

The Conceptualizations of Intelligence Among the Tonga People of Southern Zambia: A Parental Perspective

Bestern Kaani (PhD)*, Nisbert Machila (MA.History)

University of Zambia, School of Education, Department of Educational Psychology, Sociology, and Special Education, Lusaka, Zambia

*Corresponding Author

Abstract: This paper sought to describe the basic tenets of the concept of intelligence among Tonga parents of rural Zambia. Most researchers presume that what western schooling teaches and measured by intelligence tests is universal and fostered by all cultures around, therefore, failure to succeed in both constitutes non-intelligent behavior. Others argue that, although the concept of intelligence is universal, what each culture considers intelligent behavior is unique to the prevailing socioeconomic and cultural conditions. Using the realist ethnography method, eight parents were interviewed using a semi-structured questionnaire to provide narratives of both their lived childhood experiences and expectations of their children during and after school. The study revealed that Tonga parents make a clear distinction between being intelligent (*kuba amaanu*) and being unintelligent (*kubula maanu*). Being intelligent (*kuba amaanu*) is however, framed based on four core concepts – *kumvwa* (to follow instructions), *kutumika* (to be responsible), *kusyomeka* (to be trustworthy), and *kucenjela* (to be clever) – framed based on concepts of *maanu* (which may also be defined as cognition) and *busongo* (wisdom) constitute intelligent behavior.

Keywords: Clever, Intelligent Behavior, Responsibility, Tonga, Trustworthiness.

I. INTRODUCTION

Since the introduction of western education, concepts that constitutes intelligent behavior among African children are evaluated based on Eurocentric cultural lenses, yet the attitudes, values, beliefs, and behaviors of western culture is at variance with African indigenous cultures. The failure to understand and incorporate indigenous concepts of intelligence usually manifests itself in low intelligence quotient (hereafter IQ) scores among, not only in Zambians, but also among most children of non-western ancestry (Serpell, 1993; Sternberg, 2005) because most tests used lack ecological validity. While, European culture stresses that intelligent behavior is exceptional performance on intelligence tests based on compartmentalized and discrete disciplines, Nsamenang (2006, p. 294), argues that “In indigenous African education, all strands of knowledge are interwoven into a common tapestry, which is learned in a participatory curriculum.”

Indigenous African societies perceive intelligent behavior based on collective responsibility rather than individual

preference, a trait forcibly reinforced by western education. For instance, the Chewa ethnic group of eastern Zambia characterizes intelligence based on four constructs; namely cognitive aspects [*nzeru* – wisdom and *chenjela* – aptitude] and social [*tumikila* – responsibility and *khulupilika* – trustworthiness] (Serpell, 1993). Among the Chewa, intelligent children are those who contribute positively to the commonwealth of their families. Judging intelligent behavior based on Euro-American norms without taking into account local cultural knowledge would severely disadvantage Chewa children. Moreover, “Given the mismatch between the realities of African children’s lives and most school curricula still premised on the inherited colonial past, it is possible that sometimes the teachers informed by the Western models of pedagogy and pupils guided by their culture and family background may have different objectives” (Maunganidze, Kasayira, & Mudhovozi, 2011, p. 334).

Therefore, an understanding of what constitutes intelligence among the Tonga children as examined through lived experiences of their parents would provide suitable cultural lens through which both social and cognitive functioning are appropriately evaluated. The ethnographic approach used here provides an appropriate vehicle for characterizations of intelligent behavior. Apart from few available studies (Babatunde, 1992; Ogunaike & Houser, 2002; Serpell, 1993), very little research regarding the understanding of the concepts of intelligence in African settings is available. An in-depth description of the Tonga’s conceptualization of intelligence will, not only aid in developing cultural fair tests to improve children’s scores, but also play an important role in designing instruction approaches to help in bridging gaps between their cultural demands and education value systems.

II. LITERATURE REVIEW

The universally accepted notion of what constitutes intelligent behavior in western societies has been through Eurocentric hegemony as exhibited by exceptional performance on IQ tests, and individuals who perform poorly on the standardised IQ tests have low intelligence. Therefore, they are expected to be failures in school academics and life. Such characterization of intelligent or non-intelligent behavior is not faulty because human survival in western culture depends on academic

success. Sternberg (2004) argued that “in the United States as well as in much of the developed world, many of us tend to take for granted that children who do well on teacher-made and standardized tests are intelligent” (p. 148). This characterization of intelligence is not universal. It is, therefore, unrealistic to define intelligent behavior using one cultural lens. According to Mpofu, Ntinda, and Oakland (2012), “...communities define and promote human abilities they perceive to give expression to their core values” (p. 2). Hence, anthropological studies show significant differences in both definitions and expression of their core values based on cultural setting (Colson, 1958; Greenfield, 2009; Kagitcibasi, 2005; Nsamenang, 2006; Serpell, 1993; Valsiner, 2003) because “cultures evaluate their members, as well as members of other cultures, in terms of their own conceptions of intelligence” (Sternberg, 2004, p. 148).

The fascination with intelligence across cultures is not a new phenomenon among cross-cultural psychologists (Greenfield, 1999; Grigorenko et al., 2001; Serpell, 1993; Yang & Sternberg, 1997). For some cultures, concepts related to intelligence transcend western conceived psychological models. Yang and Sternberg (1997) found that Confucian Chinese culture conceptualizes intelligent behavior as “benevolence and doing what is right” (p. 149). Kagitcibasi (2005) also stated that western cultures espouse individualism, trait most non-western cultures discourage in favor of communal collectivism. Therefore, we expect non-western cultures to include social responsibility as a measure of intelligence, in addition to cognitive perspicacity. Grigorenko and colleague identified four concepts describing intelligence among the Luo in rural Kenya; *rieko* (knowledge and skills), *luoro* (respect), *winjo* (comprehension of how to handle real-life problems), and *paro* (initiative). These studies corroborate Serpell’s (1993) findings among the Chewa people in eastern Zambia.

Consequently, these cultural variations may explain why children from non-western backgrounds underperform on conventional IQ tests, but excel when tested on ecological familiar niche-based tasks. Children in rural western Kenya excel on tasks of tacit knowledge of natural herbal medicines in curing frequently occurring ailments as failure could mean the difference between life and death.

It is important to note that, in western cultures, formal schooling is what children do they during their socialization process, whereas in African cultures, schooling is what children do when they are *not* being socialized—or during enculturation into the Eurocentric socio-cultural worldview. In Africa, it is common to find parents sending children considered unintelligent to formal schools and keep the intelligent ones at home to assist with household chores, because being school smart is not as important to the children’s survival as being able to work the land for themselves.

Therefore, to get a comprehensive understanding of a people’s culturally embedded concepts of intellectual epistemology, their indigenous knowledge systems, as defined by ecological

and developmental niches, should be invoked (Sternberg, 2007). Livelihoods of most sub-Saharan Africa ethnic groupings depend on subsistence farming involving the growing of corn, millet, and sorghum, and livestock. Nonetheless, there are frequent spells of hunger and starvation due to crop failure. To ensure food security, all members of the family contribute to food production.

Due to substantial reliance on household labour, large extended families are ubiquitous throughout the region, hence collectivist philosophies inform their social epistemological belief *called Buntu*—a belief system revolving around a universal recognition of human worth (Colson, 1958; Kochalumchuvattil, 2010). *Ubuntu* promotes a collectivist culture, which calls for consented efforts to better whole community. According to Colson (1958), “The Tonga conceive a full adult as one who is married, a parent, and an active partner in a household ... one competent in ... maintenance of a household ... and the social skills to live in friendship with neighbors” (p. 257). Child-rearing practices focus on preparing children to develop into responsible husbands, wives, and parents in raising children. In fact, raising children is not limited to the nucleus family, but a shared responsibility with the extended family.

Purpose of the Study

The purpose of this ethnographic study was to identify and describe basic characteristics of what Tonga rural parents consider as intelligence with regard to children’s behaviour. At this stage, we conceptualized intelligence more broadly as the “ability to adapt to the environment and to learn from experience” (Sternberg, 2005, p. 189). The central question was, what constitutes intelligent behavior among Tonga children and how does it relate to western education? Unlike in the western cultures where IQ tests play a significant role, (Sternberg, 2004), evaluations of children’s level of intellectual competence in non-western cultures is predominantly based on skills deemed necessary for continued survival of wider society, not an individual (Colson, 1958; Nsamenang, 2006). For African children to qualify as intellectually superior, they have to acquire and apply ecologically appropriate tacit skills through apprenticeship with either their own parents or kinships that are more skilled (Sternberg, 2004). Therefore, we specifically set out to explore to the following questions; (a) what are the Tonga definitions of intelligence or intelligent behavior? (b) Who is an intelligent Tonga child? (c) What characteristics do the Tonga people look for in an intelligent individual? Due to variations in developmental niches and the fortes fostered by the Tonga ethnic group, we envisage that the notion of what Tonga parents consider intelligent behaviour will be fundamentally different from conventional mainstream psychology, mostly framed based on the Euro-American perspective, but will be show significant similarities to the Chewa’s characterization.

III. METHOD

Research design

This study adopted a *realist ethnographic* research design. The ethnographic approach is suitable for this study because definitions of human behavior are framed mostly within the socio-cultural developmental niche of the target population (Sternberg, 2004; Super & Harkness, 1986), whose understanding requires indepth interpretative descriptions of “shared and learned patterns of values, behaviors, beliefs, and language of a culture-sharing group” (Creswell, 2007, p. 68). According to Engebretson (2011, p. 146), ethnographic studies allow researchers to explore “the ethos or the values and beliefs of a particular person or group of people”. Additionally, since it is through culture that “people make meaning of their experiences and operate in everyday life and develop social organization” (Engebretson, 2011, p. 146); ethnography provides an appropriate tool to understand Tonga people’s acquired knowledge used to interpret experience and generate social behavior. Therefore, through an in-depth exploration of the Tonga’s explicit and tacit knowledge, this study was expected to unearth a wealth of “dimensions of ‘an ecology of understanding’” (Altheide & Johnson, 2011, p. 590) of their conceptions of intelligent behavior.

Participants and Sampling Procedure

Eight couples drawn from one village in Moyo chiefdom in Choma district of southern Zambia with at least four school-going children each took part in this study. Convenient sampling methods was used to selected research respondents. Based on the first author’s previous interactions with people in the study area and familiarity with Tonga culture, we used criterion sampling (Creswell, 2007) in selecting respondents fitting the required profile. Tonga organize their societies hierarchically based on chronological age seniority, and any elderly person is not only highly revered, but also regarded as fountains of their cultural knowledge. Therefore, we envisaged that a convenient sample of parents with school-going children would yield informative narratives based on their child-rearing practices and experiences. Moreover, since Tongas are predominantly polygamous and organized in large communal households (Cliggett, 2000), measures were taken to ensure that the parents interviewed were biological parents of the four targeted children, whose intelligence levels was being evaluated.

Socioeconomic characteristics of the Tonga people

Like most parts of southern Zambia, the main economic activity of the people in the targeted village is predominantly subsistence farming (Gillet-Netting & Perry, 2005). Families survive on perennial cultivation of the staple crop, maize (corn). Although the menfolk play a significant role in planning and apportioning household duties, women and young children carry out most of the work. Villages are usually a collection of homesteads consisting of mainly polygamous semi-autonomous families living in close proximity of extended family akin. Colson (1958) stated that “

...the Tonga ... relate themselves to one another through ties of kinship, locality, clientship, and formal friendships ... clans are the most enduring units in the society” (p. 15).

Although children get into school when they reach the appropriate age, the odds of graduation depend on a balance between parental interest and encouragement, socioeconomic status and performance, on one hand, and the economic value defined by household labor, on the other. Since the Tonga people combine cattle rearing and arable farming (Gillet-Netting & Perry, 2005), boys tender livestock and plough the fields, while girls take up feminine chores and sibling childcare. Assigning of these roles depends on diligence and tact a child exhibits. Serpell (1993) reported similar dynamics among the Chewa where children who excelled in assigned duties gain the trust of parents and may be required to skip school to perform their duties if required when school is in session.

Instruments and data collection procedure

The study used open-ended semi-structured interviews to elicit for parents’ descriptions of their children’s behavioral aptitudes based on cultural and societal expectations based on their lived parenting experiences. Additionally, the ethnographic design made it easy to subjectively report respondents’ narratives from the emic point of view “in a third person dispassionate voice,” (Creswell, 2007, p. 69). Recorded responses were stored on a password-secured Samsung S3 Mobile Phone, thereafter, transcribed, classified thematically, and interpreted accordingly.

Data Analyses Procedure

The first task after data collection involved transcribing the informants’ responses. We based the analyses of informants’ narratives on Wolcott’s (1994) descriptive, analytical, and interpretive aspects. Through descriptive narrations, evaluations of children’s cognitive functioning are classified according to emerging themes. An emerging picture of children’s behaviors based on their parents’ evaluations were documented using the informants’ actual words. Finally, because of expected parallels in culture and geo-economic settings, we compared Tonga conceptions to the Chewa of Eastern province of Zambia (Serpell, 1993).

IV. RESULTS

Respondents make a clear distinction between being intelligent (*kuba amaanu*) and being unintelligent (*kubula maanu*). These two concepts, however, differ significantly from western understanding of intelligence. Intelligent behavior among the Tonga reflects socially constructed interpersonal and hierarchical relationships informed by children’s attitudes in response to requests from elders as well as the diligence and tact they exhibit. Differences between intelligent and unintelligent children are not quantitative and vertically defined, but are instead qualitative descriptions of what society construe as good and bad behavior. For instance, when asked to describe the characteristics of an intelligent child, Selina, a mother of six children, asked whether the

authors requested her to describe school-based (*maanu akucikolo*) or social (*abukkale*) intelligence. Clearly, there is a distinction between being intelligent at school and at home. Four core concepts outlining the characteristics emerged from data analyses. These concepts are discussed in the section below.

The Four Core Concepts of Intelligence

The four core concepts associated to intelligence are *kumvwa* (to follow instructions), *kutumika* (to be responsible), *kusyomeka* (to be trustworthy), and *kucenjela* (to be clever), and informed by the concepts of *maanu* (cognition) and *busongo* (wisdom). Intelligence is defined in terms of tacit knowledge, and intelligent behavior is judged primarily based on the common benefit of society rather than personal gratification. Our findings show significant deviations from western cultures, which according to Geertz (1984) defines intelligence from an individualistic perspective. Tonga conceptions of intelligence are based on a collectivist perspective where “people are motivated to find a way to fit in with relevant others, to fulfill and create obligation, and in general to become part of various interpersonal relationships” (Geertz, 1984, p. 227). Therefore, it is not surprising that socially oriented behavioral attributes play a significant role in defining intelligent behavior among the Tonga.

Responses suggest that competence is not of utmost importance, what is significant is the show of respect to the person who assigns the task. Children are subservient to elders to gain acceptance. As Muumpa (pseudonym), a 46-year old father of eight children explains:

The difference between intelligent and unintelligent children is in how fast they react to requests and commands. A child who delays in responding to requests from elders is not intelligent. As an elderly person, I am not supposed to make same request twice. The child must do it the first time I ask.

In the following section, the authors provide detailed descriptions of each concept followed by brief analyses.

Intelligence as Following Instructions (Kumvwa)

An intelligent child follows instructions from any elderly person and carries them out with due diligence without any hustle or any show of impertinence. Following instructions (*kumvwa*; literally meaning to listen) is a highly desirable behavioral characteristic in children. For this reason, all parents have to ensure that children develop this trait at an early age. Children’s failure to exhibit this trait reflects negatively on the child’s upbringing. As a result, being good at following instructions reflects well on the parent. On the other hand, children who fail to listen and follow instructions are considered to be insolent or naughty. In describing an unintelligent child, Selina (a mother of two boys and a girl) says:

A child who does follow instructions is not intelligent ... if I said “my child, look you know we have problems;

could you erect an enclosure around the garden to keep stray animals away” and does not do it. That child is not intelligent.

However, in most cases, the ability to listen and follow instructions is not evaluated in the light of how well the task is done. Failure to perform the prescribed tasks is not harshly or admonished, instead evaluations are based on effort.

Intelligence as Being Responsible (Kutumika)

Following instructions alone is not enough, children must also show some level of responsibility as they perform their assigned chores. Respondents note that following instructions and taking responsibility go side by side. As Selina explains:

An intelligent child listens and follows his parents’ requests (*kumvwa*), takes responsibility (*kutumika*) for the outcome. As a parent, you can give responsibilities and rely on him to do it properly.

The Tonga presume that a child should follow instructions before s/he is given responsibilities. In this case, the word *responsibility* takes undertones of both an adjective and a noun, as it describes both behavioral characteristics and has some connotations related to accountability.

Intelligence as Being Trustworthy (Kusyomeka)

Among the Tonga, respondents argued that trustworthiness is a trait shown by children who are good at both *listening* and taking responsibility. Unlike western definitions of intelligent behavior, Tongas do not view intelligence as vertically graduated skills (as in Gardner’s multiple intelligences), but considered it as a set of lateral skills of equal importance. Mutinta describes the three concepts (*kumvwa*, *kutumika*, and *kusyomeka*) as follows:

A responsible child is one who is trustworthy. When you ask him to do something for you, s/he can be trusted to do everything or all tasks and will ensure that the tasks are done with due diligence.

On the other hand, Selina adds that behavioral characteristics of an untrustworthy child as follows:

One who does not fulfill his duties when requested to. For instance, when an elderly person asks them to go on an errand for you somewhere, an untrustworthy will not go. You ask him/her, “take this item to that person,” the child may leave, but will not reach the destination.”

Being trustworthy embodies both following instructions and taking responsibility for outcomes of one’s actions, but a trustworthy child is more desirable and receives more nominations on scale of responsibilities.

Intelligence as Being Clever (Kucenjela)

The term *kucenjela* literally means cleverness and is very closely associated with cognitive adeptness, as defined by western education. When used to describe culturally acceptable and normative intelligent behavior among children,

kucenjela transcends the other three characteristics (*kumvwa*, *kutumika*, and *kusyomeka*), but without them, the term is associated with negative overtones. For instance, when a clever child uses these skills to evade his responsibilities. Therefore, *kucenjela* must be associated with *busongo* (wisdom), but being clever does not guarantee that the child is behaving intelligently. Jelina makes the distinction between clever and responsible children:

Cleverness and being responsible are also different characteristics. Some children can be clever without being responsible. Some may not be clever, but responsible.

In some cases, children classified as clever are usually viewed with suspicion and may not be nominated to carry out sensitive and delicate chores for fear that they may pretend to have completed their chores satisfactorily when in fact not.

V. DISCUSSION

The aim of this study was to identify and describe the concepts of indigenous intelligence as defined by the Tonga parents of Southern Zambia. The main findings of the study relates to the following four socially oriented characteristics: following instructions (*kumvwa*), being responsible (*kutumika*), being trustworthy (*kusyomeka*), and being clever (*kucenjela*). Many African cultures share this view of intelligence (Nsamenang, 2006; Serpell, 1993), such as Serpell's *nzeru*, *chenjela*, *tumikila*, and *khulupirika* characterizations of intelligent behavior among children. Thus, intelligence is a function of the children's developmental niche (Sternberg, 2004; 2007) and transmitted as prescribed by their parents' ethnotheories (Super & Harkness, 1986).

Analyses and Interpretation of Tonga Concepts of Intelligent Behavior

All the four concepts related to intelligence that have been described above are framed based on sociocultural realities of the Tonga people. Evaluations of intelligent behavior draw on activities related to income generation; mainly how children apply their skills in harnessing local technologies to produce food to ensure collective survival and maintenance of the social order through conformity to authority. Thus, children are more compliant rate highly on parents' scale of following instructions, taking responsibility, trustworthiness, and cleverness with reference to family chores than their less acquiescent peers. Our findings suggest that Tonga parents value quality over quantity. Additionally, Tonga children acquire life skills through apprenticeship from more skilled peers and elders, and they have to attain appropriate competence levels. Failure to do so during childhood spells doom in future. Moreover, the survival of society depends almost entirely on seamless interaction between the individual person and the large community achieved through *kumvwa*, *kutumika*, *kusyomeka*, and *kucenjela*. Therefore, by assigning responsibilities, parents are actually teaching children life skills so they are able to fit in the existing social structure and

contribute effectively to the commonwealth of society (Kaani, 2021a; 2021b). Parents envisage that unintelligent children develop into irresponsible adults.

Another notable finding was a dualism between school (*maanu akucikolo*) and social intelligence (*abukale*). More interestingly, parents were unable to explain how an intelligent child behaves in school. When asked to describe a child with school intelligence, Muumpa instead described children who are unintelligent by saying:

Unintelligent children abscond school lessons, as they do not go to school even if they leave home. They usually just return on the way. I think the reason why they miss school is because they are not intelligent. That is why they run away from school. ... they want to hide their dullness.

This statement suggests that parents equate school intelligence to social intelligence (mainly *kumvwa* and *kutumika*), although they were able to discriminate between expected outcomes. There was general agreement that some children who performed better than others did, but when the participants were asked question why there was a difference in performance, Selina stated that:

Some children fail because they do not go to school. When their friends are learning, failing students are absconding. ... When it is school time, they miss lessons and fail by not going to school.

Therefore, this finding seems to suggest that there are no inherent academic differences between intelligent and unintelligent children, but the latter fail due to devious absenteeism.

Interestingly, although the Tonga acknowledge that western concepts of intelligence are the bedrock of formal schooling, they expect intelligent children to excel at skills unique to their immediate ecological niches, and child development fosters desired skills within local knowledge systems. Ultimately, this study brings out interesting findings as far as understanding of intelligence in non-western cultures is concerned. However, as with every qualitative study, respondents' narratives are difficult to authentic. Additionally, the study sample is relatively small to make wider generalizations. Consequently, more studies focusing on the identified concepts of situated intelligence are needed to enhance our understanding of cognition in non-western cultures.

VI. IMPLICATIONS OF THE FINDINGS

The findings of this study have some implications on both educational policy formulation and implementation. Educating a child is a joint venture between two institutions; the school, on one hand, and the family, on the other. Based on these findings, there is a mismatch between skills fostered at home and western education; differences which could account for the poor performance in children from non-western cultures (Serpell, 1993; Sternberg, 2005). Therefore,

holding all children to the same standards when cultures foster different standards is not only unfair, but also detrimental to their progress. Without compromising the overall quality of western education, which encourages universal skills for survival in a globalized world, educators should incorporate indigenous knowledge systems to promote learning. It is probably failure to acknowledge local knowledge and/or inability to incorporate it that could explain perceived functional differences in school achievement between western and non-western children.

ACKNOWLEDGMENTS

Competing interests: The authors declare that they have no financial or personal relationship(s), which may have inappropriately influenced them in writing this article.

REFERENCES

- [1] Altheide, D. L., & Johnson, J. M. (2011). Reflections on interpretative adequacy in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.) (4th Ed). The SAGE Handbook of Qualitative Research. Thousand Oaks, CA: Sage Publications.
- [2] Babatunde, E. D. (1992). A Critical Study of Bini and Yoruba Value Systems of Nigeria in Change: Culture, Religion, and Self. Lewiston, NY: The Edwin Mellen Press.
- [3] Cliggett, L. (2000). Social components of migration: Experiences from Southern Province, Zambia. *Human Organization*, 59, 125-135.
- [4] Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among the five approaches*. Thousand Oaks, CA: Sage Publications.
- [5] Engebretson, J. (2011). Clinically applied medical ethnography: Relevance to cultural competence in patient care. *Nursing Clinics of North America*, 46, 145-154. doi:10.1016/j.cnur.2011.02.002
- [6] Gillett-Netting, R., & Pery, A. (2005). Gender and nutritional status at the household level among Gwembe valley Tonga children, 0 -10 years. *American Journal of Human Biology*, 17, 372-375.
- [7] Grigorenko, E. L., Geissler, P. W., Prince, R., Okatcha, F., Nokes, C., Kenny, D. A., ... Sternberg, R. J. (2001). The organization of Luo conceptions of intelligence: A study of implicit theories in a Kenyan village. *International Journal of Behavior Development*, 25, 367-378.
- [8] Kaani, B. (2021a). Pedagogical content knowledge for initial reading instruction: The peter effect in teacher education in Zambia. *ZANGO: Zambian Journal of Contemporary Issues*, 33, 29-42
- [9] Kaani, B. (2021b). Writing Proficiency across Diverse Writing Systems: An Evaluation of the Effects of Orthographic Depth. *Zambia Interdisciplinary Journal of Education*, 2(1), 41-56.
- [10] Kagitcibasi, C. (2005). Autonomy and relatedness in cultural context: Implications for self and family. *Journal of Cross-Cultural Psychology*, 36, 403-422
- [11] Kochalumchuvattil, T. (2010). The crisis of identity in Africa: A call for subjectivity. *Kritike*, 4(1), 108-122. http://www.kritike.org/journal/issue_7/kochalumchuvattil_june2010.pdf
- [12] Maunganidze, L., Kasayira, J. M., & Mudhovozi, P. (2011). Educational assessment and analysis in the African cultural context. In A. B. Nsamenang & T. M. S. Tshombe (Eds.). *Handbook of African educational theories and practices: A generative teacher education curriculum*, (pp. 321-336). Bamenda, Cameroon: Human Development Resource Centre.
- [13] Mpfu, E., Ntinda, K., & Oakland, T. (2012). Understanding human abilities in Sub-saharan African settings. *Online Readings in Psychology and Culture*, Unit 4. Retrieved from <http://scholarworks.gvsu.edu/orpc/vol4/iss3/2>
- [14] Nsamenang, A. B. (2006). Human ontogenesis: An indigenous African view on development and intelligence. *International Journal of Psychology*, 41, 293-297.
- [15] Ogunaike, O. A., & Houser, R. F. Jr. (2002). Yoruba toddler's engagement in errands and cognitive performance on the Yoruba mental subscale. *International Journal of Behavioral Development*, 26, 145-153.
- [16] Serpell, R. (1993). *The Significance of Schooling: Life-journeys in an African Society*. Cambridge, UK: Cambridge University Press.
- [17] Sternberg, R. J. (2004). Culture and intelligence. *American Psychologist*, 59, 325-338. DOI: 10.1037/0003-066X.59.5.325
- [18] Sternberg, R. J. (2005). The theory of successful intelligence. *InterAmerican Journal of Psychology*, 39, 189-202.
- [19] Sternberg, R. J. (2007). Who are the bright children? The cultural context of being and acting intelligent. *Educational Researcher*, 36, 148-155
- [20] Super C. M., & Harkness, S. (1986). The developmental niche: a conceptualization at the inter-face of child and culture. *International Journal of Behavioural Development*, 9(4), 545-569.
- [21] Valsiner, J. (2003). Culture and its transfer: Ways of creating general knowledge through the study of cultural particulars. *Online Readings in Psychology and Culture*, Unit 2. Retrieved from <http://scholarworks.gvsu.edu/orpc/vol2/iss1/7>
- [22] Wolcott, H. F. (1994). *Transforming qualitative data: Description, analysis, and interpretation*. Thousand Oaks, CA: Sage.
- [23] Yang, S., & Sternberg, R. J. (1997). Conceptions of intelligence in ancient Chinese philosophy. *Journal of Theoretical and Philosophical Psychology*, 17(2), 101-119.

AUTHORS



Dr. Bestern Kaani is a Lecturer of Educational Psychology, Cross-Cultural Psychology, Educational Research and Special Education at the University of Zambia, Lusaka, Zambia, where he also got his Bachelor of Arts in Special Education and Geography (2001), and

Master of Education in Special Education (2006). Bestern received his Ph.D. in Curriculum and Instruction with an emphasis in Reading and Literacy from Texas A&M University (TAMU), College Station, Texas in 2014 under the supervision of Professor R. Malt Joshi. His PhD dissertation received a Dissertation of the Year Award for students graduating in December 2014. Bestern Kaani is a founding Editor-In-Chief (2020 to 2022) of the *Zambia Interdisciplinary Journal of Education* (ZIJE). He is currently serving as a reviewer for *Reading and Writing: An Interdisciplinary Journal* (2015-todate). Bestern has published a number of peer-reviewed articles in high impact journals and has been involved in a number of NIH-funded projects in Zambia, including the Learning Disabilities Project –Zambia (2004-2006) and Bala Bbala Project in Macha, Zambia (2009-2013). He has won a number of international academic awards, notably the Developing Country Fellowship from the International Society for the Study of Behavioural Development (ISSBD) in 2009 and The Witkin-Okonji Award from International Association of Cross-Cultural Psychology (IACCP) in 2016. His current research interests include the

effects of orthographic depth on literacy development among bilingual children in the developing world, teacher training in reading, and researching how culture affects cognitive development in culturally diverse environments.



Nisbert Machila is PhD student at the University of Zambia in History education. Her research topic: *Critiquing the teaching of history in Zambian secondary schools through Basil Bernstein is a unique and educative study* as it compares the various

curriculums in secondary school history. She is also a lecturer in the department of language and social sciences education under history education section. Before joining the university she worked and taught secondary school history at Chelstone Secondary school. She has published a number of scholarly works in history education and has presented in both local and international conferences. Her areas of research interests include: history education, curriculum, culture, policy and gender.