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Izinseka: African somatic epistemology and the neuroscience of bodily knowing

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African thought has long held the body as a primary site of knowing. In Nguni-Zulu epistemology, *izinseka* names a class of somatic knowing spanning pre-cognitive reflexive response to another's distress, cultivated empathic sensitivity of caregivers, and refined diagnostic insight of *isangoma*. Western psychology has typically approached such knowing through a pathology frame, reading somatic presentations as failures of an assumed mind–body hierarchy. This article argues that *izinseka* is neither mystical nor merely phenomenological but epistemologically sovereign and physiologically grounded, and proposes it as a foundational concept for African psychology. The argument proceeds in four movements: (1) formalising *izinseka* as an epistemological category, (2) tracing how the same phenomena were pathologised within Western clinical psychology, (3) presenting convergent neuroscientific evidence, including polyvagal theory and interoceptive processing, as corroboration rather than validation, and (4) examining the *isangoma* as a case study of a trained somatic knower, towards a decolonial reframing of somatic symptom diagnosis. Clinicians and scholars are called to recognise somatic experience not as pathological conversion of psychological content into physical form, but as the body performing its oldest cognitive function with fidelity.

Contribution: African psychology has affirmed somatic knowing philosophically, while its physiological grounding has remained unarticulated. Drawing on Damasio's somatic marker hypothesis, Porges' polyvagal theory, enteric nervous system research, mirror neuron studies, and predictive processing, the article shows that *izinseka* has clear physiological substrates: the gut–brain axis, insular interoceptive processing, and the autonomic social engagement system, whose architecture was identified by African thought before neuroscience formally described it. *Ukuthwasa* is reframed as neurophysiological training.

Keywords: *izinseka* (*izinseke*); somatic knowing; *Ubuntu*; interoception; polyvagal theory; enteric nervous system; decolonial psychology; *isangoma*.

Introduction

Consider what happens in the moment a baby cries. Not the thought that follows. Not the assessment of whether the cry signals hunger or pain or fear. What happens in the body before any of that. The chest tightens. Something pulls. A person across a crowded room, a stranger with no relationship to the child, turns. They did not decide to turn. The turning happened, and the decision came after, a narrative built on top of a movement the body had already made. Something was known before knowing occurred. The same capacity, more deliberately cultivated, is what allows a caregiver to read an infant's distress before it is voiced or an *isangoma* [Southern African healer or diviner] to sense an ailment a patient has not yet described. In Nguni-Zulu thought, this phenomenon is not incidental. It is a faculty, and it has a name. *Izinseka* [foundations] designates this class of somatic knowing: Knowledge that arrives through the body, as the body, before the mind has assembled its account. The concept draws on *isiZulu* vernacular to name a form of bodily knowing described phenomenologically in the literature on traditional healing, approached philosophically within the *Ubuntu* [humanity] epistemological tradition and documented empirically under adjacent concepts, particularly *umbilini* [visceral, epigastric dread; gut-clenching apprehension] (Mlisa & Nel 2013). The phenomenon has not, however, been formally theorised as a unified epistemological category. This article undertakes that theorisation. This article argues that African psychology possesses, in *izinseka*, a concept that is neither mystical nor merely phenomenological but epistemologically sovereign and physiologically grounded. It fills three specific gaps in the existing literature: (1) it provides a unified epistemological formalisation of somatic knowing within African thought; (2) it demonstrates the physiological substrates of

izinseka through convergent neuroscientific evidence, and (3) it offers a critical reconceptualisation of somatic symptom disorder diagnoses as a failure of epistemological framework rather than of cultural competence alone. The article proceeds in four movements. The first establishes *izinseka* as a formalised epistemological concept. The second examines how the same phenomena were absorbed into Western clinical psychology as disorder. The third presents the neuroscientific evidence as corroboration, not legitimation, of what African thought already named. The fourth synthesises these into a proposal for an African psychology of somatic knowing, examining the *isangoma* as a case study. This article is a conceptual analysis integrating African philosophy, critical psychology and cognitive neuroscience. As a theoretical contribution, its arguments are by design not empirically testable in the conventional sense, though each convergence it identifies implies testable hypotheses, which the conclusion outlines. The stakes are not merely academic. African patients are systematically over-diagnosed with somatisation disorders when they present bodily idioms of distress. To correct this misreading is to return to African people the epistemological sovereignty over their own somatic experience that the colonial encounter took from them.

Approach

This article proceeds as a conceptual analysis, not an empirical study, and its method is argumentative and comparative rather than observational. The comparison it draws, between the Western clinical pathology frame examined in Part II and the *Ubuntu*-derived epistemological frame developed in Part I, is licensed by the fact that both frames claim to describe the same somatic phenomena; the analysis asks which frame accounts for that phenomenon with fewer unexamined assumptions, not which frame is culturally 'correct'. The neuroscientific evidence introduced in Part III is treated throughout as corroboration, not legitimation. This means that the convergence with polyvagal theory, interoceptive processing and related findings is read as independent support for a framework African epistemology had already articulated, not as the authority that makes the framework valid. As a theoretical contribution, the paper's claims are not empirically testable in the conventional sense; where the analysis implies testable hypotheses, these are named explicitly in the concluding section.

Part I: *Izinseka* – The African epistemological claim

The concept and its context

Every epistemology begins with a prior: A foundational assumption about where knowledge lives, how it arrives and whose account of it counts. Western modernity located knowledge in the reasoning mind, individual, disembodied and verifiable. African thought, and Nguni-Zulu thought in particular, begins elsewhere. The prior is not the reasoning individual but the relational person, constituted through and within community. *Ubuntu*, rendered inadequately as 'I am because we are', is not primarily an ethical statement. It is an ontological one: The self is relation, continuously and knowing is therefore always already a relational act (Ramose 1999). It is within this ontological frame that *izinseka* must be understood. The word carries the sense of that which stirs, felt as an inner movement in response to what is happening beyond the self. It is closer to what phenomenology calls intercorporeality; the body's participation in a shared somatic field, its capacity to receive and transmit what has not yet been put into words (Tanaka 2015).[1] Alongside *izinseka*, and inseparable from it in practice, is *umbilini*: The deep visceral centre from which somatic knowing arises. In Zulu cosmology, *umbilini* names the seat of the sangoma's power, felt as a rising energy from the body's core (Edwards 2011). Mlisa and Nel's (2013) empirical study of *umbilini* among *amaXhosa amagqirha* [Xhosa doctors] provides the most formally rigorous account to date, identifying four distinct types of experience and concluding that the phenomenon is rooted in complex biopsychosocial processes. The distinction between *izinseka* as faculty and *umbilini* as its anatomical home and highest intensity will be clarified in Part III.

Three registers of somatic knowing

Izinseka operates across a spectrum of intensity, cultivation and social context. Collapsing these registers risks either trivialising the concept as mere instinct or mystifying it as the exclusive province of the spiritually gifted. The first and most universal register is the reflexive somatic response, the pull towards a crying infant felt by any person regardless of their relationship to the child. Pre-cognitive in the strict sense, it precedes and does not require conscious processing. The second register is empathic somatic knowing: The cultivated, relationally sustained capacity to feel into the state of another with sufficient accuracy to guide action. African thought has consistently associated this register with women and with relational roles, an association this article will return to in Part IV. The third register is the diagnostic somatic knowing of the *isangoma*, whose years of initiated practice tune the body into an instrument of social and spiritual perception (Makanya 2021; Sikrweqe, De Klerk & Ally 2024) that is so sensitive it detects what language has not yet named. These three registers form a continuum: What the *isangoma* does with great precision, the mother does with moderate cultivation and the stranger does reflexively.

African scholars and the incomplete argument

The African scholarly tradition has not been silent on somatic knowing, but it has not yet fully claimed the ground available to it. Ramose's (1999) elaboration of *Ubuntu* as a living epistemology opens the philosophical space within which

1.A Western reader may hear an echo of Jung here, his notion of intuition and of synchronicity as an acausal meaningful connection. The affinity is real but partial: Jung located such knowing within the individual psyche, whereas the tradition drawn on here locates it in a relational and cosmological field beyond the person. Later developments, archetypal and transpersonal psychology, among them, have pushed further towards a trans-individual or cosmological field, narrowing but not closing this gap. The divergence that remains and the reasons depth psychology has generally stopped short of it warrant fuller treatment than is possible here.

izinseka can be theorised. Metz's (2011) work on relational personhood implicitly supports the claim that somatic attunement is cognitive in a philosophically serious sense. Oyewumi's (1997) critique of Western ocularcentrism argues that the privileging of vision reflects a cultural choice rather than a perceptual necessity, creating conceptual space for *izinseka* as a legitimate sensory epistemology. Fanon (1952), writing from a different urgency, shows in *Black Skin, White Masks* that the racialised body carries knowledge of its social situation before consciousness can articulate it. Gobodo-Madikizela's (2003, 2008) work on embodied empathy points towards a form of knowing that is moral as well as perceptual. Though not from Africa, emerging research on epigenetic trauma transmission further suggests that somatic knowledge and ancestral experience are transmitted through the body across generations (Kac, Qi & Ryznar 2026; Mulligan et al. 2025). What these scholars share is the recognition that the body is an epistemological site. What they have not done collectively is follow that recognition into the physiological question. The argument has been made philosophically and phenomenologically (Cakata 2020), but the mechanism has been left unclaimed. Part III provides what is needed to close that exposure.

Part II: What Western psychology did instead – The pathology frame

The Cartesian inheritance

To understand what Western clinical psychology did with somatic knowing, it is necessary to understand the philosophical inheritance it was working within. René Descartes' separation of mind and body was not a psychological claim but a metaphysical one, with profound consequences. The mind thinks, the body extends. Knowledge belongs to the first, not the second. What the body reports may be useful as data to the reasoning mind, but the body itself does not know; it only signals (Damasio 1994). This dualism entered medicine through biomedicine's commitment to organic pathology as the only legitimate ground of illness.

Somatic symptom disorders and the cultural prior

The diagnostic history of conditions in which patients present physical symptoms without identifiable organic cause is long and revealing. Hysteria, the earliest of these categories, attached the phenomenon specifically to women, locating the problem in the unreliable excess of the female body. The *Diagnostic and Statistical Manual*'s (DSM's) successive revisions refined the terminology but retained the fundamental framework. *Diagnostic and Statistical Manual*-5's replacement of 'somatoform disorders' with 'somatic symptom disorder' shifted emphasis from absent organic pathology to excessive concern with physical symptoms; a meaningful clinical refinement that did not alter the underlying architecture: The body is producing something that reason and physiology cannot fully account for, and this constitutes disorder (First et al. 2023). Conversion disorder represents the most philosophically explicit version: Psychological conflict is converted into neurological symptoms, making the body not a site of knowing but a site of displacement. What these diagnostic categories share, beneath their clinical specificity, is a set of cultural assumptions that are Cartesian in structure. The first is that physical symptoms require physical causes. The second is that the proper relationship between mind and body is hierarchical. The third is that patients who present somatic experience as primary idiom are communicating incorrectly. None of these appear as assumptions in the DSM. They appear as clinical observations. This is precisely the problem: Cultural priors that are invisible do not look like priors; they look like facts. African patients, and more broadly patients from cultures in which somatic idioms of distress are normative, are consistently poorly served by this framework (Kirmayer, Dao & Smith 1998; Kirmayer & Minas 2000; Kleinman 1980). The clinical encounter runs as follows: The patient reports a heaviness in the chest, a disturbance in the stomach. The clinician, finding no organic explanation, concludes the patient is somatising psychological distress. The patient, from within a cultural framework in which the body is a legitimate and primary site of experience, finds this response inaccurate and dismissive. The therapeutic alliance does not form. This is not merely a communication failure. It is an epistemological one, and it has clinical consequences. The claim here is not that somatic symptom disorder diagnoses lack clinical utility, or that patients who receive them are not suffering. The claim is narrower: That the framework reflects a cultural prior about mind, body and knowledge that pathologises what some epistemological traditions organise as a faculty, and that this produces systematic clinical errors when applied without acknowledgement of its own assumptions (American Psychiatric Association [APA] 2022). The DSM is, in this sense, a cultural document; one whose universalising move renders it capable of doing epistemological harm at scale.

Part III: The neuroscience and physiology of bodily knowing

The neuroscientific literature relevant to *izinseka* is not a unified research programme but a set of convergent findings from multiple disciplines: (1) interoception research, (2) autonomic neuroscience, (3) enteric physiology, (4) social neuroscience and (5) predictive processing theory, each of which maps onto one or more registers of somatic knowing that African thought has named. These researchers, however, distant from African epistemological concerns, were studying the same human body.

Interoception and the somatic marker

Interoception refers to the brain's ongoing processing of signals from the body's internal state: (1) heart rate, (2) respiratory rhythm, (3) gut motility and (4) visceral tension. The neural pathway runs primarily through the insular cortex, whose anterior portion integrates raw interoceptive signals with emotional and cognitive processing

to produce the subjective sense of the body's state. Craig's foundational work established that feelings are, at a physiological level, representations of bodily states (Craig 2003; Greenwood & Garfinkel 2025). Higher interoceptive accuracy, the correspondence between conscious reports of bodily states and measurable physiological parameters, is associated with more reliable emotional processing, better social cognition and greater capacity for empathy (Ueno et al. 2025). The *isangoma* who has spent years attending to somatic signals is, in this framework, a person with highly developed interoceptive accuracy. Damasio's somatic marker hypothesis constitutes the most direct scientific challenge to the Cartesian framework examined in Part II. His argument, grounded in neurological case studies, is that bodily states are not peripheral to decision-making but its necessary substrate. Patients with damage to the ventromedial prefrontal cortex, the region most critical for integrating somatic signals with decision-making, retain intact reasoning capacities but suffer catastrophic decision-making collapse. Without somatic markers, deliberate reason alone cannot navigate the complexity of social and personal life (Damasio 1994). If somatic states are not noise but the very medium through which complex judgement is possible, then the Cartesian hierarchy is not merely philosophically contestable; it is empirically false.

The enteric nervous system and the anatomical basis of umbilini

The enteric nervous system, the mesh-like network of neurons lining the gastrointestinal tract, constitutes, in neurological terms, a second brain. It contains between 200 and 600 million neurons, more than the spinal cord, and is capable of operating entirely independently of the central nervous system (Cryan et al. 2019). More relevant to this argument is communication via the vagus nerve: Approximately 80% – 90% of vagal fibres carry information upward, from gut to brain, rather than downward (Cryan et al. 2019). The gut is primarily transmitting reports, not receiving orders. Approximately 90% of the body's serotonin is produced not in the brain but in the gut (Yassin et al. 2025). The *isangoma* who describes stomach-knowing is describing the output of a neural network of extraordinary complexity. Here, the concept of *umbilini* earns its most striking scientific corroboration. Traditional accounts locate *umbilini* specifically in the solar plexus region, the common name for the coeliac plexus, the largest autonomic nerve plexus in the human body, a dense network of sympathetic and parasympathetic ganglia innervating the stomach, liver, pancreas, spleen and kidneys (John et al. 2024). The celiac ganglia at its centre have been termed a 'little brain' in the neuroanatomical literature, capable of independently coordinating reflex loops between organs (Candal, Reddy & Samra 2023). Afferent fibres carry visceral sensory signals continuously upward to the brainstem. The *umbilini* is not a metaphysical location. It is a neuroanatomical one, among the most densely innervated sites in the entire body. The precision of traditional localisation, across centuries and in the absence of anatomical science, reflects sustained attention to the body's most informationally rich visceral site.

Polyvagal theory, mirror neurons and social knowing

Porges' polyvagal theory introduces the ventral vagal complex, a phylogenetically newer circuit governing what Porges calls the social engagement system. This system regulates facial muscles, prosody and head orientation, operating largely below conscious awareness through 'neuroception': The nervous system's continuous evaluation of the environment for cues of safety or threat, independent of and prior to deliberate interpretation (Grossman et al. 2026; Porges 2025). The response to a baby's cry is a neuroceptive event: Acoustic properties of infant distress activate the social engagement system before the listener has consciously registered what they are hearing. High vagal tone, measurable through heart rate variability, is associated with greater social engagement, more accurate reading of others' emotional states and more effective arousal regulation (Thayer & Lane 2000). Mirror neuron research adds a further substrate. Neurons in the premotor cortex that fire both when an individual performs an action and when they observe another performing the same action constitute a neural bridge between self and other; a mechanism through which another's experience is represented in one's own body before any deliberate interpretation (Rizzolatti & Craighero 2004). Viewing another person in pain activates, in the observer, many of the same neural regions implicated in direct pain experience, including the anterior insula and anterior cingulate cortex (Singer et al. 2004). Cultural contexts that cultivate and reward empathic attunement may be, neurologically, cultivating differential activation of these circuits.

Predictive processing: Bayesian inference in flesh

The predictive processing account of brain function, developed by Clark (2016), proposes that the brain is not a passive receiver of sensory input but an active prediction machine. The brain continuously generates probabilistic models of the body and the world, updating them in response to prediction errors. *Izinseka*, in this framework, can be understood as a highly calibrated predictive model of social and somatic states, refined through years of relational living and, in the *isangoma*'s case, through deliberate training. The stomach-knowing of the traditional healer is Bayesian inference implemented in flesh; a prior updated through thousands of encounters to the point where the model generates accurate predictions before deliberate evidence-gathering has occurred. This is not mystical. It is the same inferential architecture the brain uses for all perception.

The convergence

Taken together, these bodies of research, interoceptive neuroscience, the somatic marker hypothesis, enteric nervous system physiology, polyvagal theory, mirror neuron research and predictive processing theory, constitute a physiological account of somatic knowing that is neither speculative nor marginal. And it describes, with increasing precision, the

mechanisms underlying what African thought has named *izinseka*. This science was not developed to validate African epistemology. The convergence between its findings and the African epistemological tradition is therefore not the product of motivated reasoning. It is the product of two independent traditions investigating the same human body and arriving, by different routes, at overlapping conclusions. That overlap is the strongest possible form of corroboration.

Part IV: The *isangoma* as case study – A trained somatic knower

The calling and its misreading

The *isangoma* does not choose their vocation as a practitioner in a Western clinical tradition might. The calling arrives in the body: Recurrent illness that does not respond to ordinary treatment, unusual dreams, physical symptoms that defy biomedical diagnosis, a persistent sense of being drawn towards something unnamed. This cluster of experiences, known as *ukuthwasa* [lit. 'to emerge'; conventionally glossed as initiation, here reframed as structured training], is recognisable within the Western psychiatric framework as medically unexplained symptoms, dissociative episodes or prodromal psychotic phenomena. The Nguni-Zulu reading is precisely opposite. The body's disturbance is not a failure of function; it is a function. The *amadlozi* [ancestral spirits or departed relatives; used here to further denote a distributed ancestral memory, transpersonal mnemonic field, or intergenerational cognitive continuity] make themselves known through the body because the body is the site at which such communications are received. The somatic disturbance is the signal. The person who can bear its intensity and be initiated into its demands has demonstrated the sensitivity required for the healer's work (Edwards 2011; Letsoalo et al. 2024). This reading contains an empirical claim: That the body's unusual sensitivity, which manifests initially as distress, can be trained into a functional diagnostic capacity. On the neuroscientific evidence reviewed in Part III, this claim is entirely coherent. The interoceptive sensitivity that makes the pre-*ukuthwasa* experience disorienting is the same sensitivity that, once trained and integrated, produces the diagnostic somatic knowing of the mature *isangoma*.

Ukuthwasa as neurophysiological training

The initiation process of *ukuthwasa* is not merely cultural instruction; it is a structured programme of somatic and attentional training sharing significant features with practices that clinical neuroscience has documented as producing measurable changes in brain structure, autonomic function and interoceptive capacity. The novice healer learns to attend to their own somatic states with unusual precision, to distinguish signal from noise in the body's outputs, to tolerate intense somatic experiences without being overwhelmed and to extend that attentiveness outward into the social field. This is, in the language of clinical neuroscience, interoceptive training. Such training has been shown to improve interoceptive accuracy, increase insular cortex activation during interoceptive tasks and produce improvements in emotional regulation and social cognition (Jenkinson et al. 2024; Leech et al. 2024). Rhythmic auditory stimulation has been shown to entrain neural oscillations and influence autonomic tone (Thaut & McIntosh 2014). Research on long-term meditators shows elevated resting heart rate variability and greater autonomic flexibility (Lehrer et al. 2003; Wielgosz et al. 2019), suggesting that sustained practice of attending to internal states produces genuine neurophysiological change. No direct studies of *isangoma* heart rate variability exist in current literature; a gap this paper's argument implies should be filled, but the physiological model supports the hypothesis.

Diagnostic practice and clinical implications

The diagnostic practice of the mature *isangoma* is characterised, across ethnographic accounts, by knowing that begins in the body and moves outward to language. Central to this attending is the *umbilini*: The deep visceral centre to which the *isangoma* has learned, through *ukuthwasa*, to direct conscious attention as the primary site of diagnostic reception. Mlisa and Nel (2013) identify four distinct types of *umbilini* experience, including *uthuku* [a hunch or intuitive hypothesis] and *uvalo* [felt somatic anticipation], suggesting a structured repertoire of somatic signals that trained healers learn to read with specificity. In the framework developed here, the *isangoma*'s mirror neuron system receives the patient's somatic state, the enteric nervous system generates a gut response, the insular cortex integrates these signals into a felt sense, and the predictive model that years of healing work have calibrated generates a hypothesis about the patient's condition. That this knowing is then communicated through a spiritual framework does not negate its physiological basis. Two clinical implications deserve particular attention. Firstly, the *thwasa* experience, when it enters the Western mental health system, is at significant risk of diagnoses and treatments that are not only culturally inappropriate but may also actively interfere with a developmental process. The suppression of the calling through antipsychotic medication and the absence of initiated guidance that gives the experience meaning can produce outcomes significantly worse than supported traditional initiation (Edwards 2011; Letsoalo et al. 2024). Recognition of the physiological basis of the *thwasa* experience does not require clinicians to accept its full spiritual framework; it does require them to consider that the body's unusual activity may be something other than malfunction. Secondly, regarding gender: African thought consistently associates heightened somatic attunement with women's relational roles. To the extent that *izinseka* is cultivated through sustained relational practice, and women have been positioned as primary bearers of relational responsibility, this association may be more a product of gendered social positioning than inherent biological difference. This distinction opens *izinseka* to all persons willing to undertake the relational and somatic work its development requires.

Part V: Towards an African psychology of somatic knowing

The synthesis yields five propositions constituting the foundations of an African psychology of somatic knowing. Returning to the three gaps identified at the outset, these five propositions close them in turn; the first and fourth resolve the reconceptualisation of somatic symptom diagnosis; the second resolves the epistemological formalisation; the fifth resolves the physiological substrate by turning it into a testable agenda. The third names what is at stake in closing all three. Firstly, *izinseka* is a faculty, not a symptom. When the body knows before the mind has assembled its account, something neurologically specific is occurring. To name this a disorder is not a scientific finding; it is a philosophical prejudice wearing clinical clothes. Secondly, African thought described this faculty accurately and in advance of the scientific formalisation of its mechanisms. The accuracy of the description is what we would expect from a careful, culturally supported tradition of attending to experience over long periods. The neuroscience did not discover something that African thought did not know. It provided a second language for something African thought had already said. Thirdly, African psychology needs this claim. A discipline that asserts the epistemological legitimacy of somatic knowing while leaving its physiological basis unclaimed operates in unnecessary vulnerability, capable of being acknowledged and set aside as indigenous wisdom, excluded from serious scientific consideration. The physiological grounding of *izinseka* closes this exposure. It does not require African psychology to validate itself through Western science; it requires recognition that Western science has independently arrived at confirmation of what African thought already held. Fourthly, the systematic over-diagnosis of somatisation in African patients is an error consequent on a false epistemological framework. Correcting it requires not only cultural competence training for clinicians but also a genuine reorientation of how somatic experience is read. The body that speaks is not translating psychological distress into an inappropriate idiom. It is reporting, through the channels evolution provided, information that matters. Fifthly, the convergences identified here imply a specific research agenda. *Do isangoma show measurably elevated interoceptive accuracy? Does ukuthwasa training produce documentable changes in heart rate variability and autonomic flexibility? Are the somatic responses healers describe to clinical situations congruent with patients' physiological states in ways exceeding chance?* These are empirical questions answerable with existing methods. Studying them would not diminish *izinseka*; it would extend a conversation between two traditions that have been describing the same phenomenon in different languages, without until now recognising the other's voice. The limits here are those inherent to conceptual analysis. The neuroscientific parallels drawn here are interpretive rather than directly evidenced through studies of *isangoma* populations. The cultural specificity of Nguni-Zulu somatic epistemology may limit generalisability across other African traditions, though the relational ontology of *Ubuntu* suggests significant cross-cultural applicability within the African context. These limitations are, in the most important sense, calls to research. African psychology's task is not to prove itself to Western science but to articulate its own understanding with the rigour its insights deserve, and to invite science into a conversation, it has unknowingly already been participating in. The body has always known. The work of this article is to say so clearly enough that both traditions can hear.

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CRediT authorship contribution

Thabani Khumalo: Conceptualisation, Data curation, Formal analysis, Validation. The author confirms that this work is entirely their own, has reviewed the article, approved the final version for submission and publication and takes full responsibility for the integrity of its findings.

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