

Semantic and Pragmatic Interpretation of Figures of Speech by Trilingual Schizophrenics in Nakuru Level Five Hospital in Nakuru County, Kenya

Joseph Maina¹, Eliud Kiruji Kirigia², James Ogola Onyango³
Laikipia University, Kenya.

ABSTRACT : Schizophrenic disorders manifest in some kind of linguistic deficits. Schizophrenics are believed to encounter two wide divisions of communication challenges: disturbances in comprehending the communication of others (receptive language) and problems in conveying meaning to others. In recent years, research uncovered distinct, alternating and common symptoms present in extreme diagnoses. These linguistic impairments are seen in semantic and pragmatics of language. The current study paid attention to the competence of trilingual schizophrenia patients in a number of non – literal language processing such as metaphors, irony and proverbs as well as pragmatic failures of the subjects. The study was premised on the fact that previous studies, which have mainly drawn their data from monolingual contexts, are not clear-cut and conclusive on how schizophrenia manifest in local African cultures and especially in trilingual contexts. The evidence adduced is documented in the way First Language, Kiswahili and English are used among schizophrenics. A phenomenological qualitative design was adopted buttressed by the Un-Cartesian Linguistic Theory and the Pragmatic Linguistic Model. The main instrument of data collection were open – ended interview, audio-visual recording and observation. Data was drawn from six purposely sampled subjects and subsequently analyzed descriptively. The transcribed data were evaluated for semantic and pragmatic deficiencies linked to the trilingual schizophrenics. The study's finding indicate that the subjects exhibited difficulties in comprehending figures of speech including metaphors, irony, proverbs and idioms with a tendency to miss figurative meaning and accepting literal meaning, more so, in their second and third language as opposed to Mother Tongue. In the same note, subjects' pragmatics appeared hampered in diverse ways which included heightened non-verbal references, pressure of speech; illogicality; poverty of speech; distractability and inappropriateness. This study will enlighten linguists, psychiatrics, psychologists, kin and kith and other people who interact directly or indirectly with the trilingual schizophrenics.

Keywords: Neuro-functional system, lingual association, figurative language, trilingualism.

1. INTRODUCTION

In recent years, research has uncovered distinct, alternating, and common symptoms present in schizophrenics. These linguistic impairments are seen in semantics and pragmatics of language. Semantic knowledge is the knowledge of meaning. Semantics is a combination of fluency, executive functions, mental flexibility, and comprehension (Vogel, Chenery, Dart, Doan, Tan & Copland, 2009). Paradis (2004) study on multilingualism and neuropsychiatric disorders explains the application and comparative significance of the five neuro-functional systems involved in communication that is verbal: resolute lingual proficiency,

knowledge of language and cultural behavior, pragmatics feelings and notions. This particularly foregrounds the idea on implied lingual association as well as links among organizations that causes feelings and the diverse lingual and communication delivery mechanisms. Multilingualism has been found to impact psychotherapy and psychiatric diagnosis since language is the key instrument of the two mechanisms (Bamford, 1991). Toppelberg (1996) asserts that the patient's level of psychosis is in variance with language competence. Paul (2001) avers that robust explication of lingual masterly are significant for enhancing comprehension of the universe and capability to communicate clearly and meaningfully. Franc and Muir (1996) state that to process utterances may become the most difficult thing for a person with a mental disorder because of neural impairment in their mind or disturbances in their mind. Further, Rosenthal (1991) declares that language which is expressive is significant since it allows people to convey their desires and needs, impression and opinion, debate a view, improve their language use in writing and participate in fruitful interaction with other members. Thus, the anomaly in language resulting from schizophrenia may propound the misgivings in communication.

The use of non-literal language is widely practiced in every day verbal communication. Pragmatic skills are necessary for one to understand the intended meaning of a non-literal utterance. Pragmatic impairments could include difficulty understanding figurative language, lack of cohesion, indirect hints, ironic speech and conversational prompts (Clegg, 1983). With impairment to semantics, an individual may have difficulty with word finding, figurative language and higher-level language. The Relevance Theory posit that successful communication relies on interpreting intentions and beliefs of the speaker in a communicative situation. The theory also pinpoints the role of the 'theory of the mind' (ToM) ability in comprehending utterances, more so, those involving non-literal meanings (Brune, 2005). The term 'theory of the mind' refers to the ability to figure out other people's mental states, such as beliefs, intentions and knowledge and, thus, explains and predict their behavior.

Irony makes use of indirect communicative intention, where the implied meaning is the opposite of what is directly expressed. Irony comprehension as a figurative use of language requires someone to understand semantic underpinnings, syntactic meaning as well as the ability to interpret the speaker's indirect reference. Therefore, a combination of surface understanding and social surrounding is necessary for one to comprehend what is on the speaker's mind and recognize the actual intention expressed by the speaker is really the opposite to the ironic statement. Irony comprehension needs the right interpretation of the communicative intentions and the capability to constructing a flowing story based on the opposite information.

An example of preference of literal over figurative meaning from this study was seen in the sentence, 'Dorcas alipitia kisu alipoenda kujifungua (Dorcas underwent a knife when she went to deliver) for which the trilingual schizophrenic chose the dangerous nature of the surgeon rather than the underlying expertise of the surgeon in saving life. From this failure to comprehend a metaphor, we can infer that patients had difficulties in comprehension of metaphoric statements as can be illustrated further in comprehension of metaphorical statements such as 'the man had a heavy heart' (Winner and Gardner, 1977, cited in Cutting and Murphy, 1990). If a metaphoric statement is taken literally it will most likely be wrong (Rapp et al., 2004) and this is what the trilingual schizophrenic tended to do.

The current study revealed that as the psychotic episodes became intense, their ability to understand the meaning dependent on setting deteriorated tremendously, particularly, in their second or third language – they had an inclination to interpret metaphors, albeit with a lot difficulty, in their Mother Tongue. Pragmatics examines the communal, mental ability and holistic feature of usage of language. Consequently, it observes language in interpersonal situations and meaning in action. It examines processing of language and its mental systems where the context plays a major role in the total interpretation of an expression, and especially purpose to describe how expressions are explained. The accomplished explanation content like that reckons the capability to venture past unbending literal speech enabling us to understand the speaker's intention. This study paid attention to the competence of trilingual schizophrenic patients in a number of non-literal language

processing such as metaphors, irony, similes and proverbs and examined the pragmatic deficiencies of the subjects.

2. Method

Open – ended interviews, audio – visual recording and observation were used to understand at a deeper level the topic of this study. This research used four experimental conditions: metaphor, irony, similes, proverbs and semantic conditions. The researcher gave six scenarios (tasks) to determine metaphor interpretation, six tasks in semantic interpretation, six tasks in irony comprehension and eighteen tasks in pragmatic interpretation. A total of thirty six tasks were used in the current study. These tasks were blended randomly in order to display the diverse interpretational tasks in a changeable order. The tasks were administered verbally by the researcher. The metaphor provision comprised of six accepted metaphor tasks. The researcher presented six scripts as irony tasks to the six schizophrenia patients. Following each task three questions were investigated to obtain the patients' conscious meaning. A total of thirty six tasks were given to the patients relating to the identification of the four Gricean Maxims. After each task the initial question related to the identification of the lingual appropriateness of the responses. The tasks on semantics were used to assess the trilingual schizophrenics' semantic capacity (capabilities in objective or exact explanation).

3. Results and Discussion

With regard to the current study, we found that the respondents superior level of language structure seemed to be compromised, and this level relate to semantics and pragmatics. With regard to semantics, the respondents often exhibited problems in comprehending figurative expressions, such as 1) idioms and metaphors, 2) ironic remarks, 3) proverbs and, 4) similes with the obvious inclination to neglecting the figurative meaning and accepting literal interpretation.

Notably, for ease of identification, the Mother Tongue language is emboldened, Kiswahili language is emboldened and italicized and English language is italicized and the turns uppercase bold.

(a) Metaphor Comprehension

Results from this study indicate that the subjects tended to select word pairs according to their denotative meaning (denotative bias) as opposed to connotative meaning since the trilingual schizophrenia patients showed less inclination to select metaphorical interpretations. Consider the example given below:

INTERVIEWER: *The man is a strong lion.*

WAKANESA*: *Eh, **munyambu weuni, ndukamake** (lion in the wilderness don't worry).*

Wakanesa* is responding to a metaphor comprehension task posed by the interviewer. Wakanesa* takes the denotative meaning of the statement thereby stating '**munyambu weuni, ndukamake**'. Wakanesa* does not associate the man's immense strength with that of a lion but can only relate superficially with the lion in the wilderness. That is, the mention of a lion triggers the picture of those in the wilderness and not any other referent. It emerges from this excerpt that the respondent interpreted the metaphorical sentence more literally and idiosyncratically. This is echoed by Rapp et al. (2004) assertion that if a metaphoric statement is taken literally, it will most likely be wrong.

Consider the interpretation of the idiomatic expression below by another respondent:

INTERVIEWER: *The man in the picture goes out for a walk once in a blue moon', isn't it?*

OTIS*: *(Exclaiming) **Yaawa**, (Hey!) I walk to the moon but it's red today on Sunday eh.*

Otis* response to the interviewer's question is farfetched since it takes a literal meaning and not its intended meaning 'rarity of an occurrence of an event'. The respondent builds on the literal meaning asserting that he walks to the moon occasionally and that the moon can be red in color.

(b) Irony Comprehension

This study showed that ironic remarks posed challenges to ambiguity resolutions to the respondents. An example of a defective irony comprehension by the respondents is evidenced in the following excerpt:

INTERVIEWER: *You have very smart shoes.*

WASTELLA*: *(Suddenly looking at her pair of sandals) Yes.*

INTERVIEWER: *They match so well with your blue dress and blue handbag.*

WASTELLA*: *(Staring blankly at an imaginary bag at her elbow) Yes, it's expensive.*

INTERVIEWER: *Will you lend me the shoes and the handbag this weekend, please?*

WASTELLA: *Asha (No)*

In the incident above, using an irony comprehension task the interviewer sought to get the respondent's reaction to the ironic remarks. The respondent apparently did not comprehend the irony. In the first instance, the reference to a pair of sandals as 'smart shoes' only elicits an affirmative 'Yes' from the respondent without any further comments. Secondly, when the interviewer mentioned 'blue handbag' which is non-existent, the respondent stares at an imaginary handbag (at her elbow). Lastly, when the interviewer expressed his intention of borrowing the 'smart shoes' and 'blue handbag' she flatly refused indicating that she did not comprehend the consecutive ironical remarks in the exchange.

(c) Proverb Comprehension

Through the use of a proverb comprehension task, it became evident that miscomprehension of proverbs was the norm among trilingual schizophrenics. The respondents gave responses that were abstract and meaningless as illustrated in the following example:

INTERVIEWER: *That's true because **Waswahili husema mtaka cha mvunguni sharti***

.....' (The Swahili speakers says 'he who wants what is under the bed must')

CHEPS*: *Mbili (Two).*

INTERVIEWER: *What?*

CHEPS*: *Hakuna shati (There is no shirt). Mogen (I don't know). Sitashika (won't hold it).*

Cheps* response to a proverb comprehension task is required to fill the last part of the Kiswahili proverb '**Mtaka cha mvunguni sharti**' which is '**ainame**' (must bend) but the respondents interpretation is literal and confusing as she misunderstands the word '**sharti**' (must) to mean 'shirt' and goes ahead incoherently about not knowing nor holding the shirt.

(d) Similes Interpretation

The current study indicates that understanding and subsequent interpretation of similes presented a serious challenge to the trilingual schizophrenics. The respondent gave unrelated responses to the given similes as it can be observed from the following interaction:

INTERVIEWER: *The woman decided to go to the shops and buy some very sweet lollipops.*

MOGAKA*: *Yes, yes.*

INTERVIEWER: *They were sweet like*

MOGAKA*: *Sweets, many sweets.*

INTERVIEWER: *The child without a shirt felt as cold as.....*

MOGAKA*: *Coldfingers.*

INTERVIEWER: *That tree there is tall like*

MOGAKA*: *A (hesitatingly, looking at the door)...a a door.*

The respondent is unable to give even a single correct response in the similes comprehension task. The responses consist of contextualized nouns which are not in any way related to the individual similes or obtained from the context of the simile itself like in the response 'sweets, many sweet' in the simile 'sweet like' and 'cold' from the simile 'as cold as...'. The respondent answers to the simile 'tall like' is equally absurd 'a door' suggesting the incomprehension of similes.

In essence, we can deduce from this study that there were unpredictable distortions in comprehension based on unpredictable sequences in the three languages: Mother Tongue, Kiswahili and English.

Pragmatic Dysfunctions

In the current study respondents exhibited communicative incompetence in as far as pragmatics is concerned. The notable pragmatic deficiencies noted include 1) pressure of speech or excess of speech/content, 2) poverty of speech, 3) heightened non-verbal reference, 4) Illogicality, 5) Distractibility, and 6) Inappropriateness.

Pragmatics appears to be an area that was greatly affected in as far as the respondents' communication is concerned just as Dennett (1992) assertion that the language disorganization of the schizophrenics can take a variety of forms.

(a) Pressure of Speech

It emerged from this study that respondents displayed pressure of speech or excess of speech, that is, the subjects overall word count was higher than would be expected as in the example that follows:

INTERVIEWER: *The man and woman have finished digging, isn't it?*

OTIS*: *They got finished. He told them eh eh (whispering) onge (it isn't there). Akakimbia*

Eh akakimbia mpaka shule sijui mpaka akakuta (He ran eh ran up to school I

don't know until he met the) James

The context of this excerpt is a task on antonym comprehension in which the interviewer seeks to determine the comprehension of antonyms. The respondent provided a huge amount of irrelevant material displaying excess of speech as opposed to giving an affirmative 'yes' or a non-affirmative 'no'.

(b) Poverty of Speech

Poverty of speech by the respondents was also noted in the current study. The respondents exhibited this pragmatic misdemeanor when uttering very few words or inadequate amount of words with insufficient quantity of information. The following example can attest to this phenomenon:

INTERVIEWER: *How many people can you see?*

CHEPS*: *Three.*

INTERVIEWER: *Okay, can you show me the third man?*

CHEPS*: *Yes.*

INTERVIEWER: *Please show me the third man in the picture.*

CHEPS*: *Yes (Unmoving).*

In the above extract, the respondent is required to look at a TAT card with a picture of a man astride a motorcycle talking to a lady. The respondent gives single word responses to the questions. In such instances, the respondent continually provides little than the expected amount of information as response to questions and never asked any question of his own or attempted to offer any comment.

(c) **Heightened Presumed Information**

It was noted that trilingual schizophrenics in this study engaged in heightened obscurity of presumed information. The respondent presented a lot of surrounding information or assumed some knowledge on the part of the interviewer than was realistic as illustrated in the following example:

INTERVIEWER: *People like to say 'Hasira ni'? (Anger is)*

WAKANESA*: *Yes, of course.*

INTERVIEWER: *What does it mean?*

WAKANESA*: *Aimi ni aimi na nunaleie* (Farmers are farmers and he refused). Wambua

Kukunza ingi aningiombosya tu (folding again folding dozing only). **Atwilia**

(He skips) Musembi **na ndautiaa** (and not sweat).

In the context above, the respondent in a proverb comprehension task deviates and talks about something very different – farmers, Wambua and Musembi – who the respondent believes are known to the interviewer (which is not the case). The respondent talks about Wambua and Musembi as if they are known to them both (the interviewer and the respondent) as he further describes what the two are doing that is, folding, dozing, skipping and not sweating.

(d) **Illogicality**

It emerged from the current study that the respondents indulged in illogicality which was characterized by faulty expressions or inadequate logic. In some instances respondents appeared to draw faulty resolutions from the more flimsy origin of evidence, for example:

INTERVIEWER: *Keep on trying, Trying is halfway to success...*

MOGAKA*: *Koria nokobua* (to eat is success). **Tobaisa koganya amache gochia**

asokobua (Don't wait water to success). **Amabere nokobua naende ekanisa**

ekoria amatoke nokobua (Milk is success again church eats bananas is success).

In this example, the respondent articulates a new idea of success, and in so doing, so transitions from an ordinary definition of success – 'eat or consume' – to a lower sensible order of corrections that results in giving success to unparalleled references by giving a trail of things that can be associated or are related to success like eating bananas and taking milk.

(e) **Distractibility**

The subjects in this study apparently suffered from distractions. The four types of distractibility noted were as follows: 1) tangibility, 2) derailment, 3) loss of goal, and 4) circumstantiality.

(i) **Tangibility**

Tangibility was evident in this study when the respondents elaborated on irrelevant details. An example of tangibility from a respondent is as follows:

INTERVIEWER: *The Kiswahili proverb 'Mchagua jembe si mkulima'* (He who chooses

hoe is not a farmer) can be applied to the happenings in this picture.

NAFULA*: *Yees.*

INTERVIEWER: *What does it mean?*

NAFULA*: *Eh...eh...Yakolera mutaoni ikaratasi tsibiri yakora musibitari efitabu vili*

Nende tsiswi nende inailoni (He sneaked to town two paper bags got lost at the hospital books have hairs and polythene bag).

Nafula* is required to relate the Kiswahili proverb to a TAT card bearing a picture of a man playing a musical instrument while another one watches closely. Nafula* digresses and talks about a man sneaking to town with polythene paper bags, hospital books having hairs which is a clear example of a first discussion not communicated; a novel topic forcibly emplaced and the discourse carried on without any propositional meaning.

(ii) **Derailment**

The respondents in the current study appeared culpable to be derailed and thus got distracted during interactions in a number of occasions. An example of this derailment can be observed in the following excerpt:

INTERVIEWER: *What is the man in this picture thinking?*

WASTELLA*: *Mundu ocio arokire ira arorera guku* (That man came yesterday and got

Lost here) *(the bulb suddenly goes off and turns on after approximately one*

minute). Aroya thitima arathii nayo (He took the bulb and went with it).

Mpaka leo hakuna siunaona (Until today it's not there you can see).

In the process of the interaction above, the lights had gone off and on which affected the respondent's flow of thoughts. The respondent next statement (after the lights encounter) incorporated the man and the incident that had just taken place.

(iii) **Loss of Goal**

It was evident from this study that respondents suffered from loss of goal since they occasionally lost trace of the line of discourse without outside interferences. The example that follows illustrates this point:

INTERVIEWER: *What makes you believe the people in the picture are farmers?*

WAKANESA*: *Farmers plant crops and drivers were arrested eh eh kutuvya tinginya iyo*

(Swimming until not yesterday) causing the accident in Kisumu and Masaku

(in reference to Machakos town).

In reference to a TAT card with a picture of some people working in a farm, the respondent started off in the right direction by talking about the subject matter (farmers) then digresses to talk about swimmers and finally about drivers causing accidents in Kisumu and Masaku respectively making it difficult to comprehend what the respondent was talking about.

(iv) **Circumstantiality**

It emerged from the study respondents were prone to be circumstantial, that is, in some instances they were indirect in their presentation of information as can be illustrated below:

INTERVIEWER: *I have two ball in my hand. I want you to tell me the color of the ball I lift*

up, okay?

CHEPS*: *Okay.*

INTERVIEWER: *(Lifting up a red ball).Give me the color.*

CHEPS*: *The ball is colorful it's blue and red and blue bukusie chon atindonik* (those

books are over) *eh...no food again tomorrow.*

In a color identification task above, the respondent gave a response closer to the required information albeit in an indirect way and by doing this, gave a substantial amount of irrelevant details.

(f) **Unnecessary Repetition**

It was noted in this study that respondents engaged in unwarranted repetition whereby they repeatedly gave similar information in the course of interaction although having not been prompted to do so. This can be attested by the following excerpt:

INTERVIEWER: The man in the picture wants assist in fixing the vehicle's problem.

OTIS*: Eh...eh

INTERVIEWER: *We can summarize his actions with a Kiswahili proverb 'Tenda wema nenda zako' (Do good to others and go your way)?*

OTIS*: *Ndiiiiiiyo*, (Yeeeeeeeees).

INTERVIEWER: *What does the proverb mean?*

OTIS*: **No tho** (He died).

INTERVIEWER: *Yes.*

OTIS*: **No tho, notho, no tho kende** (He died, he died, he died again).

The context of the excerpt above is in response to a proverb comprehension task using a TAT card with a picture of two men: one repairing a vehicle and another equally keen and bending on the open bonnet of the car. The respondent was expected to explain the meaning of the proverb read out. The respondent repeated the words **no tho** (he died) four times in quick succession without any prompt from the interviewer which were answers not related to the Kiswahili proverb that he was expected to refer to.

(g) Echolalia

There was evidence of echolalia in this study whereby the subjects repeated back phrases uttered by the interviewer in one occasion or another. The example below illustrates this:

INTERVIEWER: *Does this happen every day?*

WAKANESA*: *Every day.*

INTERVIEWER: *Eh.*

WAKANESA*: *Every day, not every day, yes every day.*

INTERVIEWER: *Yes.*

WAKANESA*: (Shouting) *Every day!*

The respondent was answering a question related to a TAT card with a picture of a vehicle which had hit a young boy riding a bicycle. The interviewer's words 'every day' were repeated back five times by the respondent in quick succession following a prompt from the interviewer.

(h) Inappropriateness

From the current study, we found that the respondents portrayed some elements of inappropriateness when they resulted to the use of threats, profanities and other similarly inappropriate utterances as in the excerpt illustrated below:

INTERVIEWER: *What happened next?*

WASTELLA*: *Wachana na hiyo mbwa* (Forget about that dog). *Iyo ningui mono* (That is really a dog). *Takataka!* (Rubbish!). *Nakwambia nikimpata nitamuua!* (I'm telling you if I get him I will kill him!) **** you! Me, (thumping her chest) *I don't joke! **** you!*

In the excerpt above, the interviewer sought the respondent's remarks from a TAT card with a picture of a man apparently walking away on a woman. The woman was holding his elbow to prevent him from leaving. The respondent shouted expletives before issuing death threats to an imaginary man. A summary of pragmatic dysfunction features are indicated in the table below.

A Summary of Pragmatic Dysfunction Features in Trilingual Schizophrenics

Name	Identification and Assessment
Pressure of speech	Subject's output is significantly more than expected.
Poverty of speech/content	Subjects output prominently lower than anticipated shown by the researcher's attempt to interfere and change the prompt for extra detail.
Heightened presumed information	Referents were repeatedly introduced or remained unclear.
Illogicality	Statements which drew decisions derived from wrong or insufficient reasoning. Subjects' opinions are contextually baseless or appear to be from particulars that the interviewer is ignorant of.
Distractibility: Easily distracted. Distractibility is typically classified into four specific categories:	
- Tangentiality	- Elaborate on irrelevant details
- Derailment	- Easily derailed.
- Loss of goal	- Losing track of the thread of discourse without outside interferences.
- Circumstantiality	- Indirect in their presentation of information.
Unnecessary repetition	Subjects reproduce similar information many times in the same interaction with no prompting.
Echolalia	Subjects' output that squarely replicate a phrase or a word from the interviewer's earlier negotiate.
Inappropriateness	Subjects resulting to insults, threats, profanities and other similar inappropriate utterances.

From the current study, we can conclude that the trilingual schizophrenics exhibited lack of semantic and pragmatic content presented in English and Kiswahili but with a negligible comprehension in case of Mother Tongue.

4. CONCLUSION AND RECOMMENDATIONS

Results from this study indicate that the respondents exhibited difficulties in comprehending figures of speech including metaphors, irony, proverbs and idioms with a general tendency to miss the figurative meaning and accepting literal meaning regardless of language. Also, the subjects pragmatic appeared hampered in diverse ways and had difficulty in their communication skills when different pieces of information are included in a conversation. Based on the finding and conclusion of this study, we recommend a research on how schizophrenics semantically/pragmatically interpret other linguistic aspects (like phonetics, morphology, phonology and lexis) involving trilingual schizophrenic. Also, a study on how schizophrenia manifests in writing might elicit interesting reading.

5. REFERENCES

1. Bamford, K. (1991). Bilingual issues in mental health assessment and treatment. *Hispanic Journal of Behavioral Sciences* 13, 377 – 390.
2. Brune, M. (2005). 'Theory of Mind' in schizophrenia: a review of the literature. *Schizophrenia Bulletin* 31 (1), 21 – 41.

3. Clegg, C. (1983). Psychology of employee lateness, absence and turnover: a methodological critique and empirical study. *Journal of Applied Psychology* 68 (1), 88 – 101.
4. Cutting, J. & Murphy, D. (1990). Preference for denotative as opposed to connotative meaning in schizophrenia. *Brain Language* 39, 459 – 468.
5. Dennett, L. (1992). *The Self as a Centre of Narrative Gravity: Self and Consciousness Multiple Perspective*. Hillsdale: Erlbaum.
6. Franc, J. & Muir, N. (1996). *Communication and the Mentally Ill Patient: Developmental Linguistic Approaches to Schizophrenia*. London: Jessica Kingsley.
7. Franc, J. & Muir, N. (1996). *Communication and the Mentally Ill Patient: Developmental* Paradis, M. (2004). *A Neurolinguistic Theory of Bilingualism*. Amsterdam: John Benjamins.
8. Paul, R. (2001). *Language Disorders: From infancy through adolescent*. Missouri: Mosby.
9. Rapp, A., Mutschler, D., Wild, B., Erb, M., Lengsfeld, I., Saur, R. et al. (2004). Neural correlates of irony comprehension: The role of schizotypal personality traits. *Brain and Language* 113, 1 – 12.
10. Rosenthal, M. (1991). *The Nature of the Mind*. New York: Oxford University Press.
11. Toppelberg, C. (1996). Psychiatric evolution in a second language. *Psychiatric Services* 47, 1001 – 1002.
12. Vogel, A., Chenery, H., Dart, C., Doan, B., Tan, M. & Copland, D. (2009). Verbal fluency, semantics, context and symptom complexes in schizophrenia. *Journal of Psycholinguistic Research* 38 (5), 459 – 473.
13. Winner, E. & Gardner, H. (1977). The comprehension of metaphor in brain-damaged patients. *Brain Language* 100 (4), 717 – 729.

INFO:-

Corresponding Author: Joseph Maina, Laikipia University, Kenya.

How to cite this article: Joseph Maina, Semantic and Pragmatic Interpretation of Figures of Speech by Trilingual Schizophrenics in Nakuru Level Five Hospital in Nakuru County, Kenya, Asian. Jour. Social. Scie. Mgmt. Tech. 2(5): 54-63, 2020.