integrated classroom...Inclusive education is one of the most effective ways in which we can promote a unified, incorporated, consolidated and tolerant society.

Several education policy documents emerged post the democratic dispensation, calling for inclusion. With the introduction in 2001 of *White Paper 6: Special Needs Education, Building an Inclusive Education and Training System*, equality, social justice and inclusivity, amongst others, were advocated to accommodate the holistic needs of all South African children (DoE, 2001). To address learners' educational needs, it is advocated, they have to be assessed fairly, systemically and holistically (DoE, 2001:7), a situation certainly not experienced previously (Foxcroft & Roodt, 2009:21) where mental testing, for example, as a form of educational assessment, was used as an exclusionary measure to justify a separate and different form of education, especially for the African child. Yet even today, "[t]he value of psychological testing remains a contested one in South Africa" (Laher & Cockcroft, 2013:4) with arguments put forward that it is not valid and reliable and still maintains an exclusionary position albeit couched in notions of cultural fairness.

With the accession to power of the National Party in 1948 and their propagation of the policy of apartheid, the very nature of education reflected the idea of separation, both ideologically and institutionally. With this separation came assertions of the inferiority of the African child which were reflected in government documents on education, the most notable was the Eiselen Report of 1951, which later formed the foundation of 'Bantu Education' (Christie, 2008:62-63). These notions of the inferiority of the African child however, were evident even prior to apartheid education and were infused into South African society's thinking and behaviour through several prevalent theories on race prior to and even during the 20th century and continuing into the next century. According to Soudien (2007:115):

Race, predictably, remains the dominant factor in South African social policy and analysis. Its centrality arises out of the country's more than 350-year experience of contact between a white settler and a black indigenous population and an accompanying conflict in which racism played an important part. In the course of the unfolding history of these relationships, a particular language of racial description developed which, in the last hundred years, has come to settle around the identification of groups described as African, coloured, white and Indian.

Racism therefore did not end with the democratic dispensation and, in some form, is still infused in society, overtly or covertly. According to Nel (2014:248): "Our country is still in the grip of bias, stereotyping, and discrimination against people who look, behave, believe, feel and think differently from others". For three-and-a-half centuries South African society has reflected, in varied degrees and forms, racial thinking and practices. As such pseudo-scientific theories of the inferior intellect of the African child were prevalent, especially during the first half of the 20th century and were designed to justify why the African child was seen as inferior and should not receive an education similar to that of European children (Lewis, 1999). These pseudo-scientific theories represent one interpretation of racism (Manne, 2002:x) and will be used in this paper as a means of elucidating how African children were seen as inferior and thereby received a different education to Europeans.

The aim of this paper is therefore to examine some prevalent pseudo-scientific theories on the intellect of the African child from a historical-educational perspective especially evident in the first half of the 20<sup>th</sup> century; their reflection in society and in educational policy documents and practices; and perceptions thereof. To Le Roux (2011:17–35), this method of enquiry focuses on the historical and the educational and "[b]ecause the past no longer exists, it needs to be reconstituted from studying relics, documents and traces left by past societies" (Le Roux, 2011:17). This process will be done by a scrutiny of primary and secondary

document sources, considering time and space (Le Roux, 2011:17–35) taking the present into consideration and going back to the past with an eye on the future (Lewis & Seroto, 2011). A thematic approach (Potgieter, 1978:3) will be taken where two main strands of intellectual pseudo-scientific racial theorising on the intellect of the African child – qualitative and quantitative – will be discussed in depth. This gives rise to information not always being presented chronologically.

Firstly, a short synopsis is given of the evolution of racial theories prior to the 20<sup>th</sup> century, their penetration of South African society's thinking and behaviour and their infusion in educational policies, thought and practice. The second part of this paper will look at the development of pseudo-scientific intellectual theories especially during the first half of the 20<sup>th</sup> century and their impact on educational thinking and practice. The paper will conclude by looking at the way forward, given this discussion of approaches to intellectual assessment, especially pertaining to its place within education.

# 2. Pseudo-scientific theories on intellect during the 20th century

To grasp 20th century pseudo-scientific theories on the intellect of the African child it is essential to view the genesis thereof. Concurrent with the practice of slavery and European colonialisation was early scientific thought about human variations or types (Milner 1975:14) which was established particularly during the modern or Enlightenment period, a period characterised by the endeavour to explain phenomena (e.g., colonised Africans) in rational terms. "The European classes involved in this process (re)constructed representations of these (colonised-A.L.) populations, both to legitimise their actions and in response to their experience of those populations" (Miles, 1989:25) for the legitimisation of slavery, economic and political exploitation and an explanation of racial differences. Rationalism "demanded new universal definitions of man's place in nature as well as his position in God's universe" (Dubow, 1995:25), which were often in direct conflict with widespread theological thought of monogenesis (a common descent for all humankind).

To many Europeans at the time, the monogenistic approach was an inflexible interpretation of the universe (Davies, 1988:11) and was challenged by the development of natural history (Miles, 1989:32; Dubow, 1995:25), especially in the light of the justification of colonial economic and political control. Natural historians started organising phenomena to include not only plants and animals, but also humans (Banton, 1987[a]:45). The notion of difference in race was starting to change, now denoting human biological type (Miles, 1989:32; *cf.* Banton, 1987[a]:45; Banton, 1987[b]:168) as opposed to singular lineage. Science was not only required to establish the number and characteristics of each so-called race, but also the hierarchical relationship and difference between them, including their mental abilities, with Europeans being placed at the top of the ladder, a position which justified colonisation (Barzun, 1965:45; Poliakov, 1974:45,161; Miles, 1989:32).

During the second half of the nineteenth century, the concept of race as type was strengthened by the institutionalisation of physical anthropology. To Ashley (1982:52) the 1850's and 1860's "produced a number of writings on racial differences, and there was renewed interest in brain sizes, facial angles and brain convolutions" (cf. Gibbes, 1851:597; Barzun, 1965:51,68; Poliakov, 1974:206; Banton, 1987[b]:54,74; Dubow, 1995:28–30) to demonstrate the superiority of Europeans. Further research by the anthropologist, Franz Boas, in the early 20th century aided the collapse of the "scientific appeal" of craniometric arguments and of racial

determinism (Dubow, 1995:30). Importance was then placed on intelligence assessment, since this offered "a more 'direct' path to the same invalid goal of ranking groups by mental worth" (Gould in Dubow, 1995:31), taking place especially in the 20<sup>th</sup> century (Foxcroft, Roodt & Abrahams, 2009:12).

The nineteenth century did not only represent the pinnacle theories of racism, but also of imperialism and nationalism (Milner, 1975:15–16). Nationalistic movements and groupings found the concept of race an opportune means in establishing national unity by appealing to nationalistic movements and groupings' sense of patriotism and perceived racial superiority (Barzun, 1965:133-138). In South Africa, these racial theories were to manifest and sustain themselves within ideological thought and behaviour in a range of ways continuing through to the 20<sup>th</sup> century and well into the latter part of the 20<sup>th</sup> century, especially in the National Party's thinking about the African child's perceived inferior intelligence.

# 3. 20th century discourse

The Union of South Africa was formed in 1910 (SA[U], 1911) and parliament became an all-white establishment (Shepherd, 1971:81–82; Liebenberg, 1975[a]:383) giving expression to the idea of segregation, and highlighting the political and economic supremacy of whites in South Africa, being bolstered by the racial theorising evident and prevalent during the previous century (Crijns, 1959:54). Western pseudo-scientific theories on the intellect of African children were apparent within the widespread racial discourse, permeating education policy lexicon, thinking and practice. Qualitative and quantitative attempts using Western knowledge to conceptualise the intellect of the African child seemingly contributed to this discourse and created a narrative of intellectual inferiority. To Ramoupi (2010:4): "Since at least the formation of the Union of South Africa in 1910, South African society has been – and continues to be – dominated by Western culture."

Theories postulated during the early twentieth century attempting to understand and conceptualise the mind of the African child involved investigating the physiological structure and intellectual capacity of the brain in order to ascertain if there was a difference between African people and white people. Although the examination of physiological differences in the brain structures of Africans and whites was a popular way in showing racial superiority even up until the 1950s, it was seen as an "elusive" means of comparison. An alternate means was "sought to evaluate *qualitative* differences in the cognitive and perceptual processes of Africans and whites" (Dubow 1995:202-203). Here the stimulus of the Sorbonne anthropologist and philosopher, Lucien Lévy-Bruhl, permeated South African discourse of the day. Lévy-Bruhl's theories underlined qualitative information in order to arrive at conclusions on the intelligence of Africans, as opposed to the quantitative "hard numbers" of intelligence testing. Lévy-Bruhl maintained that the difference in culture between Europeans *vis-à-vis* as opposed to African people, was that of being rational, and causal *vis-à-vis* unscientific, mystical, emotional and prelogical.

These theories were to influence those who were involved in the education of the African child, such as the writings of the Swiss missionary anthropologist, the Reverend Henry Junod, who in an article written in 1920 entitled "The magic conception of nature amongst the Bantu" notes that "[w]e Europeans of the twentieth century possess what I may call the scientific spirit, whilst Bantus are still plunged in the magic conception of Nature" (Junod, 1920:79). He acknowledged from the beginning that these perceptions of his were "simply consulted [by]

my experiences of thirty years with South African natives", reflecting an anecdotal observation as opposed to any scientific research. Junod (1920:77) refers to the racial superiority of white people and implied inferiority of the African as is clear from the following referral to education: "The white man has to rule and to educate the native population; he must consequently exert a considerable amount of authority over it." In a further account to the 1908 Select Committee on Native Education (Cape of Good Hope 1908, Appendix [N]:xxix) referring to: "Practical hints about the Reform of Native Education", he notes:

The shape of the mind of the natives, their mental, social, linguistic conditions are and likely will remain for a long time very different from those of white people...It is therefore imperative that they should be trained according to a special code of instruction suiting them better than the ordinary programme of the European schools.

Ironically, together with this belief of perceived qualitative differences went the notion that "the treatment of natives, politically speaking, must be fair and as liberal as possible if we want to preserve the peace of the land" (Junod, 1920:77). This inconsistency is noted in equating fair treatment with white authority and is to be seen against the background that many missionary teachers who saw it as their God-given task to "protect" Africans (*cf.* Cotton, 1926; Smith, 1926) which was in agreement with prevailing notions of "benevolent colonialism" (Lewis & Steyn, 2003).

The introduction of segregated "Native Education" for African pupils after Union witnessed a racialised system implemented in African education in contrast to education provision for white children based on the former's perceived intellectual differences. Missionaries mainly taught African pupils in primary schools and these schools were largely aided by provincial subsidies (Hartshorne, 1992:25). In this way, the government still had influence over educational policies and practices. This is reflected in several documents, aimed specifically at teachers of African pupils. One such document was published by the Cape of Good Hope's Department of Public Education in 1924 (Cape of Good Hope 1924: Foreword) and later revised in 1929 (Cape of Good Hope, 1929: Foreword), *The Native Primary School: Suggestions for the Consideration of Teachers*. In the Foreword (Cape of Good Hope 1929: Foreword) of both documents, the then Superintendent-General of Education, WJ Viljoen, notes that these documents would "give the education of the Native child the basis of reality, and of adaptation to his environment and needs, that will render his education of real benefit to the individual and a potent influence in the advancement of the race". To Dube (1985:93) the main aim of this type of education was:

To handicap African children with the introduction of an inferior syllabus, coupled with inadequate learning conditions and poorly educated teachers. These combined factors were intended to reinforce the existing belief of white superiority while simultaneously making African children believe that they, by nature, have different destinies. Whereas segregated education was intended to impose mutual ignorance of each other's customs, values, and lifestyles upon white and African children, the curriculum for native education was designed to retard the intellectual development of Africans (italics mine—AL).

Furthermore, the 1930s observation of the Report of the Interdepartmental Committee on Native Education, 1935-1936 (UG29/1936) (SA[U], 1936)—commonly referred to as the Welsh Commission—which inquired into the education of the African child in South Africa at the time - highlights a prevalent perception that African children required an intellectually inferior and separate type education that channelled them into certain career positions and to assume inferior positions in society:

[I]t seems clear that there still exists opposition to the education of the Native on the grounds that (a) it makes him lazy and unfit for manual work; (b) it makes him "cheeky" and less docile as a servant; and (c) it estranges him from his own people and often leads him to despise his own culture...the aim that most...critics have at the back of their minds is that we must give the native an education that will keep him in his place.... (Rose & Tunmer, 1975:231–232).

Education is influenced by several societal forces: politics, culture and religion (Lewis, 1992:43) and in this case African education was provided mainly by missionaries up until apartheid education, within a racially segregated, hegemonic, capitalistic society. Jones (1970:40) has this to say about the relationship: "As in the case with all forms of social institutions, a reasonably clear perspective of Bantu education is contingent upon an understanding of the cultural developments, political, economic, and religious, which have shaped the country and the attitudes of its people." Seen in context, the 1920s and 1930s were an important breeding ground for nationalistic feelings, spurred on by political, economic and social factors. Poverty and unemployment were rife, both nationally and internationally, due to a worldwide economic crisis and subsequent depression creating the 'Poor White' problem. Large-scale urbanisation of both Africans and whites occurred and ensuing poverty and unemployment prevailed (Kinghorn, 1986[a]:52), which created a resistance to the education and development of Africans. Psychologically these developments impacted strongly on whites since they now competed with Africans for careers, as well as being on an equal footing with Africans whom they had previously perceived as inferior (Kinghorn, 1986[a]:52-53). A nationalistic world-view was introduced into, amongst others, the Dutch Reformed Church (DRC) (which invariably included their mission stations where African children were educated). An understated variation in emphasis emerged from a justification on biblical grounds of white people as the "custodian" of "inferior races" to the "theology of humanity as equal because of separation" (Kinghorn, 1990:63-69).

This paved the way for the introduction of intellectually inferior education during the 1950's which reflected principles of separate development strengthened by further pronouncements of the intellectual inferiority of the African child and reinforced by quantitative psychological assessment data. Qualitative pronouncements of the African child as intellectually inferior to the European child were striking during the apartheid period when cultural differences were equated to intellectual differences and, in the instance of the African child, their perceived intellectual inferiority to the white child. Khuzwayo (2005:316) notes a study done by Groenewald in 1976 who drew the following main finding:

[T]he problems which Blacks experience should be attributed especially to their being rooted in a traditional outlook on and way of life which dictated the pattern of their lives for centuries and which differ fundamentally from the Western way of life. The world of culture in which the Black child finds himself has restrictive implications for the actualisation of his intelligence.

Stemming from a colonial heritage (Foxcroft & Roodt, 2009:18), psychological testing became popular in the early 20<sup>th</sup> century as it was seen as a means of "provid[ing] immediate and reliable assessments of intellectual abilities and aptitudes on a comparative basis" between Africans and Europeans since the tests were perceived as "scientific and objective" (Dubow, 1995:209). Internationally at the time, psychological assessment was becoming widespread (Foxcroft & Roodt, 2009:12) and its use and development as a political tool in South Africa proved vital to those looking for a scientific endorsement of segregation and proof of racial superiority, especially by theorists seeking to justify white dominance over Africans.

These assessment measures were standardised for whites and were therefore not valid and reliable when applied to other cultures and races, a practice that is ethically, morally and legally wanting. To Foxcroft and Roodt (2009:5): "the appropriateness of an assessment measure for an individual, group, or organization from another context, culture, or society cannot be assumed without an investigation into possible test bias...and without strong consideration being given to adapting and re-norming the measure."

Foxcroft and Roodt (2009:18) further see that "what is different and important to note is the context in which this development took place. Psychological assessment in South Africa developed in an environment characterised by the unequal distribution of resources based on racial categories (African, coloured, Indian and white)." The *Cape Times* (1946:6) newspaper gives insight into the prevalent context or 'spirit of the time' in that "the race problem to-day in this country is worse than it has ever been throughout our history", sentiments shared by Liebenberg (1975[b]:424-426). Events during this period included political division between the political parties and the white population regarding discriminatory non-white legislation and the upsurge among many white people of an uncertainty of political and economic control by Africans. All this took place in the larger world that was moving towards non-discrimination. White people in South Africa started to press for segregation and Afrikaner nationalism reached a climax just after World War II. With the National Party coming to power in 1948, the emergence and advancement of this party's doctrine of apartheid was given impetus by intellectual pseudo-scientific theorising and conclusions that reinforced these declarations of racial separation.

Psychological assessments, as a means of measuring white superiority, began to make their appearance in the education system's policy lexicon especially after 1910, and led to prejudicial attitudes and discriminatory behaviour, especially in provision to the African child. The liberal educationist, Charles Loram (1917:162-193), in his book, *The Education of the South African Native*, published the outcomes of intellectual assessments performed on African, Indian and white school children, and maintained that African children were mentally not as capable as whites and Indians, emphasising the "continued dominance of the European" (Loram, 1917:192). This necessitated, according to Loram (1917:192-193), an education for the African child which matched the perceived inferior intellect. Loram, however, was careful in assigning the cause to permanent or inherent inferiority (*cf.* Kutoane & Krüger, 1990:9; Louw-Potgieter & Foster, 1991:62). In essence, to Laher and Cockcroft (2014:304): "The lower scores obtained by Black children were used as 'evidence' for the inferiority of the native intellect."

Furthermore, the Nationalist scholar, M.L. Fick, published the book, *The educatability of the South African Native*, in 1939 in which he used "available objective data" and inferred a contrasting view to Loran's earlier argument (Kutoane & Krüger 1990:9): African people had an intrinsic inferior intelligence compared to that of white people (Fick 1939:1–2). This assumption, however, differed from his own conclusion drawn in his earlier 1929 publication, which attributed the inferiority of the African child's intellect to sub-standard schools and teaching methods and the African child's unfamiliarity with the nature of the tasks of the test (Foxcroft & Roodt, 2009:18) and not definitively to innate reasons. To Fick (1929:910):

Whether this inability is due to the innate or racial make-up of the groups concerned, whether it is merely an indication of a lower level of intelligence or whether it is due to that type of training or teaching that the child receives, it is impossible to state definitively.

Of note is the foreword of Fick's 1939 book, which was written by another resolute nationalist, Dr Werner Eiselen, the then Chief Inspector of Native Education, and future chairperson of the National Party's investigation into Bantu Education. Here Eiselen (1939:iii–iv) ratified the intellectual superiority of white people, as well as the need for an education system that was different for the African child to that of the white child since "we may be leading them into a *cul-de-sac* and thus retard their development." A conclusion similar to that of Fick was reached by another Nationalist scholar, J.A. Jansen van Rensburg (Jansen van Rensburg 1938:17–43) in his book, *The learning ability of the South African Native* which endorsed the dominant "scientifically proven" perception, that African people were only suited to carry out manual, repetitive jobs (Louw-Potgieter & Foster, 1991:63), thus necessitating a separate education system that would suit such a perception pertaining to their intellectual abilities.

Psychological measures were questioned in the period between the two world wars (Foxcroft & Roodt, 2009:14) and the aforementioned psychological tests and conclusions drawn were interrogated by the 1936 Welsh Commission (SA[U] 1936:105), and countered by the liberal scholars, I.D. MacCrone (1936:92-107), S. Biesheuwel (1943:196-224) and even from within missionary circles. Missionary criticism was expressed by the editorial of the Lovedale missionary journal, South African Outlook (1 May, 1939:100) as well as by letters directed by readers to the editorial (South African Outlook 1 July, 1939:167-168). A critique of this mental testing articulated by the editorial of South African Outlook (1 May 1939:100–105) was that the investigators who made these "objective" observations were in fact white and not of the culture of those being tested. Specific criticism directed at Van Rensburg's works included questioning the validity of the selection process, pointing out that the white testers were not linguistically experienced in the language of those tested and that those assessors who were linguistically skilled, were not trained in psychology. Other critiques involved the nature of the tests, the type of test material used as it was standardised for Europeans and that environmental factors (e.g., test setting) were not taken into consideration during testing which would have negatively affected the result. Given this, although Jansen van Rensburg's (1938:1-43) study referred to these points of criticism, he still concluded white intellectual superiority. Criticism was also directed at psychological testing by the African academic, D.D.T. Jabavu (1929:934–935), who described the accomplishments of many African professionals as on par with their European peers. In the 1920s, Molema (1920:328–329), whom Chanaiwa (1980:16) considers a "great and...historically oriented intellectual", commented that:

[H]as science proved any intellectual or moral inefficiency of the African races? No no more than it has proved their intellectual and moral efficiency. Neither capacity nor incapacity have been shown conclusively to be characteristic of the backward races, or, more plainly of the African race.

Lovedale missionary school principals, Drs James Stewart and RHW Shepherd, also criticised allegations of mental inferiority of African people; they noted the exceptional achievements of both African and white students during examinations (*cf.* Horrel, 1963:13). Dube (1985:92) argues that the reason for advancing white superiority was that:

[t]he effect of equal ability in school performance was seen by the colonialists as undermining the social perception of Africans as "inferior." Children who see first-hand the contradiction between social stereotypes and reality are not likely to embrace those stereotypes. The aim of segregation, then, was to prevent white children from learning the true African ability directly through social intercourse at school.

In 1948, the Nationalist Government executed its policy of separate development in all earnest and in January 1949 a commission on 'Native Education', under the chairmanship of Werner Eiselen, was established (Behr & MacMillan, 1971:396; Lewis, 1992:51-53). After the Eiselen Report was presented to the House of Assembly on Monday, 11 February 1952 (South African Outlook, 1 March 1952:36; Lewis, 1992:51), a new era of racial segregation was introduced, regarding the African child's education which would move strictly along separate and racial lines. The Commission was tasked with formulating plans to provide an "education for natives as an independent race, in which their past and present, their inherent racial qualities, their distinctive characteristics and aptitude, and their needs under ever changing social conditions are taken into consideration" (italics mine – AL) (SA[U], 1951:7). Years of pseudo-scientific intellectual theorising and practice were reflected in the lexicon and culminated in the starting point of the Commission. To Behr (1988:33): "[t]he Commission... began with the premise that a distinction should be drawn between White and Black education." Racial intellectual theorising - qualitative and quantitative - over the years had once again found its way into the policy justification of a different, intellectually inferior education provided to the African child.

Opposition to the Eiselen Report was substantial; the Education League in Johannesburg saw the "proposed" new system as flouting "the growing needs of a vast detribalized and urbanized Native population" (*Cape Times*, 18 September 1953:4) while the editorial of the missionary publication, *South African Outlook*, perceived the document as "a politician's and not an educationalist's document. It smacks of *apartheid*, of the Nationalist brand, from beginning to end" (*South African Outlook*, 1 March 1952:36). The general tone and content of the Eiselen Report was seen by the editorial of the *South African Outlook* (1 March 1952:36) as in support of the racial policies of the National Party Government. Marambana (1987:23), on speaking of the education crisis at the time, declared that "segregation is the root cause of crisis in African education", with the intention of not merely keeping different groups apart, but to produce conditions for inequality, thus "giving the white section superiority and hegemony, and others inferiority and subordination."

The Minister of Native Affairs, Dr Hendrik Verwoerd, introduced the Bantu Education Act in 1953, based largely on the recommendations of the Eiselen Commission (Behr 1988:35–36) which removed African education from the jurisdiction of the provincial education departments and run by the Department of Bantu Education (Shepherd 1971:153; Behr 1988:61), which "was based on the realistic and separatist principles of the Nationalist government's ideology" (Mncwabe 1990:21). Pointing to mathematics education and the intellectual inferiority of the African child within policy lexicon and formulation, during the Second Reading of the Bantu Education Bill on 17 September 1953 Verwoerd (1953 in Khuzwayo, 2005:310) noted:

When I have control over native education I will reform it so that the Natives will be taught from childhood to realise that equality with Europeans is not for them. People who believe in equality are not desirable teachers for Natives...What is the use of teaching the Bantu child mathematics when it cannot use it in practice? That is quite absurd.

African children were discouraged from taking mathematics, which featured minimally within the education of the African child and, if so, was presented as "an abstract, meaningless subject" (Khuzwayo, 2005:310). These policy insertions, thinking and behaviour resulted from pseudo-scientific racial theorising of Africans that permeated South African society at the time (Lewis, 1999:165).

The educationalist, Behr (1988:61), argued that this was "a system of centralization within each racial group and decentralization between groups." Criticism to this type of segregated education was prevalent (Cook, 1990:172) in political (Cape Times, 18 September 1953:4) educational (Cape Times, 22 September 1953:5) and theological circles (South African Outlook, 1 October 1954:145; Cape Times, 22 November 1954:4; Sebakwane, 1994:12). Khuzwayo (2005:310) sums up the impact that several years of social, political and economic deprivation had on the education of the African child:

The apartheid policies of the Nationalist government were explicitly engineered to create minority group control and to provide inferior education for the majority in order to sustain its position of social, political and economic subjugation. Educational resources were not only limited, but also differentially distributed.

Education of the African child continued to be inferior, separate and unequal throughout the apartheid years. Psychological measures continued to reflect similar characteristics (Foxcroft et al., 2009:19) until a change in the political dispensation came about in the 1990s which started to question these theories and practices.

# 4. Concluding remarks and the way forward

This paper has examined selected pseudo-scientific racial theories on the mental abilities of the African child from a historical-educational perspective and how they were reflected within numerous educational policy documents, perceptions, thinking and practices at the time. These were apparent prior to and during the apartheid era (Lewis, 1999:279). Yet, given this, they still prevail. Ntshoe (2017:84) notes that "while strides have been made to reverse the explicit *de jure* racism, racialism, segregation, inequalities and inequities in schools in the democratic society, more hidden and subtle forms of racism and resegregation are emerging as the country enters its third decade of democratic rule post-1994." What then, given this discussion, creates a solid awareness and action in addressing and preventing racist thinking and behaviour in education in general, and intellectual assessment in particular?

Pseudo-scientific racial theorising justified separate and unequal education and conceptualised the African child's intellect as inferior to that of the white child over several years of education, in particular, in South Africa. This was also evident in apartheid education where the African child's enrolment in subjects such as mathematics, was discouraged due to their perceived inferior intellectual abilities and to keep them subjugated. Nongxa (2018), avers to apartheid's Bantu Education stance of discouraging African children from taking mathematics, subsequently denying a whole generation the opportunity of pursuing this vital school subject for the benefit of the economy then and now (Mouton, Louw & Strydom, 2012). This should be seen in the light of current concerns around the lack of Science, Technology, Engineering and Mathematics (STEM) graduates in South Africa (Grayson, 2009:9) and the lack of exposure to these subjects by the African child due to apartheid education which did not train sufficient STEM teachers (Parker, 2009:47) due to racist pseudo-scientific theories permeating thinking, practices and behavior that have left the African child's education lacking in relevant opportunities. To Nongxa (2018) this highlights the current importance of the provision of opportunities, especially for the African child, with talent in mathematics, to realise potential in this subject and of the necessary exposure to and support of role models for the next generation of youth pursuing mathematics in order to contribute to the development of the wellbeing of the African child and the economy.

It is the fiduciary and ethical duty of statutory bodies, such as, the Health Professions Council of South Africa (HPCSA) as the statutory body (SA[R], 1974) of mental health practitioners (e.g., psychologists) in this country, to ensure that psychological assessment instruments in general, and intellectual instruments in particular are valid and reliable. Linked to this is the responsibility of practitioners to administer psychological tests appropriately and ethically to redress the past when "psychologists provided pseudo-scientific legitimization for the segregation of races in South Africa which continued through the 1920s and 1930s" and well into the 1970s as a predominantly culturally insensitive, unreliable and invalid means of psychological understanding with Western models typically being used with little development and ethical practice taking place. Although the 1980s and 1990s saw gradual changes in making assessment instruments more applicable to all South Africans (Laher & Cockroft, 2014:304-309), even today in the democratic era, psychological assessment instruments are viewed with caution (Foxcroft et al., 2009:19-21). Some instruments still in use (e.g., the Senior South African Individual Scales-Revised [SSAIS-R]) (Van Eeden, 1991), did not make use of African children in the standardisation sample; made use of dated theoretical models and norms; and have not kept up with demographics and curriculum changes. The rationale for continued use is the result of a lack of locally normed alternatives (Cockcroft, 2013:48-57) and the cost of international instruments which are often not standardised for the South African population. However, present developments have led to a definite progression in legitimising psychological assessments with several policy documents addressing this issue. The White Paper 6 (Department of Education, 2001) and the Employment Equity Act, 55 of 1998 (RSA, 1998, section 8), for example, both advocate fair psychological assessment devoid of discrimination. Yet, assessment remains an area that needs constant debate, monitoring and development to avoid exclusion and discrimination. As Lesufi (2017:21) advises: "[a] nonracial education must be constantly reinforced in word and deed". As part of psychological assessment, demands for non-discriminatory assessment of learners is called. Laher and Cockroft (2014:309) note the move to include a more holistic, contextual and relevant dynamic assessment and the incorporation of qualitative approaches into psychological assessment to ensure a fair means of assessment as opposed to a rigid, predominantly Western approach. Theron (2013:71-72) calls for a comprehensive assessment of a child's abilities that includes not only an intellectual assessment, but also qualitative information and observations to ensure " a meaningful, comprehensive assessment." Given this article's exposition of the past misuse of the singular use of qualitative and qualitative information in arriving at faulty conclusions of the African child's mental abilities, practitioners' good training and ethical practice are essential to ensure holistic, contextual, reliable and valid assessments as opposed to one-sided, biased assessments to suit a specific malevolent agenda.

Furthermore, this article also relates to the importance of South Africans in general and learners in particular being made aware of historical developments to ensure that discriminatory, one-sided Eurocentric, malevolent thinking and practices are red-flagged and halted. History teaching, as Horn (2018:22), points out has the potential to be a positive influence or a "destructive power" with pseudo-science being part of the latter. Horn (2018:22) points out:

If the younger generation looks at the present without knowledge of the past, or, to put it another way, without knowledge of how we arrived at the present, it is very likely that most of them will accept the status quo without question. Many may even no longer seek to create a better present. In short, if we fail to realise what it took to get where we are today, we will be doomed to a future that holds no promise of progress.

Education policy makers are currently proposing to make history a compulsory school subject from Grades 10-12 (Bailey, 2017; Horn, 2018:22) and for history text books which are relevant and authentic to provide the opportunity for learners to engage critically with the past (Seroto, 2018). In this vein Bharath and Bertram (2018:158) advocate "[a]ccess to a diverse and rich bank of historical sources that are appropriately contextualised would support learners in developing their understanding of the process of historical enquiry." This expresses the need for authentic knowledge production from an African perspective as part of the decolonising process in education and higher education (Ramoupi, 2010:4).

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