

Indigenous knowledge language systems as source of educational psychology principles for teaching and learning: A case of traditional African cultures of Zimbabwe

Patrick Chadamoyo¹ Emmanuel Dumbu^{1,2*}

1. Senior Student Advisor: Department of Student Services, Zimbabwe Open University, Masvingo Regional Campus, 68 Hellet Street, Masvingo, Zimbabwe.
2. Senior Lecturer and Regional Programme Coordinator: Zimbabwe Open University, Faculty of Commerce and Law, Masvingo Regional Campus, 68 Hellet Street, Masvingo, Zimbabwe.

*dumbuworks@gmail.com Cell: 00263 772 920 872

Abstract

The study explores how the traditional African cultures of Zimbabwe have used their indigenous knowledge of *tsumo* (proverbs) for teaching their children cultural norms and values. The study argues that if educational psychology is about what goes on in teaching and learning, then the ways the traditional African elders have used proverbs (*tsumo*) to successfully teach children about ways of behaving, are based on educational psychology principles. The study adopted the qualitative field- based approach whereby the Karanga language speaking people of Masvingo province of Zimbabwe were interrogated on how the statements of proverbs (*tsumo*) entrenched in their language, are used to teach children ways of understanding the world. The study also used documentary evidence of selected statements of proverbs (*tsumo*) to illustrate the relationship between the potential effect of these proverbs (*tsumo*) on changing human behaviour and that of the principles of educational psychology. Results have indicated that the scientific methods that culminated in the pronouncement of the general statements of educational psychology theories and principles were and are still the same methods that elders of the indigenous African societies used and still use today to formulate general statements of truths called proverbs (*tsumo*).

Key words: traditional African cultures; indigenous knowledge; proverbs (*tsumo*); educational psychology; scientific knowledge

1. Introduction

In the recent years, the increasing awareness and global recognition of Indigenous Knowledge (IK) systems as a growing field of inquiry (Battiste,2005) and as a distinct, legitimate and valuable source of knowledge (Australian

Academic and Research Libraries,2005), raises a range of issues that need to be interrogated. Whilst the meaning and definition of IK systems can best be understood by people who practice them (Battiste, 2005), a number of scholars worldwide have attempted to define IK but it appears it has defied a simple definition. Nevertheless, indigenous knowledge is commonly understood to be the traditional knowledge or local knowledge of the indigenous peoples (Nakashima, Prott and Bridgewater, 2000) that is unique to that particular culture or society. According to Wikipedia, the indigenous peoples are ethnic groups that are regarded as the ‘original inhabitants’ of a territory. IK is generated and transmitted orally and freely (Brush, 2009). The United Nations (UN) view IK as encompassing all forms of knowledge-technologies, know-how skills, practices and beliefs that enable a community to achieve stable livelihoods. From another angle, IK is mainly of a practical nature particularly in the field of agriculture, fisheries, health, horticulture and forestry (Australian Academic and Research libraries, 2005). As for the World Bank (1997), it is the basis for local level decision-making, education, natural resource management, and a host of other activities for sustainable development. Above all, IK takes the form of stories, songs, folklore, proverbs, cultural values, rituals, community laws, and local languages (Barnhardt and Kawagley, 2005), as well as agricultural practices including the development of plant species and animal breeds.

Gleaning through all these definitions, it is apparent that IK is imbued with all forms of global knowledge and hence it should be recognised, valued and appreciated (Ellen and Harris, 1996). However, despite all these efforts by international scholars and international organizations such as the UN, International Labour Organizations and the World Bank to recognise and value the role of IK in sustaining the livelihood of millions of people globally, it still remains devalued, when contrasted with the Western Knowledge (WK), as unevaluated and untested data set for the scientific community to extract, validate and incorporate into the scientific frameworks (Australian Academic and Research Libraries,2005).

Given this scenario, and considering that all or much of the IK was transmitted orally through a language system, it can be inferred that all this misrepresentation of traditional knowledge in the minds of the western people, could have come about as a result of lack of documentation associated with the indigenous ways of knowing (Battiste, 2005). The study seeks to demystify the western thinking by articulating and delineating the epistemological and psychological underpinnings associated with the indigenous ways and their use of language in the teaching and learning contexts. The study dwells on drawing a comparative analysis between the documented scientific processes embedded in western scientific knowledge with the undocumented scientific process behind the indigenous knowledge of language systems. This parallel analysis enables the reconstruction of that which has not been documented about the IK and brings forth what may be accepted as having been the psychological and scientific processes behind the formulation and use of ‘tsumo’ (proverbs) as an aspect of language, in the lives of the indigenous Karanga people of Zimbabwe. Simply put, the study argues that if the Karanga people have used *tsumo* (proverbs) for ages, generation after generation, to teach their people about ways of understanding the world and about human behaviour, and that educational psychology theory, as espoused by western knowledge, is all about teaching and learning of the ways of thinking and human behaviour (Gross, 2005), then *tsumo* (proverbs) should have been or are educational psychology principles or theories in their own right.

To have more insight into the study context, the study draws its attention to the significance and relevance of the

Karanga people who are one of the Shona ethnic groups of Zimbabwe. The Karanga are the indigenous people of Masvingo province, an area which lies in the south eastern part of Zimbabwe, bordering the Great Zimbabwe Monuments. They are indigenous because they are deemed the 'original inhabitants' of that part of the country. The Karanga people speak one of the Shona language dialects called Karanga and alongside other Shona language dialects such as Zezuru, Manyika, Ndau and Korekore, the Karanga dialect has generated and cultivated a deep and rich indigenous language system characterised by *tsumo* or *shumo* (proverbs).

2. Contextualizing *tsumo* or *shumo* (proverbs)

The indigenous knowledge of languages and its relevance to informing indigenous peoples about world views and ways of life has sparked debate and widespread discussion among various scholars interested in indigenous knowledge systems. The issue of *tsumo* (proverbs) as an aspect of the indigenous knowledge system of the Shona people has also captured attention of many scholars of the indigenous language systems, the earliest ones being Munjanja (1965), Fortune (1975), Hamutyinei and Plangger (1974) Chimhundu (1980) and more recently, Mapara (2009) and Matereke and Mapara (2009). These authors have tried to define the term *tsumo* or *shumo* (proverb) and it appears there is a general agreement that *tsumo* or *shumo* are summary statements of generalised truths that have accumulated over time through the experiences of preceding generations, and just like any other indigenous knowledge systems, they have been transmitted from generation to generation orally and freely (Hill, 2004; Matereke and Mapara, 2009). The terms *tsumo* or *shumo*, as Chimhundu (1980) explains, are commonly regarded as dialectical variants of the same lexical item for proverb, with *shumo* having a Karanga orientation and *tsumo* being Zezuru.

Broadly speaking, the indigenous people of the traditional Shona cultures used *tsumo* proverbs as expressions of beliefs, values and knowledge of the community that would have created them (Matereke and Mapara, 2009). Since time immemorial, proverbs (*tsumo*) have served as teaching and learning strategies for both adults and children. They were regarded as a body of knowledge and wisdom from which explanations of every situation in life could be derived (Hamutyinei and Plangger, 1974). They were expressed and are still expressed in proclamations such as *vakuru vedu vakati* or *vakuru vedu vaiti* or *vakuru vedu vanoti* (our elders say) (Mapara, 2009) when introducing a decision-making process or when resolving conflicts or disagreements, or when warning those that would seem to be deviating from cultural norms (Chimhundu, 1980). For instance, in the traditional courts, one could hear elders saying to a man who is refusing to accept a woman he has impregnated on grounds that she has other children who are not his own *Iwe muchinda, vakuru vakati wakweva sanzu wakweva nemashizha aro* (Young man, our elders said, one who drags a tree branch, does so together with its leaves). Similarly, in everyday life, those who seemed to deviate from group norms or were disrespectful to relatives or friends, could be warned by saying *Shamwari, natsa kwaunobva, kwaunoenda husiku* (My friend, do good where you leave, where you go it is darkness).

In fact, as most authors of indigenous knowledge observe, there are as many proverbs (*tsumo*) as there are life situations requiring clarification or explanation (Chimhundu, 1980, Mapara, 2009). The objective of the study was to demonstrate that these proverbs (*tsumo*) were psychological theories just as good as Western knowledge psychological theories of Piaget, Freud or Skinner because they were based on scientific method of observation, hypothesizing, experimentation and drawing of conclusions. The difference between Western scientific knowledge

and traditional scientific knowledge is that whatever influenced and inspired the indigenous scientific knowledge was not documented (Battiste, 2005). Thus, the study contested the idea that if something was not documented; it does not mean that it did not happen. In addition, the only other difference between Western psychological theory and the indigenous knowledge of proverbs (*tsumo*) is that, as Chikuhwa (2007) observes, *tsumo* (proverbs) cannot be traced to specific persons or theorists.

3. Theoretical framework

The study of the indigenous knowledge of *tsumo* (proverbs) was built and informed by our understanding of the meaning and significance of the scientific method, scientific principle and scientific theory. In an attempt to define a scientific method, Zamora (2004:1) states that a scientific method has four steps namely: observation and description of phenomena, formulation of a hypothesis, testing the hypothesis by analysing the results of observations through experimenting, and finally establishing a theory based on repeated verification of the results. In the same vein, an extract from Science Made Simple (2006) confirms Zamora's statement and describes the steps of the scientific method as observation, hypothesis, prediction, experimentation and conclusion. In this case, the conclusion is the establishment of a theory. For this reason, the intent of this study was to establish that the proverbs (*tsumo*) that originated from the IK of the Karanga people were and are based on scientific principles of observation, hypothesis, experimentation and making conclusions and can also be categorised into the psychodynamic, the behaviourist, the cognitivist, the humanist as well as the social learning perspectives, as we know them today.

4. Statement of the Problem

Despite all the efforts by international scholars and international organizations such as the United Nations, International Labour Organizations and the World Bank to recognise and value the role of IK in sustaining the livelihood of millions of people globally (Wikipedia), it still remains devalued, when contrasted with the Western Knowledge (WK), as unevaluated and untested data set for the scientific community to extract, validate and incorporate into the scientific frameworks (Australian Academic and Research Libraries,2005). The study therefore sought to demonstrate that if the IK language systems of *tsumo* (proverbs), have been used for teaching and learning ways of behaviour and of understanding the world, and Educational Psychology is all about teaching and learning of human behaviour, then the IK of *tsumo* (proverbs) is Educational Psychology in its own right.

5. Objectives of the study

To establish the potential effect of *tsumo* (proverbs) in changing human behaviour and that of the principles of educational psychology as we know it today

To articulate and delineate the epistemological and psychological underpinnings associated with the indigenous ways of thinking and use of language aspect of *tsumo* (proverbs) in the teaching and learning contexts.

To establish and demonstrate that the IK of *tsumo* (proverbs) was (is) built on the foundation of the scientific knowledge and psychological processes in educational psychology and therefore *tsumo* (proverbs) are indeed educational psychology principles.

To reconstruct the missing link between IK and WK

6. Research Questions

The main question addressed by the study was:

What is the relationship between the IK language aspect of *tsumo* (proverbs) and the WK aspect of educational psychology principles in the teaching and learning contexts?

The main question generated other sub-problems such as ‘What are these *tsumo* (proverbs)?’, ‘How are they formulated and what are their sources and intent?’

7. Methodology

7.1 The Sample

The study drew its sample from a population of the Karanga people who are one of the Shona ethnic groups of Zimbabwe. The study focused on people dwelling in the areas surrounding Chiefs Mugabe, Mapanzure and Shumba territories, which border the Great Zimbabwe Monuments that lie in the south-eastern part of Zimbabwe. Thus, during the time of data collection, the authors, who were and are also the indigenous people of the Karanga culture, had time long enough of interacting with the elders of the Karanga people, as well as participating in their day-to-day life, observing and interrogating how these people, in their natural environments, used and applied *tsumo* (proverbs) as a source of wisdom that they used to inform each other about world views and expected standards of behaviour.

7.2 The Research Design

The study used an ethnographic research design based on participant observation and field work. Ethnographic research design was found appropriate because it enabled the researchers to gather data based on a triangulation of methods namely: interviews, observation and document analysis (Genzuk, 1999). Using quotations, descriptions and excerpts of documents about the Shona language systems, the researchers were able to draw a narrative description of how the Karanga people used their language namely *tsumo* (proverb) to inform each other about world views and rules and ways of behaving.

Data were analysed qualitatively using document analysis of interview quotations; self reported narrative descriptions and excerpts of the Karanga *tsumo* (proverbs) and how these were related with educational psychology principles as understood within the frame of reference of the Karanga people.

8. Results and Discussion

In order to establish what could have influenced the indigenous people to formulate statements of *tsumo* (proverbs) or how they could have arrived at such conclusions, the researchers asked the elders to reconstruct and narrate how they derive a the statement of *tsumo*. The simple answer given by the elders was that these statements of *tsumo* (proverbs) were derived from observations of interactions among people, from which they drew conclusions that they would use as reference points when teaching people ways of behaving. A typical example given was how they derived a statement of *tsumo* (proverb) namely *rega zvipore akabva mukutsva* (A burnt child dreads fire) that they used to teach the child, for example, to fear fire. Using this *tsumo* (proverb) namely: *rega zvipore akabva mukutsva* (A burnt child dreads fire), the following is a documented narrative of what the elders said could have literally happened.

After observing that the child, especially at crawling stage, is not afraid of fire or could touch the fire indiscriminately, we hypothesize that if one is left to feel the heat or touch the fire, then one will be afraid of it. To prove this, the child is taken in a controlled situation where the parent manipulates the child's hand by moving it close to the burning fire up to a point when the child feels the heat and begins to withdraw the hand. In most cases, the parent or any caregiver warns the child by saying *pisa* (heat). This is repeated several times and in different contexts until the child is left in a natural setting where a burning fire is within reach. The prediction is that one would not touch the fire. After careful observation of the child's behaviour, the conclusion is that the child does not touch the fire because 'fire burns.' Furthermore, it is observed that the child can withdraw a hand from any object (not necessarily fire) if the caregiver sounds the word *pisa* (heat). On observing that the child is now afraid of fire, the elders would then say *rega zvipore akabva mukutsva* (A burnt child dreads fire).

After qualitatively analysing the above narrative or procedure, the researchers found out that the procedure could be presented scientifically using the western knowledge of a scientific process as shown below.

Aim of the experiment: To teach the child that 'fire burns' expressed in Karanga proverb as *rega zvipore akabva mukutsva* (A burnt child dreads fire)

Stage One

OBSERVATION

The child indiscriminately touches fire and is not afraid of fire

Stage Two

HYPOTHESIS

If the child feels the heat, the child does not touch the fire.

Stage Three

EXPERIMENTING

The child is made to feel the heat plus the caregiver saying the word *pisa*. This is followed by successive pairing of the word *pisa* plus the child feeling the heat. After some period, the child withdraws hand just by hearing the word *pisa*. The child has learnt by classical conditioning.

Stage Four

PREDICTION

Leave the child alone, with fire within reach; the child does not touch fire.

Stage Five

CONCLUSION

The child does not touch the fire because fire burns

This is expressed as *rega zvipore akabva mukutsva* (A burnt child dreads fire). When the above procedure is examined closely; it is found out that it clearly typifies a scientific method by its own right and by any Western standards. When juxtaposed with the western knowledge of educational psychology theories, it is again found out that it exemplifies the Behaviourist classical conditioning theories or learning by association whereby Pavlov experimented with dogs and used continuous pairing of meat and bell sound (association) until the dog could salivate to the sound of the bell only, the same way the child in the 'indigenous experiment' is frightened by the word *pisa*

To confirm observations and results of the first experiment, the researchers documented another supportive evidence of the scientific method and processes that culminated in the drawing of a conclusion and formulation of another statement of *tsumo* (proverb) *chindiro chionoenda kunobva chimwe* (A plate goes where another one comes from) with an English equivalent of 'A good turn deserves another'

The narrative as given by the elders was as follows:

One starts by giving a neighbour, for example, a basin of mealie-meal. The neighbour may return or respond by giving back something but not necessarily a basin of mealie-meal but a cup of salt or a bundle of vegetables. If this process is practiced by different people in different contexts with the process of giving and receiving repeated and observed several times and for a long period in the lives of the people, the conclusion drawn from the observations and analysis of the events, culminate into the formulation of the statement of *tsumo* (proverb) *chindiro chionoenda kunobva chimwe* (A good turn deserves another) meaning, one is likely to continue with a certain type of behaviour if rewarded.

When this statement of *tsumo* (proverb) *chindiro chionoenda kunobva chimwe* (A plate goes where another one comes from) is also compared with the western knowledge of educational psychology theories, it is found out that it is typical of the Behaviourist theory of operant conditioning by Skinner (Skinner, 1953) which simply states that

behaviour is a result of reward systems (or punishment).

The point which is revealed by the results is that the traditional knowledge of *tsumo* (proverbs) was not created out of sheer common sense (Battiste, 2005). They were real scientific principles or theories based on scientific evidence identical to what could be accepted by the scientific world of the West. The application and use of the Karanga *tsumo* (proverbs) have stood the test of time (Chimhundu, 1980; Mapara, 2009) and can be applied in different contexts and across communities and still carrying the same effect and acceptance. If it was not the fact that they were built on scientifically tested evidence, they could have faded over time or fallen by the way side.

In a way, what these results are confirming is simply the idea that the indigenous people had their own ways of systemizing and categorizing information they generated from their own unique experiences and environments (Barnhardt and Kawagley, 2005).

8.1 Matching tsumo (proverbs) with educational psychology perspectives of Western knowledge

In view of the scientific evidence associated with the formulation of ‘tsumo’ (proverbs) and the analysis of their function in the oral tradition of teaching and learning of human behaviours, the present study discovered that these statements of proverbs can be matched one to one with the educational psychology principles, or they can be categorized into broad educational psychology perspectives as known in the Western knowledge systems. As alluded to earlier on, the eurocentric knowledge of educational psychology theories and perspectives has been categorized into broad schools of thought known as: the psychodynamic perspectives, the behaviourist perspectives, the cognitivist perspective, the social learning perspective, the humanist perspective, among others. The following discussion and synthesis based on selected Karanga *tsumo* (proverbs) and some extracted from the writings of A.C. Hodza (Hodza,1974), H.Chimhundu (Chimhundu,1980) and G.S. Fortune (Fortune,1973) illustrate this symbiosis that exists between statements of *tsumo* (proverbs), as known in the indigenous world, and the educational psychology principles, as known in the western world.

8.2 Traditional African Psychological perspectives- tsumo (proverbs) in the psychodynamic domain

In western knowledge, Freud’s and Erikson’s psychosexual and psychosocial theories respectively emphasize on the importance of early experiences and their effect on future behaviour. These theories inform us that if the child does not experience a healthy development during the early stages of development, particularly in the oral, anal and phallic stages according to Freud, or if the psychosocial conflicts are not resolved successfully at these early stages, then the child might experience mal-adjusted behaviour in future. In other words, what happened in the past or what happens now, if not properly accommodated or accounted for, may seem not harmful now but may have serious consequences in future. For the same reasons, the indigenous Karanga people had known all about that, hence, they used their IK language system of proverbs (*tsumo*) to warn or teach their folk about taking care of the present in order to harmonise the future.

Thus, the *tsumo* (proverb) which says: *Natsa kwaunobva kwaunoenda husiku* (Do good with people of the area you

are coming from because where you are going there is darkness) means one needs to relate well with relatives and friends one has now because one never knows what the future holds. If one gets in trouble, one may need to come back to these friends and relatives.

Similarly we may relate other indigenous *tsumo* (proverbs) with the psychodynamic perspective. The following two *tsumo* (proverbs) illustrate this. Thus, one could hear the elders saying: *Chisi hachiyeri musi wacharimwa* (Working in the fields on prohibited days may have no effect on the day the seeds are sown, but may cause serious consequences in future; or *China manenji hachifambisi* (A bad omen moves slowly or takes long to have effect)

Again the emphasis here is that the past is what is affecting the present or the past or present may seriously affect the future and that is the essence of the Western psychodynamic perspectives, as well as the indigenous 'psychodynamic' perspectives.

8.3 Traditional African Psychological Perspectives tsumo (proverbs) in the Behaviourist domain

The indigenous knowledge systems had also known about the Behaviourist principles of learning by classical conditioning and operant conditioning long before the front runners of Western behaviourist psychology. The Behaviourist believed that all behaviour is shaped by the environment through classical conditioning or operant conditioning. Apart from such *tsumo* (proverbs) as *Rega zvipore akabva mukutsva* (A burnt child dreads fire) or *Chindiro chionoenda kunobva chimwe* (A good turn deserves another) that we have used to demonstrate classical and operant conditioning respectively, we can pick another example *Mwana washe muranda kumwe* (The chief's son is a servant elsewhere) which the elders used to demonstrate their knowledge of the power of the environment in shaping human behaviour. This means a person might have a certain type of behaviour in a given area but when taken to another different environment, the same person can develop a totally different behaviour. In this case the son of a chief when he is in his own area can behave like a chief. However, when put in an environment that does not support or allow such kind of behaviour (of behaving like a chief), he becomes a servant or he adjusts his behaviour accordingly.

Just as the behaviourist educational psychology theories would advocate the use of praise or incentives as positive reinforcers to desired behaviour, the indigenous people had such knowledge too. In situations when they wanted to reward good behaviour, you could hear the elders saying, *Tenda muchakata ugowa* (Thank the fig tree so that it bears more fruits); or *Mugoti unopiwa anyerere* (A porridge stick is given to one who is quiet).

8.4 Traditional African psychological theories tsumo (proverbs) in the social learning domain

The indigenous Karanga communities were also aware of Bandura's Social Learning theories which emphasize learning by observation through imitation and modelling (Bandura, 1965) In situations where they wanted to teach elders good behaviour so that they would get respect from the young ones you would hear the elders saying *Gudo guru peta muswe kuti vaduku vakutye* (A big baboon should fold its tail in order for the young ones to fear it). This means, for the young children or subordinates to respect (fear) their superiors, the elders or superiors themselves

should behave well so that the young observe what the elders do and imitate or model after them

8.5 Traditional African psychological theories-*tsumo* (proverbs) in the cognitivist domain

The indigenous Karanga people were also cognitivists. The Western knowledge of the cognitivist perspective emphasizes the power of the intellect or internal states in influencing human behaviour such as in decision-making, problem solving or information processing. The leading cognitivists such as Piaget (Piaget, 1970), and Bruner (Bruner, 1966), believed that thought processes developed as a result of the interaction between heredity and environment through manipulation of objects and experimenting with ideas. In short, they emphasized active learning by doing. Likewise, the indigenous Karanga people knew all about this and their traditional wisdom or traditional psychology informed their people in the following *tsumo* (proverbs)

Commenting on the power of the internal states of the mind, the Karanga elders would say *Chinoziva ivhu kuti mwana wembeva anorwara* (What knows is the soil that the young of the mouse is sick). This means nobody knows what a person thinks until one says or does a thing. Emphasizing on the importance of prior learning, they would say *Muzivi wenzira yeparuware ndiye mufambi wayo* (One who knows the path that passes through a rock is one who always uses that path). This is acknowledging that what somebody has done or said is based on what one knows already.

On matters concerning decision-making, the elders would say *Kukanya hurangana* (mixing things is a result of agreement or consensus). This means whatever comes out of an agreed decision, blame is not given to one person. Again when encouraging shared decisions, they would say *Dzafura churu chimwe dzava nzivane*: (Those that have grazed at one anthill have become acquaintance). This means experience once shared unites people ever before. When encouraging people to talk or share ideas (interpersonal interaction), the elders would say, *Mwana asingacheme anofira mumbereko* (A baby that does not cry dies in the cradle)

Even the idea of Piaget of suggesting that one should be capable of doing tasks according to one's abilities and age (Gross, 2005), the wisdom of the elders was expressed by saying *Nzou hairemerwi nenyanga dzayo* (An elephant is not burdened by its own tusks). The elders were also aware of the potential or limitations of the hereditary factors. This means if one had performed below what was expected, one would defend oneself by saying *Veduwe murombo haarove chinenguo* (My people, a poor man never kills anything with a skin to it) or if others think that one is not utilising one's abilities and resources adequately, they would say *Mapudzi anowira kune vasina hari* (Squashes fall where there are no pots) with an English equivalent of 'Fortune favours fools'.

9. Conclusion

The underlining theme of this study was to show that the Karanga people of Zimbabwe have used their indigenous knowledge of *tsumo* (proverbs) in the teaching and learning contexts in the same manner the Western communities have used educational psychology principles and theories to inform the world about issues concerning the human mind and behaviour. The article argued that the indigenous language systems and the formulation of *tsumo* (proverbs)

transcend common sense because their creation was based on scientific method and processes that validated and authenticated the use and application of *tsumo* (proverbs) to various situations and across Karanga communities. The indigenous knowledge systems of *tsumo* (proverbs), just like any other indigenous knowledge systems was transmitted orally and freely from generation to generation and as such it suffers from lack of documentation. For this reason the study contested the idea that if something is not documented, then it becomes problematic to regard it as scientific, by providing the missing link, which is, demonstrating and reconstructing the scientific method and processes that could have formed the basis behind the formulation of statements of *tsumo* (proverbs). This is the biggest contribution that this study has made to the field of research in indigenous knowledge. It went beyond what other research studies in indigenous knowledge have gone by way of reconstructing the missing link in indigenous knowledge and it should remain the challenge of the present day scholars in indigenous knowledge to carry further the reconstruction theme and apply it to other areas such as medicine, agriculture, law among other areas. The study has also shown that *tsumo* (proverbs) were and are educational psychology principles and theories in their own right and the indigenous Karanga people had known educational psychology long before the western communities had known about it and therefore the Eurocentric knowledge cannot claim supremacy and dominance of having pioneered the origin and source of educational psychology.

The study therefore recommends that the present day education system should reconstitute the indigenous knowledge systems by first of all casting ideas in indigenous knowledge before introducing Western knowledge ideas in the teaching and learning of academic subjects. For this reason, the study proposes an emergence of a new body of knowledge to be known as ‘The Traditional African Perspective (TAP) or the Indigenous Knowledge Perspective (IKP) in Educational Psychology based on the use and application of the *tsumo* (proverbs) in the teaching and learning contexts just in the same manner the western knowledge of Educational Psychology is used and applied.

References

- Barnhardt, R. and Kawagley, A.O. (2005) Indigenous knowledge systems and Alaska Native Ways of Knowing Anthropology. *Education Quarterly*, 36(1), pp.8-23.
- Battiste, M. (2005) *Indigenous Knowledge: Foundations for First Nations*. University of Saskatchewan, Saskatoon, SK Canada.
- Brush, S.B. (2009) Indigenous Knowledge of Biological and Intellectual Property Rights: The Role of Anthropology: *American Anthropologist*, Volumje 95, Issue 3, pages 653-671 September.
- Chimhundu, H. (1980) ‘Shumo, Tsumo and Socialization in *Zambezia*, *viii*,(1) 37-51
- Ellen, R. and Harris, H (1996). “Concepts of indigenous environmental knowledge in scientific and development studies literature-a critical assessment”; draft paper, East-West Environmental linkages Network Workshop 3, Canterbury
- Fortune, G. (1973) Form and Imagery in Shona Prtoverbs, *Zambezia*,4(ii).

Genzuk,M (1999) A Synthesis of Ethnographic Research, Center for Multilingual, Multicultural Research University of Southern California, Los Angeles.

Hamutyinei, A. and Plangger A.B. (1974) Tsumo-Shumo, Shona Proverbial Lore and Wisdom. Gwelo, Mambo Press.

Hill,F.W. (2004) Passing on Traditional Knowledge Alaska Rural Systematic Initiative: Alaska Federation of Natives, Alaska 99501

Mapara, J. (2009) Indigenous Knowledge Systems in Zimbabwe: Juxtaposing Postcolonial Theory. The Journal of Pan African Studies, vol.3, no.1, September 2009.

Matereke, K. And Mapara, J. (2009) Shona Ethnoaesthetics: Beauty and the Shona Proverb. The Journal of Pan African Studies, Vol 2, No. 9, pp197-218

Science Made Simple (2006-2009) The Scientific Method: Understanding and using The Scientific Method. Available at <http://www.sciencemadesimple.com/scientificmethod.html>. Retrieved on 15/04/11.

The World Bank Group (2010) What is Indigenous Knowledge-Definitions: *Region*: Sub Saharan Africa.

Zamora,A. (2004) Scientific Method- The four steps of the scientific method. Scientific Psychic. Available at <http://www.scientificpsychic.com/workbook/scientific-r> retrieved on 15/04/11.

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage:

<http://www.iiste.org>

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. **Prospective authors of IISTE journals can find the submission instruction on the following page:**

<http://www.iiste.org/Journals/>

The IISTE editorial team promises to review and publish all the qualified submissions in a fast manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

