

https://dspace.org/

# Curiosity in Africans and Europeans

**Foden, Bernardina**

**2015-01-21**
http://hdl.handle.net/10539/16660

Downloaded from a DSpace repository. https://dspace.org/

compared was highly correlated, showing that the subjects responded to the tests in a similar manner. The functional equivalence of the tests could not be conclusively tested, however, in that the technique suggested by Poortinga, namely comparison of the correlation matrices in the two groups, requires larger groups of subjects than those used in this study, and furthermore that the tests being compared were fairly homogeneous in the two groups, whereas low correlations between most tests in this study were observed. The possibility of the functional equivalence of some of the tests for which significant correlations did emerge was discussed. The failure to provide a means of testing functional equivalence which is less dependent for its applicability on the actual results of tests can be considered a serious deficiency of the concept.

No significant difference in score on the individual tests, for which there were indications that they could be considered item equivalent (it was pointed out in Chapter II, that item, functional equivalence and score equivalence can never be proved, only disproved or confirmed) was found. In view of the assumption of no qualitative differences between the two cultural groups, and the similarity in education and interests in these two groups (discussed in Chapter IV), this result is not surprising. It can be argued that if no differences in preference for complexity, novelty, uncertainty, incongruity and self-ratings on curiosity were found between two cultural samples so highly similar in motivation and education, it is unlikely that

the greater differences which may be found on these variables at lower levels of literacy reflect more than the readily changeable, environmentally determined influences discussed in Chapter II.

In the absense of evidence of a unitary construct of curiosity, future research should focus on tests of the various collative properties in their own right. Of these the complexity tests are perhaps the most promising for future research. In view of the fact that no differences in complexity preference in the representational complexity test was found between the two cultural samples, it was suggested that the abstract nature of the stimulus material in the non-representational complexity test probably introduced a cultural bias, due to lack of familiarity of the African sample with this type of stimulus. It would be interesting to test whether repeated exposure to abstract and complex stimulation would increase the preferred complexity level on the non-representational complexity test in the African group, thus reducing the cultural bias.

Further research into the different mode of answering the curiosity questionnaire in the two groups might also be of value. Factor analysis of scores on the questionnaire for two larger groups of African and European subjects might provide important insights into differences in motivation in African and European subjects.

In conclusion, it must be emphasized that this study is essentially an exploratory one, and that any conclusions drawn must be regarded as tentative. Further research into

the tests discussed in this study, both with university students and at lower educational levels using an intra rather than inter-cultural approach could provide important insights into the effects of environment, education and culture on curiosity, novelty, complexity, etc. For developing African nations "curiosity" and associated concepts might well be related to adaptation to Western technological society.

# APPENDIX A

N.I.P.R. QUESTIONNAIRE

Name: ..... Age: ..... Sex: .....

Instructions to Subjects.

The following questionnaire consists of pairs of statements, one presented on the left and one on the right-hand side of the page. The two statements are separated by 4 dashes, e.g. :

I like the thrills of watching car races ___ ___ ___ ___ I find car races unpleasant.

You are required to mark one of the dashes with a cross (X). Mark the left most dash if the left-hand statement is more true of you, or if it expresses your attitudes or opinions or feelings better than the right-hand statement. Mark the right most dash if the right-hand statement is more true of you, or if it expresses your attitudes or feelings far better than the left-hand statement, e.g. :

X ___ ___ ___

or :

___ ___ ___ X

In those cases in which you feel that the attitude or feeling expressed by the statements is more extreme than your own, or you have difficulty in deciding which statement is more true for you, mark the dash the second from the left, if you tend to agree more with the left-hand statement than with the right-hand statement; or mark the dash the second from the right if you tend to agree more with the right-hand statement than with the left-hand statement, e.g. :

___ X ___ ___

or :

___ ___ X ___

Please mark only one dash of each pair of statements.

| | | | |
|---|---|---|---|
| 1. | I would like a job that requires a lot of travelling. | ___ ___ ___ ___ | I would like to work in one place. |
| 2. | I prefer to spend my weekends amusing myself at home. | ___ ___ ___ ___ | I prefer to spend my weekends away from home, visiting people and places of interest. |
| 3. | I find the quickest and easiest route to a place and stick to it. | ___ ___ ___ ___ | I sometimes take different routes to a place I often go, just for the sake of variety. |
| 4. | When I leave University, I would like to engage in research. | ___ ___ ___ ___ | When I leave University, I would prefer an administrative job. |
| 5. | I am interested only in my studies. | ___ ___ ___ ___ | I am interested in many activities outside my studies. |
| 6. | When I see a crowd at the scene of a road accident, I go and see what happened. | ___ ___ ___ ___ | When I see a crowd at the scene of a road accident, I don't go near the place, unless I have to pass by. |
| 7. | I like to see a completed job, but I am not interested in watching it being done. | ___ ___ ___ ___ | I find it fascinating to watch workmen carrying out a job. |
| 8. | When I go on holiday, I like to relax in one spot. | ___ ___ ___ ___ | I like a holiday where one is ... new things every day. |
| 9. | I enjoy listening to the music of a few favourite composers. | ___ ___ ___ ___ | I enjoy listening to composers ... different styles. |
| 10. | I would like to be one of the first visitors to the moon. | ___ ___ ___ ___ | I would not be interested in taking a trip into outer space. |
| 11. | I like to order food with which I am familiar so as to avoid disappointment and unpleasantness. | ___ ___ ___ ___ | I like to try new foods that I have never tasted before. |
| 12. | I ignore unusual noises which are disrupting to one's peace and work. | ___ ___ ___ ___ | When I hear an unusual noise, I try to discover what caused it. |
| 13. | I would like to try some of the new drugs that produce hallucinations. | ___ ___ ___ ___ | I would not like to try any drug that might have strange effects on me. |

| | | | |
|---|---|---|---|
| 14. | I prefer a guide when I am in a place I don't know well. | ___ ___ ___ ___ | I like to explore a strange town or section of town by myself, even if it means getting lost. |
| 15. | If a colleague comes to work with a black eye, I would express sympathy and ask how it happened. | ___ ___ ___ ___ | If a colleague comes to work with a black eye, I would make no reference to it unless he does so himself. |
| 16. | When travelling by bus, I like to look at my fellow passengers. | ___ ___ ___ ___ | I am not interested in watching other passengers on a bus. |
| 17. | I feel that the essence of good art is in its clarity, symmetry of form and harmony of colours. | ___ ___ ___ ___ | I often find beauty in clashing colours and irregularity of form. |
| 18. | I usually read those books that deal with topics in my sphere of interests. | ___ ___ ___ ___ | I like to read a great variety of books. |
| 19. | I like the stimulation afforded by a good detective story. | ___ ___ ___ ___ | I do not particularly care for detective stories. |
| 20. | I would be very interested in seeing a sample of the moon-rock brought to earth by the astronauts. | ___ ___ ___ ___ | I would not go out of my way to see a sample of the moon-rock brought to earth by the astronauts. |
| 21. | I would like to follow a set career at University, so that I leave well-qualified in a particular profession. | ___ ___ ___ ___ | I would like to get a general education at University, before specializing in any field. |
| 22. | Once I find a good job, I will stick to it. | ___ ___ ___ ___ | I would like to have a change of job every now and then, just for the sake of variety and interest. |
| 23. | I feel that the most important goal in life is to find peace and happiness. | ___ ___ ___ ___ | I feel that the most important goal in life is to live life to the fullest and experience as much as one can. |
| 24. | I like to read books about exploration. | ___ ___ ___ ___ | I like to read books about everyday people. |
| 25. | I am usually very keen to see a new film or play. | ___ ___ ___ ___ | I am seldom interested in seeing a new film or play. |

| | | | | | |
|---|---|---|---|---|---|
| 26. | I am hardly aware of the activities of my neighbours. | ___ | ___ | ___ | ___ | I take a great interest in the activities of my neighbours. |
| 27. | I feel that "Variety is the spice of life". | ___ | ___ | ___ | ___ | In my opinion, one should not necessarily make a "change for change's sake". |
| 28. | I feel that the facts about the private lives of the celebrities are often fascinating. | ___ | ___ | ___ | ___ | I feel that the facts about the private lives of the celebrities are often boring. |
| 29. | I feel that as long as a gadget works, one should leave it alone. | ___ | ___ | ___ | ___ | I sometimes take a gadget apart just to see how it works. |
| 30. | I tend to use the same products. | ___ | ___ | ___ | ___ | I tend to try new products. |
| 31. | When I go on vacation, I like to break completely with my usual routine, by camping out for example. | ___ | ___ | ___ | ___ | When I go on vacation, I like to be comfortable and stay in a hotel or boarding house. |
| 32. | I like to meet people whose ideas are different from my own. | ___ | ___ | ___ | ___ | I like to choose my acquaintances from people who have the same ideas as I have. |
| 33. | When salesmen come to my door, I am seldom interested in what they have to say. | ___ | ___ | ___ | ___ | When salesmen come to my door, I am usually fairly interested in what they have to say. |
| 34. | I do not enjoy having to adapt myself to new and unusual situations. | ___ | ___ | ___ | ___ | I enjoy having to adapt myself to new and unusual situations. |
| 35. | On the night of an election or important sport match, I wait near the radio to hear the results as soon as they come in. | ___ | ___ | ___ | ___ | I can't be bothered to spend the night waiting for election or sporting results as one can hear them just as well the next morning. |
| 36. | If visiting a place where they have a gambling casino, I would feel inclined to try my luck a little. | ___ | ___ | ___ | ___ | I avoid gambling at all times. |
| 37. | I like to listen to new and unusual kinds of music. | ___ | ___ | ___ | ___ | I do not like irregularity and discord in music. |
| 38. | I avoid things that may be dangerous. | ___ | ___ | ___ | ___ | I sometimes like to do things that involve taking risks. |

| | | | | | |
|---|---|---|---|---|---|
| 39. | When I hear a good song on the radio, I listen to find out who the performing artist is. | ___ | ___ | ___ | ___ | I do not care who the performing artist is, so long as a song is good. |
| 40. | I have only one main hobby. | ___ | ___ | ___ | ___ | I have a lot of different hobbies. |
| 41. | I look in shop windows only when I want to buy something. | ___ | ___ | ___ | ___ | I enjoy looking at shop windows, even when I have no intention of buying. |
| 42. | I like to try the new things I hear or read about for myself. | ___ | ___ | ___ | ___ | I feel that one can take most of the things one hears or reads about for granted. |
| 43. | I get bored seeing the same old faces. | ___ | ___ | ___ | ___ | I like the comfortable familiarity of everyday friends. |
| 44. | Once I have found a pleasant holiday spot, I return to it every year. | ___ | ___ | ___ | ___ | I like to go to a different place every year for a holiday. |
| 45. | When I go on a trip, I like to plan my route and timetable carefully. | ___ | ___ | ___ | ___ | I would like to take off on a trip with no preplanned routes or timetables. |
| 46. | I find auction sales very interesting. | ___ | ___ | ___ | ___ | I do not care for auction sales. |
| 47. | I like to try new things just to see what will happen. | ___ | ___ | ___ | ___ | I like to think things over very carefully before trying something new. |
| 48. | If a small fissure accidentally appeared in the wall of a nudist camp, I would under no circumstances peep through. | ___ | ___ | ___ | ___ | If a small fissure accidentally appeared in the wall of a nudist camp, I would definitely take a peep. |

SELF RATING SCALE

Name : . . . . . Age : . . . . . Sex : . . . . .

Instructions to Subjects

You are asked to rate yourself on a series of descriptive scales. For example :

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| If, for example, you feel that you are extremely intuitive, place your cross (X) as follows : | RATIONAL | ___ | ___ | ___ | ___ | ___ | X | INTUITIVE |
| On the other hand, if you feel that you are extremely rational, place your X as follows : | RATIONAL | X | ___ | ___ | ___ | ___ | ___ | INTUITIVE |
| If you feel you are quite intuitive, but not extremely so, place your X as follows : | RATIONAL | ___ | ___ | ___ | ___ | X | ___ | INTUITIVE |
| If you feel you are quite rational, place your X as follows : | RATIONAL | ___ | X | ___ | ___ | ___ | ___ | INTUITIVE |
| If the right-hand adjective is only slightly more applicable to you than the left-hand adjective, place your X as follows : | RATIONAL | ___ | ___ | ___ | X | ___ | ___ | INTUITIVE |
| If, however, the left-hand adjective is slightly more applicable than the right-hand one, place your X as follows : | RATIONAL | ___ | ___ | X | ___ | ___ | ___ | INTUITIVE |
| If you consider yourself to be neutral with respect to a particular pair of adjectives (e.g. you feel that you are neither particularly rational nor particularly intuitive) mark the scale in the middle. | RATIONAL | ___ | ___ | ___ | X | ___ | ___ | INTUITIVE |

## MYSELF

| | | |
|---|---|---|
| ACTIVE | _ _ _ _ _ _ | PASSIVE |
| QUICK | _ _ _ _ _ _ | STEADY |
| POSITIVE | _ _ _ _ _ _ | NEGATIVE |
| CURIOUS | _ _ _ _ _ _ | INDIFFERENT |
| WITHDRAWN | _ _ _ _ _ _ | OUTGOING |
| INTERESTED | _ _ _ _ _ _ | UNINTERESTED |
| EXCITABLE | _ _ _ _ _ _ | CALM |
| ATTENTIVE | _ _ _ _ _ _ | INATTENTIVE |
| FREE | _ _ _ _ _ _ | CONSTRAINED |
| UNRESPONSIVE | _ _ _ _ _ _ | RESPONSIVE |
| ENTHUSIASTIC | _ _ _ _ _ _ | INDIFFERENT |
| ENERGETIC | _ _ _ _ _ _ | UNENERGETIC |
| INHIBITED | _ _ _ _ _ _ | UNINHIBITED |
| PROGRESSIVE | _ _ _ _ _ _ | CONSERVATIVE |
| IMPATIENT | _ _ _ _ _ _ | PATIENT |
| MOBILE | _ _ _ _ _ _ | QUIET |
| CONCENTRATING | _ _ _ _ _ _ | DISTRACTIBLE |
| VARIABLE | _ _ _ _ _ _ | STEADY |
| IMPULSIVE | _ _ _ _ _ _ | CAUTIOUS |
| EXPANSIVE | _ _ _ _ _ _ | RESERVED |

| | | |
|---|---|---|
| RETIRING | _ _ _ _ _ _ _ | SELF ASSERTIVE |
| ABSORBED | _ _ _ _ _ _ _ | BORED |
| LIVELY | _ _ _ _ _ _ _ | QUIET |
| ENTERPRISING | _ _ _ _ _ _ _ | UNENTERPRISING |
| AGGRESSIVE | _ _ _ _ _ _ _ | PEACEFUL |
| SILENT | _ _ _ _ _ _ _ | NOISY |
| CHANGEABLE | _ _ _ _ _ _ _ | STABLE |
| DOMINANT | _ _ _ _ _ _ _ | SUBMISSIVE |
| ACTIVE | _ _ _ _ _ _ _ | SEDATE |

---oooOooo---

## BIOGRAPHICAL QUESTIONNAIRE

Surname : .....

Initials : .....

Date of Birth : .....

Place of Birth : .....

Tribe : .....

**Question 1.**

In which places did you live before you came to this University?
(Indicate whether you consider these places to be rural or urban and which years of your life you spent in each of them.)

| Place | Rural / Urban | Years of Age From - To. |
|---|---|---|
| ..... | ..... | ..... |
| ..... | ..... | ..... |
| ..... | ..... | ..... |
| ..... | ..... | ..... |
| ..... | ..... | ..... |
| ..... | ..... | ..... |
| ..... | ..... | ..... |
| ..... | ..... | ..... |

**Question 2.**

A. Did your father always live in an urban area — Yes / No
a rural area — Yes / No
before you were born?

If your father did not always live in the same type of area, please indicate approximately the total number of years he lived in
an urban area ..... years
a rural area ..... years
before you were born.

B. Did your mother always live in an urban area — Yes / No
a rural area — Yes / No
before you were born?

If your mother did not always live in the same type of area, please indicate approximately the total number of years she lived in
an urban area ..... years
a rural area ..... years
before you were born.

Question 3.

What grade or standard of schooling did your father pass? .....

What grade or standard of schooling did your mother pass? .....

Question 4.

A. What was the occupation of your father when you were a pre-school child? .....

What is his occupation now? .....

B. What was the occupation of your mother when you were a pre-school child? .....

What is her occupation now? .....

Question 5.

A. Do you yourself or any member of your family own any land in a rural area or expect to inherit any land? Yes / No.

B. Did you undergo any traditional initiation ceremony? .....

What is your attitude towards the system of initiation (positive or negative)? .....

C. What is your attitude towards the system of lobola - are you in favour of it or not? .....

D. Do your father and your mother belong to the same tribe? Yes / No.

Did any of your father's or mother's brothers marry a wife who belonged to another tribe? Yes / No.

Question 6.

A. Where would you like to work after completion of your studies - in a rural area or in an urban area? .....

Question 8 (continued)

B. What, in your opinion, are the most important advantages of the African culture over the European culture?

C. What, in your opinion, are the most important advantages of the European culture over the African culture?

D. Describe briefly what you would like to do during your life that would make you happiest and most proud of yourself.

# REFERENCES

1. BAKER, G. and R. FRANKEN. Effects of stimulus size, brightness and complexity upon EGG desynchronization. Psychon. Sci., 1967,7, 289-290.

2. BARNES, G.W., and A. BARRON. Stimulus Complexity and Sensory Reinforcement. JCPP., 1961, 54, 466-469.

3. BERLYNE, D.E. Novelty and Curiosity as determinants of exploratory behaviour. Br. J. Psychol. 1950, 41, 68-80.

4. BERLYNE, D.E. A theory of human curiosity. Br. J. Psychol. 45, 180-191.

5. BERLYNE, D.E. The arousal and satiation of perceptual curiosity in the rat. JCPP.,1955, 48, 238-246.

6. BERLYNE, D.E. Conflict and Information Theory Variables as determinants of human perceptual curiosity. J. Exp. Psychol., 1957, 53, 399-404.

7. BERLYNE, D.E. Conflict and Choice Time. Br. J. Psychol., 1957a, 48. 106-118.

8. BERLYNE, D.E. Uncertainity and Conflict: A point of contact between information theory and behaviour theory concepts. Psychol. Rev., 1957b, 64, 329-339.

9. BERLYNE, D.E. The influence of complexity and novelty in visual figures and orienting responses. J. exp. Psychol, 1958, 55, 289-296.

10. BERLYNE, D.E. Conflict, arousal and curiosity. New York, McGraw-Hill, 1960.

11. BERLYNE, D.E. Uncertainity and epistemic curiosity. Br. J. Psychol. 1962, 53, 27-34.

12. BERLYNE, D.E. Note on food deprivation and extrinsic exploratory responses. Psychol. Rep.1962a, 11, 162.

13. BERLYNE, D.E. Motivational problems raised by exploratory and epistemic behaviour. In: Koch S, ed., Psychology: a Study of a Science. New York, Mc Graw-Hill, 1963.

14. BERLYNE, D.E. Complexity and Incongruity variables as determinants of exploratory choice and evaluative ratings. Canad. J. Psychol., 1963a, 17, 274-290.

15. BERLYNE, D.E. Structural and Direction in Thinking. New York, John Wiley and Sons, 1965.

16. BERLYNE, D.E. Curiosity and Exploration. Science, 1966, 15 , 25-33.

17. BERLYNE, D.E. Indifferent Exteroceptive Stimulation and Reinforcement. In: Glass, D.C., ed., Environmental Influences. New York, Rockerfeller University Press,1968.

18. BERLYNE, D.E. Novelty, complexity and hedonic value. Perception and Psychophysics, 1970, 8(5-A),279-286.

19. BERLYNE,D.E. and D.M. BOREA. Uncertainity and the orientation reaction. Perception and Psychophysics, 1968, 3(1-B),77-79.

20. BERLYNE, D.E., M.A. CRAW, P.H. SALAPATEK and J.L. LEWIS. Novelty, complexity, incongruity, extrinsic motivation and the GSR. J. Exp. Psychol., 1963,66,560-551.

21. BERLYNE,D.E. and G.H. LAWRENCE. Effects of Complexity and Incongruity variables on GSR, exploratory behaviour and verbally expressed preferences. J. Gen. Psychol., 1964,71, 21-45.

22. BERLYNE, D.E. and J.L. LEWIS. Effects of heightened arousal on human exploratory behaviour. Canad. J. Psychol., 1963, 17, 398.

23. BERLYNE, D.E. and P. MCDONNEL. Effects of stimulus complexity and incongruity on duration of EEG desynchronization. Electroenceph. clin. Neurophysiol., 1965, 18, 156-161.

24. BERLYNE, D.E., J.C. OGILVIE and L.C. PARHAM. The dimensionality of visual complexity, interestingness, and pleasingness. Canad. J. Psychol., 1968, 22, 376-387.

25. BERLYNE, D.E. and J. SLATER. Perceptual Curiosity, Exploratory Behaviour and Maze Learning. JCPP, 1957, 50, 228-232.

26. BERRIEN, F.K. Methodological and related problems in cross-cultural research. Int. J. Psychol., 1967, 2, 33-43.

27. BERRY, J.W. Temne and Eskimo perceptual skills. Int. J. Psychol., 1966, 1, 207-229.

28. BERRY, J.W. On cross-cultural comparability. Int. J. Psychol., 1969, 4, 119-128.

29. BERRY, J.W. Radical cultural relativism and the concept of intelligence. pp. 77-88
In: Cronbach, L.J. and P.J.D. Drenth, eds., Mental Tests and Cultural Adaptation. The Hague, Mouton, 1972.

30. BIESHEUVEL, S. African Intelligence Johannesburg, South African Institute of Race Relations, 1943.

31. BIESHEUVEL, S. Objectives and Methods of African Psychological Research. J. soc. Psychol., 1958, 47, 161-168.

32. BIESHEUVEL, S Race, culture and personality. Johannesburg, South African Institute of Race Relations, 1959.

33. BIESHEUVEL, S. An examination of Jensen's Theory concerning educability, heritability and population differences. Psychol. Afr., 1972,14, 87-94.

34. BIESHEUVEL. S. Adaptability : its measurement and determinants. pp 47-62. In : Cronbach, L.J and P.J.D. Drenth, eds., Mental Tests and Cultural Adaptation. The Hague, Mouton, 1972 (a).

35. BIESHEUVEL,S and D.R. PITT. Some tests of speed and tempo of the primary secondary-function temperament variable. J. Nat. Inst. Pers. Res., 1955, 6, 87-94.

36. BLACK, K.N., T.M. WILLIAMS and D.R. BROWN. A developmental study of preschool children's preference for random forms. Child Dev., 1971, 42, 57-61.

37. BLIGH, M.N. A comparative study of visual and auditory responsiveness in two ethnic groups. M.A. Thesis, Johannesburg, University of the Witwatersrand, 1967.

38. BOCK,R.D and L.V. JONES. The measurement and prediction of judgement and choice. San Francisco, Holden-Day, 1968.

39. BOX, G.E.P. A general distribution theory for a class of likelihood criteria. Biometrika, 1949, 36, 317-346.

40. BRENNAN, W.M., E.W. AMES and R.W. MOORE. Age differences in infants' attention to patterns of different complexities. Science, 1966, 151, 354-356.

41. BROWN, J.S. and I.E. FARBER. Emotions conceptualized as intervening variables with suggestions towards a theory of frustration. Psychol. Bull., 1951, 38, 465-495.

42. BROWNLEE, K.A. Statistical Theory and Methodology in Science and Engineering. 2nd ed. New York, John Wiley.

43. BUTLER, R.A. Discrimination learning by rhesus monkeys to visual exploration motivation. JCPP., 1953, 95-98.

44. BUTLER, R.A. The effect of deprivation of visual incentives on visual exploration motivation in monkeys. JCPP., 1957, 50, 117-119.

45. CAMPBELL, D.T. and D.W. FISKE. Convergent and Discriminant Validity by the multitrait-multimethod matrix. Psychol. Bull., 1959, 56, 81-105.

46. CAROTHERS, J.C. The African mind in health and disease. Geneva, World Health Organization, 1953.

47. CONNOLLY, M.R. and L. HARRIS. Effects of Stimulus Incongruity on children's curiosity as measured by looking time and expression change. Psychonomic Science, 1971, 25(4), 232/234

48. COWLEY, J.J. and R.D. GRIESEL. The development of second-generation low-protein rats. J. genet. Psychol., 1963, 103, 233-242

49 COWLEY, J.J. and R.D. GRIESEL. Low protein diet and emotionality in the albino rat. J. genet. Psychol., 1964,10( 89-98

50. CRANDALL, J.E. Relation of epistemic curiosity to subjective uncertainty. J. exp. Psychol., 1971, 88, 273-276.

51. CRAVIOTO, J.Deficiences and mental performance in childhood. In : Glass, D.C., ed ., Environmental Influences. Proceedings of the Conference. New York, The Rockefeller University Press, 1968.

52. CRONBACH, L.J. Summary and Commentary. pp. 469 - 486 In: Cronbach, L.J and P.J.D. Drenth, eds., Mental Tests and Cultural Adaptation. The Hague, Mouto 1972.

53. CUMMINGS,S.P. Curiosity as a measure of cortical potential. Diss. Abstr., 1967, 28 (4-A),1323.

54. DARCHEN,R. Sur l'activite exploratrice de Blatella germanica. Z. Tierpsychol., 1952, 9, 362-372.

55. DAY, H. Brief note on the Berlyne-Heckhausen Controversy. Psychol. Rep. 1965, 17, 225-226.

56. DAY, H. Looking time as a function of stimulus variables and individual differences. Percept. Mot. Skills, 1966, 22, 423-428.

57. DAY, H. Evaluations of subjective complexity, pleasingness and interestingness for a series of random polygons varying in complexity. Perception and Psychophysics, 1967,2, 281-286.

58. DAY,H. The importance of arousal as a motivational factor in learning to read. Canad. Psychol., 1968, 9, 154-161.

59. DAY,H. Role of specific curiosity in school achievement. J. ed. Psychol., 1968, 59, 37-43.

60. DEMBER, W.N. Response by the rat to Environmental change JCPP., 1956, 49, 93-95.

61. DEMBER, W.N and K.W. EARL, Analysis of exploratory, manipulatory and curiosity behaviours. Psychol. Rev., 1957, 64, 91-96.

62. DENNIS, W. Causes of retardation among institutional children: Iran. J. genet. Psychol., 1960, 96, 47-59.

63. DE RIDDER, J.C. The personality of the urban African in South Africa. London, Routledge & Kegan Paul, 1961.

64. DUIJKER, H.C.J and N.H. FRIJDA. National character and national steriotypes. Amsterdam, North Holland Publishing Co., 1960.

65. DUIJKER, H.C.J. and S. ROKKAN. Organizational aspects of cross-national research. J. Soc. Issues, 1954, 10, 8-24.

66. EDWARDS A.L. Experimental design in Psychological Research New York, Rinehart & Co., 1953.

67. EISENMAN, R. The association of random shapes revisited. Psychon. Sci., 1966, 6, 397-398.

68. EISENMAN, R. Complexity-Simplicity: preference for symmetry and rejection of complexity. Psychon. Sci., 1967, 8, 169-170.

69. EKENSBERGER, L.H. The necessity of a theory for applied cross-cultural research.pp. 100-107. In: Cronbach, L.J and P.J.D. Drenths, eds. Mental Tests and Cultural Adaptation. The Hague, Mouton, 1972.

70. EYSENCK, H.J. The empirical determination of an aesthetic formula. Psychol. Rev., 1941, 48, 83-92.

71. EYSENCK, H.J. Dimensions of Personality. London, Routledge. 1947.

72. EYSENCK, H.J. The structure of human personality. London Methuen, 1953.

73. FANTZ,R.L. Visual Experience in Infants: decreased attention to familiar patterns relative to new ones. Science 1964, 146, 668-670.

74. FARLEY, F.H and S.V. FARLEY. Extraversion and stimulus-seeking motivation. J. consult. Psychol., 1967, 31, 215-216.

75. FARLEY, F.H and S.V. FARLEY. Impulsivaness, sociability and preference for varied experience. Percept. Mot. Skills, 1970, 31, 47-50.

76. FERGUSSON, G. A. On transfer of the abilities of man. Canad. J. Psychol., 1956, 10, 121-131.

77. FESTINGER, L. Theory of Cognitive Dissonance. Evanston, Illinois, Row, Person, 1957.

78. FICK, M.L The Educability of the South African Native Pretoria, South African Council for Education and Social Research, 1939.

79. FISKE, D.W and S.R. MADDI. Functions of Varied Experience. Illinois, The Dorsey Press, 1961.

80. FOWLER,H. Response to environmental change: a positive replication. Psychol. Rep., 1958, 4, 506.

81. FOWLER,H. Curiosity and Exploratory Behavior. New York, Mc Millan, 1966.

82. FRENCH, J.W., Ruth, B. Ekstrom and L.A. Price., Manual for kit of reference tests for cognitive factors. New Jersey, Educational Testing Service, 1963.

83. FRENKEL-BRUNSWIK, Else. Intolerance of ambiguity as an emotional and perceptual personality variable. J. Pers., 1949, 18, 108-143.

84. FRIJDA, N. and G. JAHODA. On the scope and methods in cross-cultural research. Int J. Psychol., 1966, 1, 109-127.

85. GARLINGTON, W.K. and H.E. SHIMOTA. The change seeker index: a measure of the need for stimuls input. Psychol. Rep., 1964, 14, 919-924.

86. GLASS, Y. The productivity of the black industrial worker. CSIR Research Rev., 1961, 1, 161-163.

87. GLASS,Y Industrial Man in South Africa : Address to the Institute for the study of Man in Africa, Johannesburg, 1961.

88. GLASS,Y. The Industrialization of an indigenous people. S. African J. Sci., 1963, 59, 386-394.

89. GRANT, G.V. The Organisation of Mental Abilities of an African Group in Cultural Transition. Ph.D. Thesis, Johannesburg: University of the Witwatersrand, 1969.

90. GREENBERGER, E., J. WOLDMAN and S.W. YOURSHAW. Components of curiosity: Berlyne reconsidered. Br. J. Psychol., 1967, 58, 375-386.

91. GULLIKSEN, H. Theory of Mental Tests. New York, John Wiley, 1950.

92. HARLOW, H. Motivation as a factor in the acquisition of new responses. In : Jones, M., Ed., Nebraska Symposium on Motivation.Lincoln, Nebraska, Univ. Nebraska Press, 1953, 24-49.

93. HARLOW, H.F., N.C. BLAZEK and G.E. MCCLEARN. Manipulatory motivation in infant rhesus monkeys. JCPP., 1956, 49, 444-448.

94. HARRIS, L. The effects of relative novelty on children's choice behaviour. J. exp. ch. Psychol., 1965, 2, 297-305.

95. HEBB, D.O. The organization of behaviour. New York, John Wiley, 1949.

96. HEBB. D.O. Drives and the CNS. Psychol. Rev., 1955, 62, 243-254.

97. HECKHAUSEN, H. Complexity in perception : phenomenal criteria and information-theoretic calculus. A note on D.E. Berlyn's "complexity effects". Canad. J. Psychol., 1964,8, 168-173.

98. HEIDER, F. Attitudes and cognitive organization. J.Psychol., 1946, 21,107-112.

99. HUTT, CORINNE. Temporal effects on response decrement and stimulus satiation in exploration. Br. J. Psychol., 1967, 58, 365-373.

100. HUTT, C and P.L. MCGREW. Do children really prefer complexity? Psychon. Sci., 1969, 17,113-114.

101. IRVINE, S.H. Towards a rationale for testing attainments and abilities in Africa. Br. J. Educ. Psychol., 1966,36, 24-32.

102. IRVINE, S.H. Factor analysis of African abilities and attainments: constructs accross cultures. Psychol. Bull., 1969,71 (1), 20-32.

103. IRVINE, S.H and J.T. SANDERS. Logic, language and method in construct identification accross cultures. pp. 427-446. In: Cronbach, L.J. and P.J.D. Drenth, eds., Mental Tests and Cultural Adaptation. The Hague, Mouton, 1972.

104. ISHIHARA,S. Tests for colour-blindness, 13th ed. Tokyo, Kanehara, Shuppan,1958.

105. JENSEN, A.R. How much can we boost I.Q. and scholastic achievement. Harvard Educational Review, 1969, 39,1-123.

106. KENDAL, M.G. The advanced theory of statistics, Vol.II. London, Griffin, 1946.

107. KIVY, P.N., R.W. EARL and E.D. WALKER. Stimulus content and satiation. JCPP., 1956, 49,90-92.

108. LACEY, J.I. Somatic response patterning to stress: some revisions of activation theory. In: Appley, M.H. and R. Thurnbull, eds., Psychological Stress. New York, Appleton-Century-Crofts, 1967.

109. LANGEVIN, R. Is curiosity a unitary construct? Canad. J.Psychol., 1971, 25, 360-374.

110. LECKART, B.T. Looking Time: the effects of stimulus complexity and familiarity. Perception and Psychophysics, 1966, 1, 142-144.

111. LEUBA, C. Toward some integration of learning theories: the concept of optimal stimulation. Psychol. Rep., 1955, 1, 27-33.

112. LEVIN, H. and D.G. FORGAYS. Learning as a function of Sensory Stimulation of various intensities, JCPP., 1959, 52, 195-201.

113. LIVSON,N. Towards a differential construct of curiosity. J. genet. Psychol., 1967, 111, 73-84.

114. LORD, F.M. and M.R. NOVICK. Statistical Theories at Mental Test Scores. Massachusetts, Addison-Wesley, 1968.

115. MALTZMAN,L. Motivation and Direction in thinking, Psychol Bull., 1962, 59, 457-467.

116. MAW, W.H. and E.W. MAW. Non-homeostatic experience as stimuli of children with high curiosity. Calif. J. Educ Res., 1961, 12, 57-61.

117. MAW, W.H. and E.W. MAW. Children's curiosity and parental attitudes. Journal of Marriage and the Family, 1966, 28, 343.

118. MC CLELLAND, D.C., J.W. ATKINSON,R.A. CLARK, and E.L. LOWELL. The achievement motive. New York, Appleton-Century-Crofts,1953.

119. MELCHERT, J.C. Novelty and change in the Perceptual Curiosity of children. Dis. Abstr. 1967, 28 (6-A), 2098.

120 MENDEL, G. Children's preferences for differing degrees of novelty. Child.Dev., 1965,36,453-465.

121. MINTON, H.L. Perceptual curiosity as a function of stimulus complexity and cognitive complexity. Dis. Abstr., 1963, 23, 2593.

122. MINTON. H.L. A replication of perceptual curiosity as a function of stimulus complexity. J. exp. Psychol., 1963a, 66,522-524.

123. MONTGOMERY, K.C. Exploratory Behaviour as a function of stimulus situations. JCPP., 1953, 46, 129-133.

124. MONTGOMERY, K.C. The role of the exploratory drive in learning. JCPP., 1954, 47, 60-64.

125. MONTGOMERY, K.C and M. SEGALL. Discrimination learning based upon the exploratory drive. JCPP., 1955, 48, 225-228.

126. MORRISON, D.F. Multivariate Statistical Methods. New York, McGraw-Hill, 1967.

127. MUNDY-CASTLE,A.C. The relationship between primary-secondary functioning and the alpha rhythm of the electroencephalogram. J. Nat. Inst. Pers. Res.,1955, 6, 95-102.

128. MUNDY-CASTLE,A.C. Psychology in Ghana. Studies of electrical rhythms of the Brain. pp. 222-260. In: Brokensha, D. and M. Crouder, eds. Africa in the wider world. Oxford, Pergammon, 1967.

129. MUNSINGER,H and W. KESSON. Uncertainty, structure and preference. Psychol. Monogr.,1964, 78, 1-24.

130. MUNSINGER,H. and W. KESSEN. Stimulus variability and cognitive chage. Psychol. Rev., 1966, 73, 164-178.

131. MUNSINGER,H., W. KESSEN and M.L. KESSEN. Age and uncertainty: Developmental variations in preference for variability. J. exp. ch. Psychol., 1964, 1, 1-15.

132. MUNSINGER,H. and M.W. WEIR. Infants and young children's preference for complexity. J. exp.ch. Psychol., 1967, 5, 69-73.

133. MYERS,A.K. and N.E. MILLER. Evidence for learning motivated by exploration. JCPP., 1954, 47, 428-436.

134. NELSON,G.K. The EEG in kwashiokor. EEG clin. Neurophysiol., 1959, 11, 73-84.

135. NELSON,G.K. Race, culture and brain function. Johannesburg, Inst. for the study of man in Africa, 1964.

136. OMBREDANE,A., F. ROBAYE and H. PLUMAIL. Resultats d'une application repetee du matrix couleur a une population de Noirs Congolais. Bull. Cent. Etud. Rech. psychotech 1956, 5, 129-147.

137. PENNEY,R.I. and B.MCCANN. The children's reactive curiosity scale. Psychol. Rep., 1964, 15, 323-334.

138. PENNEY, R. and R. REINEHR. Development of a stimulus variation seeking scale for adults. Psychol. Rep., 1966, 18, 631-638.

139. PEW,R.W. The speed-accuracy operating characteristic. Acta psychol., 1969, 30, 16-26.

140. PHILLIP,R.L. and G.J.S. WILDE. Stimulation seeking behaviour and extraversion. Acta psychol., 1970, 32, 269-280.

141. PIAGET, J. The origins of intelligence in children. New York, International Universities Press, 1936.

142. PIELSTICK,N.L. and A.B. WOODRUFF. Exploratory behaviour and curiosity in two age and ability groups of children. Psychol. Rep., 1964, 14, 831-838.

143. POORTINGA, Y.H. Cross-cultural comparison of maximum performance tests: some methodological aspects and some experiments with simple auditory and visual stimuli. Psychol. Afr. 1971, Monograph supp. no. 6.

144. POORTINGA, Y.H. and ELMIEN SPIES. An attempt to compare risk-taking in two culturally different groups. Psychol Afric. 1972, 14, 186-199.

145. PORTEUS,S.D. Primitive Intelligence and Environment. London MacMillan, 1937.

146. PROVINS,K.A.,G.R.BELL, S. BIESHEUVEL and W.T.V. ABTISESHIAN. The cross-cultural measurement of perceptual and motor skills in relation to human adaptation. Hum. Biol., 1968,40,484-493.

147. PRZEWORSKI,A., and H. LEVINE. Equivalence in Cross-cultural research Pub. Opin. Q., 1966, 30, 551-568.

148. RABBIT,P. Time to detect errors as a function of factors affecting choice response time. Acta psychol., 1967,27, 131-142.

149. RABBIT, P.M.A and S.M. VYAS. An elementary preliminary Taxonomy for some errors in laboratory choice RT tasks. Acta psychol., 1970, 33, 56-76.

150. ROSENTHAL,R. The Volunteer subject. Hum. Rel., 1965, 18 389-406.

151. RUMP, E,E. Is there a general factor of preference for complexity? Perception and Psychophysics, 1968, 3, 346-348.

152. SAXE, R.M. and G.E. STOLBACK. Curiosity and parent-child relationship. Child.Dev., 1971, 42, 373-384.

153. SCHIFF, NYRA,R. An analysis of reported caretaker behaviour correlates at manifest curiosity among Ganda pre-school children. Ph. D. thesis. Syracuse, New York, Syracuse University, 1970.

154. SCHOUTEN, J.F and J.A.M. BEKKER. Reaction time and accuracy Acta psychol., 1967, 27, 143-153.

155. SEGALL,M.H., D.T. CAMPBELL and M.J. HERSKOVITS. The influence of culture on visual perception. New York, Robbs-Merril Co., 1966.

156. SHUEY, Audrey, M. The Testing of Negro Intelligence, 2nd ed. New York, Social Science Press, 1966.

157. SOKOLOV,E.N. Perception and the conditioned reflex. Oxford, Pergammon Press, 1963.

158. STRODBECK,F.L. Considerations of meta-method in cross-cultural studies. Amer.Anthrop., (Special Publication), 1964,66,& 377-411.

159 THOMAS,H. Preferences for random shapes: ages six through 19 years. Child Dev., 1966,37, 843-859.

160. THOMSON,W.R and T. SCHAEFER. Early environmental stimulation. In: Fiske, D.W. and S.R Maddi, eds., Functions of varied experience. Illinois, The Dorsey Press, 1961.

161. THURSTONE,L.L. and T.G. The Chicago Tests of Primary Mental Abilities : Manual. Chicago: Science Research Associates, 1943.

162. TYLER. LEONA,M. The Psychology of Human Differences, New York, Appleton-Century- Crofts, 1965.

163. VERSTER,J.M. The Intellectual Structure of C.S.I.R Scientists, Johannesburg. National Institute for Personnel Research, 1973.

164. VITZ, P. Preference for different amounts of visual complexity. Behav. Sci., 1966, 11, 105-114.

165. WHITING,J.W.M. The cross-cultural method. In: Lindzey, G., ed., Handbook of social psychology, Vol.I.,London, Addison Wesley, 1954, pp. 523-531.

166. WILCOCKS, Annamarie. Test Administrator's Manual for Intermediate Battery A/77. Johannesburg, National Institute for Personnel Research, 1969.

167. ZUBEK, J. Behavioural changes after prolonged perceptual deprivation. Percept. Mot.Skills, 1964, 18, 413-420.

168. ZUBEK,J.P., J.M. SHEPARD, and S.L. MILSTEIN. EEG changes after 1,4, and 7 days sensory deprivation: a cross-sectional approach. Psychon. Sci., 1970,19,67-71.

169. ZUBECK,J and G. WELCH. EEG changes after prolonged sensory and perceptual deprivation. Science, 1963, 139, 209-210

170. ZUCKERMAN,M., E.A. KOLIN, L. PRICE and I. ZOOB. Development of a sensation-seeking scale. J. Consult. Psychol., 1964, 28, 477-482.

**Author** Foden Bernardina
**Name of thesis** Curiosity in Africans and Europeans. 1973

***PUBLISHER:***
**University of the Witwatersrand, Johannesburg**
**©2013**

***LEGAL NOTICES:***

**Copyright Notice:** All materials on the University of the Witwatersrand, Johannesburg Library website are protected by South African copyright law and may not be distributed, transmitted, displayed, or otherwise published in any format, without the prior written permission of the copyright owner.

**Disclaimer and Terms of Use:** Provided that you maintain all copyright and other notices contained therein, you may download material (one machine readable copy and one print copy per page) for your personal and/or educational non-commercial use only.

The University of the Witwatersrand, Johannesburg, is not responsible for any errors or omissions and excludes any and all liability for any errors in or omissions from the information on the Library website.