Harmony-Disharmony Scale: Development and Initial Factorial Validation

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Abstract: Objective - The Harmony Restoration Theory (HRTheory) propounded by Ebigbo (1995, 2001a) is an African psychodiagnostic theory of health. It is a theory of harmony-disharmony, psychopathology, psychotherapy and a useful attempt to account for the aetiology of psychopathology in the African. Central to the theory is the notion that psychopathology arises from the disharmony in the cosmos of an individual. The objective of this study was to develop and validate a measuring scale, harmony-disharmony scale (HD Scale), for determining the areas of the cosmos which an individual needs harmony restoration before the initiation of harmony restoration therapy. Method - Based on the harmony restoration theory of health and Harmony restoration therapy, 120 items with 40 items per subscale were generated focusing on the three aspects of an individual’s cosmos viz: endocosmos, mesocosmos and exocosmos needing harmony restoration. The outcome, a 120 likert-type scale, was administered to a cross-section of University undergraduates. The 258 responses obtained from the respondents (124 males and 128 females) aged 16 to 29 years (21.02 ± 4.083, mean ± s.d.) were subjected to factor analysis. Results - The data was examined to assess the suitability for factor analysis and was found suitable with good R-matrix, Bartlett’s test of Sphericity and Kaiser-Meyer-Olkin (KMO) sample sufficiency. A 3-factor model emerged from the result of the factor analysis with 59 pure and valid items loading on factor 1, 23 items loading on factor 2 and 16 items loading on factor 3. The factors retained their original theoretical names viz: endocosmos, mesocosmos and exocosmos. Conclusion - The finding of this study is consistent with the harmony restoration theory on the African personality consisting of three components. Suggestions on ways to advance this area of research were made and a short version of the harmony-disharmony scale was proposed.

Introduction
The Harmony Restoration Theory (HRTheory) propounded by Ebigbo (1995, 2001a) is an African psychodiagnostic theory of health. This theory postulates the existence of three domains of personality in an African: endocosmos, mesocosmos, and exocosmos. It also posits that a disruption or disharmony in any of these domains would engender ill
health or psychopathology. Hence, assessing harmony and disharmony in the three aspects of an individual’s cosmos is crucial for planning and successful psychotherapeutic intervention strategy (Ebigbo, 1995, 2001(a); Igbokwe & Ndom, 2008; Igbokwe, 2014). As a theory of health and ill health from an African perspective, the HRTheory uses a psychotherapy procedure developed by Ebigbo (1995, 2001a; Onyeizugbo, 2002), named Harmony Restoration Therapy (HRTherapy).

The HRTherapy is a therapy that seeks to treat maladaptive behaviours and enhance adaptive behaviours. This theory and its therapy emanated from the notion of African collectivism in which where it is believed that health or ill health is a function of an individual’s level of harmony or disharmony with the components of his/her cosmos or world (Ebigbo, 2001a). Cosmos represents a sum total of the individual’s world which according to the HRTheory is tripartite in nature consisting of the endocosmos, the mesocosmos and the exocosmos. A break in harmony between the individual and his cosmos would result in illness which could be mental or physical (Ebigbo, 1995). Thus, according to the harmony restoration theory, “...a state of stress,...(which is a state of cosmic imbalance or) disruption of relationship with one’s environment depresses the immune response system while a state of harmony increases the immunity” (Ebigbo, 2001a).

The African concept of illness hypothesizes that the mind, the body and the society interact to determine health and ill health and this therefore means that the mind is the body and the body is the mind (Ebigbo, 1989). There is no precise distinction between the two. This means that psychological illnesses are experienced bodily or somatically and physiological illnesses also manifest psychologically. The African’s behavior is thus determined by their relationship with the components of their cosmos. This further establishes that the African is largely cosmocentric and any presence of disharmony or disruption of relationship between them and their cosmos brings about illness or disharmony in the African (Igbokwe & Ndom, 2008). The issue is not whether the problem is from the society, the mind of the individual or the body of the person, the overall effect of disharmony is either psychological or physiological ill health.

Interestingly, the African is focused on maintaining harmony largely because of the collectivistic nature of the African (Ebigbo, 1986). This collectivism extends to the African’s view of health where health and ill health cannot be conceived of except in the context
of inter-human and human-spirit relationship. Ebigbo, Oluka, Ezenwa, Obidigbo and Okwaraji (1996) succinctly captured this by noting that the African is at peace when he is in harmony with his cosmos but when harmony is destabilized, everything goes awry. This view is also expressed in the Poem, “Viaticum,” written by the Senegalese poet, Birago Diop (Nwoga, 1982, p.107):

In none of the three jugs
The three jugs where on certain
evenings return
the tranquil souls,
the breaths of the ancestors,
the ancestors who were men,
the ancestors who were sages,
Mother has dipped three fingers......
Mother has touched me three times......
Mother said: "Go through the World,
go in Life. They will follow thy traces."
Since then I go,
I go by the tracks and on the roads,
beyond the seas and further still
....And when I come to the wicked
men,
the black-hearted men,
when I come to the envious,
the black-hearted men,
before me advance the breaths of the
forefathers.

The poem expresses the seamless interaction between humans, living or dead. At eventide the departed souls of departed ancestors return to interact with their living relatives (lines 1-6). This mind state corresponds to what in harmony-restoration theory described as the exocosmos. Notice also from lines 10-14 that they are able to interfere in the daily routine of the living such as defending one from the ontoward activities of the “envious, the black-hearted men...” (or mesocosmos). The African therefore is at peace only when there is harmony between these planes of existence and with himself (endocosmos, but when harmony is destabilized, everything goes awry. Agoha (2009) has argued that it is not possible to define the individual personality to the exclusion of his/her society. Therefore, disturbances in society or external sources (Baasher, 1975; Idemudia, 2003) may be experienced as illness within the individual. A state of wellness is then thought to consist of harmonious interaction between the core self (endocosmos), social relations (mesocosmos), and the exocosmos (metaphysical) (Ebigbo, 2001a; Oluka, 1995; Ebigbo, Oluka, Ezenwa, Obidigbo & Okwaraji, 1996).

From the harmony restoration perspective, it is believed that once there is harmony, there is no need for treatment but once there is disharmony, harmony restoration therapy is initiated to treat or cure the maladaptive behaviour or alleviate the problem so as to return the person to a state of normalcy. Harmony restoration therapy aims at restoring harmony in the Patient. It is believed that once this is achieved the symptoms, which themselves are thought to be idioms of distress, would disappear. During this
process, the therapist first obtains the cosmogram which is the summation of the plethora of the relationships which are important to the individual; areas of disharmony are revealed, enabling the Cosmoanalyst (or Therapist) arrive at a meaningful diagnosis. According to Ebigbo, Elekwachi, Eze, Nweze and Innocent (2013), “cosmogram is the diagrammatic presentation of the various relationships an individual entertains and their levels of harmony or disharmony” (p.20). The functional relationships are strengthened or encouraged while the dysfunctional ones are restored through suitable psychological techniques. Other methods of psychotherapy are effectively employed in an integrative eclectic manner (Ebigbo et al 1997; See Ebigbo, 1994, 1995 a & b, 2001a; Oluka, 1995; Ebigbo et al, 1996) to restore harmony and bring healing to the ailing.

Research Problem
The problem this research addresses is the need to develop and factorially validate the Harmony-Disharmony scale. The challenge with almost all psychotherapy procedures and theories is the lack of diagnostic tools. If most theories of health have this, it would be easy to diagnose and initiate treatment. Hence, there is need for diagnostic tools especially in Africa. In fact, there has always been a perceived perennial problem with psychodiagnosis and assessment in Africa which brought about the consensus among authors that Western diagnostic measures should be used with caution in Africa (Ebigbo & Ihezue, 1981). For instance, somatization is a culture specific or culture – bound syndrome and the presentation of somatic complaints (symptoms) in West Africa can very often lead to a wrong diagnosis (Ebigbo & Ihezue, 1981). This led to the development of an African (Nigerian) culture specific instrument to measure somatization (Ebigbo, 1982). At present, there are still calls being made for an indigenous response to the development of indigenous psychological instruments or scales (Olatunji & Onofeghara, 2008) for diagnosis within indigenous psychotherapy procedures in Africa.

A diagnostic tool in HRTherapy will facilitate the diagnosis and treatment of individuals and serve as a cosmogram mapping and/or cosmogram exploration guide knowing that by the time the client completes the scale, a reasonably clear picture of the individual’s cosmogram would have emerged to aid the cosmoanalyst in his analysis or HRTherapy. This is because, in order to treat a client, there is need for the therapist to know the area from which the disharmony being experienced by the client emanates and the intensity of the disharmony. In
order to successfully measure harmony – disharmony and eliminate ‘trial-and-error’ in clinical practice, especially in the diagnosis of disharmony within the individual, it is absolutely needful to have a scale that brings all the protocols/complaints of patients into a common denominator so as to assess harmony/disharmony in individuals. This could be done by collating items which measures the three different components of the personality, subject the items to empirical factor analysis to examine if there will be satisfactory factorial loading of items and a determination of the factor structure of the Scale, examine the item constellation on the endocosmos, mesocosmos or exocosmos subscales and establish the reliability and validity of the instrument in order to ease psychodiagnosis.

Objectives of the Study

The major objective of this study was to develop a valid and reliable instrument for measuring harmony/disharmony in persons.

Methods

Research Design: This study made use of the survey research design because observation and measurement was obtained from a cross-section of participants using a psychological instrument.

Setting and Population: The setting for this study was Covenant University (CU), Ota. Covenant University was established in October 2002 as one of the private universities in Nigeria. Covenant University operates the collegiate system and presently has four undergraduate colleges viz: The College of Business Studies, College of Engineering, College of Leadership Development Studies and College of Science and Technology. There are presently 23 departments in Covenant University.

Covenant University students were used for this initial validation of the instrument because in line with global trend in the development of psychological tests, some of the widely used tests have been initially validated with university students. The authors believe that possibly because of the herculean task of developing tests and ensuring reliability and validity, university undergraduate affords a researcher the opportunity to test the variables in a test in a controlled setting so that observable differences will only be attributed to population peculiarity and not other confounding or extraneous variables.

For instance, in a test like the Schutte’s Emotional Intelligence Test (SSEIT), Schutte, Malouff, Hall, Haggerty, Cooper, Golden, and Dornheim (1998) used 32 university students in the United States to develop and validate the SSEIT which is recognized as the most used emotional intelligence scale worldwide. Austin, Saklofske, Huang, and McKenney (2004) used 500 university students in the University of British Columbia to validate the SSEIT.
students to validate the SSEIT in Canada while Newcombe and Ashkanasy (2002) used 537 university business students to validate the SSEIT Australia. Also, the Subjective Happiness Scale (Lyubomirsky & Lepper, 1999) was developed and validated using mostly university students. Hood, (1975) validated the Mysticism Scale, Research Form D using university students. This scale is presently the most widely used scale to measure mystical experiences (King, 2008). Other psychological tests used worldwide like the Minnesota Multiphasic Personality Inventory (MMPI) took its root from the university setting, the University of Minnesota in the USA. King in 2008 used 631 undergraduate students from 100 to 400 level enrolled in psychology courses in Trent University, Ontario Canada to develop the widely acclaimed Spiritual Intelligence Inventory (SIRI).

**Sampling Procedure/Technique**
The instrument was administered using the simple random sampling method of odd and even technique with the odd numbered students receiving the instrument. The scale administration took an average of ten minutes in the participants’ classes.

**Inclusion and Exclusion Criteria**
The inclusion criteria was being a healthy undergraduate student of Covenant University willing to participate in the study while the exclusion criteria was being unhealthy (not fit to respond), not willing to respond and not being a student of Covenant University.

**Ethical approval and Consent**
Ethical clearance was obtained for this study from the Ethics Committee of the Covenant University Centre for Research, Innovation and Discovery (CUCRID), Covenant University, Ota. Also, each of the participating student was requested to fill out and sign an informed consent form after reading through the copy on the questionnaire and briefed on the purpose of the research. A debriefing or post evaluation interview was conducted after the study to clear doubts and answer further questions on the objectives or goals of the study.

**Instrumentation: Harmony-Disharmony Scale (HD Scale)**
The initial Items for the HD scale were generated by Igbokwe (2004) from a review of literature on African cosmology, socio cultural studies, ethno-psychiatry, African traditional healing practices and from the case files and direct protocols from clients treated at the International Federation for Psychotherapy (IFP), working under Professor Peter O. Ebigbo who propounded the Harmony Restoration Theory. These items were written in statement forms with each of them specifically addressing some aspect of the cosmos, personality or temperament. Six subject experts
(Clinical Psychologists (3), Social Psychologist (1) and Psychotherapists (2)) examined the items for face validity.

The present form of the scale, the HD scale is a 120 - item likert-type positively and negatively worded scale that assesses the three dimensions of a person’s cosmos. The HD scale has three subscales namely, the endocosmos, mesocosmos and exocosmos subscales with 40 items for each of the subscales. Concerning the number of items, Clark and Watson (1995) suggested that over-inclusive item pool is aimed at assisting the researcher determine the best worded items since scale reduction is more often than not observed as a result of factorial validity. The HD Scale is in a four response likert format. This is in line with Comrey (1988), Clark and Watson (1995) and King (2008) who suggested that the likert format is more reliable than the dichotomous format in instrument design.

The scale measures also the personality and the temperament of the individual with the last six items on the endocosmos subscale measuring sanguine, choleric, melancholic and phlegmatic personality while the last three items on the mesocosmos subscale measures introversion-extroversion. Also, it incorporates the core HD Scale items that represent areas of relationship of the individual. The response pattern is four Likert type response options which are rarely or none of the time (1), a little of the time (2), some of the time (3), most or all of the time (4). These response options or assists in the examination of the client since the cosmoanalyst’s work is not only to map out discordant, distorted or disharmonious relationship but to know the extent, quality or intensity of such disharmony or distortion and to also know the component or aspect of the cosmos that the disharmony is coming from.

Cluster analysis, which is an exploratory data analysis tool for solving classification problems, was conducted on the scale (Igbokwe, 2004). It should be noted that the object of cluster analysis is to sort cases into groups, or clusters, so that the degree of association is strong between members of the same cluster and weak between members of different clusters. Each cluster thus describes, in terms of the data collected, the class to which its members belong; and this description may be abstracted through use from the particular to the general class or type. It reveals associations and structure scales. The method of cluster analysis employing clinical-rational clustering approach has been highly favored and widely used in clinical research (Crandell & Dohrenwend, 1967; Sas, Jaffe, & Reddon, 1985;
The harmony-disharmony scale has four Likert type response options ranging from rarely or none of the time (1) to most or all of the time (4). A score is assigned to an item based on the wording of the question. This means that some questions are positively worded (scored forwardly) while some are negatively worded (scored backwardly). The scores are summed up to achieve a total score which points to the person’s level of harmony. Not only that, the individual’s score based on the subscales is collated to know where in particular the disharmony being experienced is from.

Research Procedure
Authors (Clark & Watson, 1995; Worthington & Whittaker, 2006) are of the opinion that for the preliminary stage of psychological scale development, a minimum of 300 participants are required while for the confirmatory stage of a psychological scale development, a recommended number of 200 participants should be used. Hence, for this study, three hundred and twenty (320) students were randomly selected from the four colleges and administered the questionnaire. However, out of the 320 questionnaire administered, only 258 of them were correctly responded to. Others were either filled incorrectly, mutilated or had other issues that they could not be included in the final analysis (participation rate = 80.63%). The participant selection was in line with the assertion of Clark and Watson’s (1995) proposal of a minimum of 300 participants in the development of a scale.

Design/Statistics
Observation and measurement were obtained on a group of participants on a dichotomous variable harmony-disharmony to identify their response pattern to the scale items using a survey design. The H-D Scale was subjected to descriptive statistics with its mean and standard deviation calculated for the scale and the subscales. Internal consistency for the scale and subscales was analyzed with Cronbach’s alpha coefficient and split half reliability. The data was also subjected to factor analysis using the Statistical Package for Social Sciences, seventeenth edition (SPSS - 17) was used for data analysis.

Results
Participant’s (Demographic variables)
A total of 258 university undergraduates took part in this initial validation (124 (48.1%) males, and 128(49.6%) females, 6 (2.3%) participants did not indicate their gender). The participants ranged in age from 15 to 29 years (21.02 ± 4.083, mean ± s.d.) and were selected from year 1 to year 5 to respond to the initial H-D scale. One hundred and fifteen (115 (44.6%)) of the participants were
from the College of Development Studies and College of Leadership Development Studies while one hundred and thirty seven (137(53.1%)) were from the College of Science and Technology and College of Engineering while 6 (2.3%) did not indicate their college. Six (2.3%) of the participants were year 1 students, 73 (28.3%) were year 2 students, 37 (14.3%) of the students were in year 3, 131 (50.8%) of the students were in year 4 while 5 (1.9%) of the students were year 5 students. Six (2.3%) of the participants did not include their demographic variables but they completed the questionnaire hence, their responses to the scale were used for the analysis.

**Exploratory Factor Analysis (Principal Component Analysis (PCA))**

The H-D Scale was subjected to empirical factor analysis to determine its dimensions. This was done in five stages. These stages are: establishing the determinant (R-matrix), the analysis of data in terms of their compatibility with factor analysis, obtaining the factors, factor rotation and naming factors.

First, it was important to establish the determinant, that is, to examine if there is multicolinearity, if every variable on the H-D Scale has good correlation with every other variable (Field, 2005) on the H-D Scale. The determinant of the R-

matrix was found to be 8.68E-036 = 0.000868. This is greater than 0.00001 which if less than would show low correlation between items (Field, 2005). This means that for the H-D Scale, every item has good correlation and none has a spuriously high coefficient and hence, there is no need to remove any question from the correlation matrix at this stage.

Second is conducting the Bartlett’s test of Sphericity and Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy. This determines if the data gathered is appropriate for factor analysis. The factor analysis showed a value of 0.786 on the Kaiser-Meyer-Olkin measure of sampling adequacy. Field (2005) noted that for a sample to be adequate for factor analysis, the KMO value should be above 0.50. Hence, the 258 data used for this analysis was adequate for this factor analysis. For the Bartlett’s Test of Sphericity, the data showed a significant Approximate Chi-Square value ($\chi^2 (7140) = 17451.574$, $p < .001$).

Third, in order to obtain the factors, exploratory factor analysis and method of principal component analysis were used. Fourth, the factor rotation method of oblique rotation and specifically, Direct Oblim was used. This was adopted as a result of the theoretical background of the harmony restoration theory and the H-D Scale which suggests a relationship between the factors,
meaning that the factors are expected to correlate. The explanations for the last three points are going to be further done with the table 1.

The extraction method of the factor analysis was set for the analysis to extract 3 factors following the theoretical background of the HR Theory (Ebigbo, 1995; Ebigbo, 2001a). A total of three factors emerged however, they could not account for half of the total variance. They could only explain for 27.337% of the total variance (Factor 1 = 20.409; Factor 2 = 7.449 and Factor 3 = 4.946). Interestingly, 35 factors had an eigen value greater than 1 (1 had more than 3, 8 had more than 2 or more and 23 had 1 or more eigen value).

The coefficient display format for the analysis was set at 0.31. A total of 63 items initially loaded on the factor 1, 24 items loaded on factor 2 and 20 items loaded on factor 3. However, there were ambiguous items which loaded on more than one factor (Variables 14, 16, 20, 8, 39, 1, 23, 18, and 9) while some items did not load on any factor at all (Variables 26, 11, 27, 40, 32, 24, 114, 33, 96, 51, 111, 43 and 94). Those items were pruned out in order to have pure and valid items for the H-D scale. The pruning process removed 9 items which loaded in more than one factor and 13 items which did not load on any factor.

After the pruning, a total of 59 pure and valid items loaded on factor 1 only, 23 items loaded only on factor 2 and 16 items loaded only on factor 3. The outcome of the exploratory factor analysis is represented in Appendix 1. The scree plot for the stage 1 factor analysis is represented in figure 1.
From figure 1, the scree plot by levelling off at the third factor clearly indicates the presence of the three factors theoretically and statistically identified as part of the Harmony-Disharmony Scale. A **Confirmatory Factor Analysis (CFA)** showed the Bartlett’s test of Sphericity and Kaiser-Meyer-Olkin (KMO) sample sufficiency to be $\chi^2 (4753) = 13355.366 (p < .001)$ 0.822 respectively. All the analyzed data did not load on any other factor. This shows that the H-D scale is a multi-dimensional scale which measure Harmony – Disharmony.

**Reliability and Validity of the H-D Scale**

The final 98 item H-D Scale yielded a .938 Cronbach’s alpha coefficient with a standardized item alpha of .937 to estimated internal consistency of the scale. Also, a Spearman Brown’s coefficient of split half reliability of .806 was observed for equal length while .806 was also observed for unequal length. The result of the internal consistency estimation showed a good outcome for the three subscales also. This is shown in table 1. The intrinsic validity (Guilford, 1954) of the factor analyzed scale showed a coefficient of .934 showing a good intrinsic validity. The scale has also been shown to have construct validity from the factor analysis and the reliability analysis conducted (Aiken, 1979).

| Table 1: Internal consistency reliabilities (α) Means, Standard Deviations and Gender Differences on the H-D Scale |
|-----------------------------------------|----------------|----------|--------------------|----------------|----------------|----------------|-----------------------|-----------------------|
|                                        | All (N = 258)  | Males (N = 124) | Females (N = 128) |
|                                        | α         | M        | SD        | M        | SD        | M        | SD        |
| Endocosmos                             | .957     | 119.19  | 33.31     | 125.03  | 31.58     | 110.98  | 31.39     | $t(250) = \text{3.54}^*$ |
| Mesocosmos                             | .860     | 60.10   | 12.10     | 58.78   | 12.45     | 60.87   | 11.65     | $t(247.63) = \text{-1.37}$ |
| Exocosmos                              | .722     | 44.83   | 6.91      | 44.29   | 7.00      | 45.13   | 6.90      | $t(249.50) = \text{-0.962}$ |
| Cosmos Total                           | .938     | 224.12  | 38.65     | 228.10  | 37.76     | 216.98  | 35.74     | $t(250) = \text{-2.40}^*$ |

The analysis of the data showed a good inter item correlation between the cosmos total and all the subscales. Almost all the subscales showed a significant correlation with each other except for the correlation between the exocosmos and the endocosmos (Table 2).
Table 2: Inter item correlation between the subscales and Cosmos total

<table>
<thead>
<tr>
<th></th>
<th>Endocosmos</th>
<th>Mesocosmos</th>
<th>Exocosmos</th>
<th>Cosmos Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endocosmos</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mesocosmos</td>
<td>.165**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exocosmos</td>
<td>.035</td>
<td>.243**</td>
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<tr>
<td>Cosmos Total</td>
<td>.920**</td>
<td>.499**</td>
<td>.285**</td>
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</table>

From the analysis, there was a negative correlation between sex and endocosmos and sex and cosmos total. There was also no correlation between sex and mesocosmos and exocosmos. A negative and no correlation was also observed between the subscales and level of education. Among the demographic variables, age alone correlated positively with the endocosmos among the subscales and the cosmos total (Table 3).

Table 3: Inter item correlation between the subscales, Cosmos total and demographic variables

<table>
<thead>
<tr>
<th></th>
<th>Endocosmos</th>
<th>Mesocosmos</th>
<th>Exocosmos</th>
<th>Cosmos Total</th>
<th>Sex</th>
<th>College</th>
<th>Level</th>
<th>Age</th>
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<tr>
<td>Mesocosmos</td>
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<td>.165**</td>
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<td>Exocosmos</td>
<td>.035</td>
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<td>Cosmos Total</td>
<td>.920**</td>
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</tr>
<tr>
<td>Sex</td>
<td>-.219**</td>
<td>.087</td>
<td>.061</td>
<td>-.150*</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>College</td>
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<td>-.013</td>
<td>.002</td>
<td>-.137*</td>
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<td></td>
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</tr>
<tr>
<td>Level</td>
<td>-.93</td>
<td>-.164**</td>
<td>.054</td>
<td>-.124*</td>
<td>.308**</td>
<td>.252**</td>
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</tr>
<tr>
<td>Age</td>
<td>.127*</td>
<td>0.2</td>
<td>-.019</td>
<td>.116</td>
<td>-.174**</td>
<td>.355**</td>
<td>.973</td>
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</table>

Discussions and Conclusions

The principal objective of this study was to develop and factorially validate the harmony-disharmony scale with an initial sample of students in a Nigerian Private University and this has been achieved to a large extent. Ebigbo et al (2013) developed and validated a 55 item measure, the harmony restoration measurement scale (Cosmogram) to capture the components of the cosmos and measure the presence or otherwise of disharmony in persons. The Cronbach Alpha reliability coefficient of .938 is comparable to that, .56, obtained by Ebigbo et al (2013). The overall mean scores of males (228.10 ± 37.75, mean ± s.d.) for this study is higher than that of the females (216.98 ± 35.74, mean ± s.d.). This shows that males sampled for this study tend to be more in harmony with their cosmos than females. This is
in line with the findings by Ebigbo et al (2013) where they reported a mean score of 90.03 ± 9.58 (mean ± s.d.) and 89.86 ± 9.80 (mean ± s.d.) respectively for males and females. This has therapy implications and suggests that males general relationship with their world and themselves is strong but females tend to have slightly stronger relationship with others and God or anything they revere.

The scale is not all encompassing. Hence, it is the duty of the cosmoanalyst to in-depthly probe for further information on any aspect of the cosmos that disharmony is observed using the scale. One of the main assumptions underlying the construction of the scale is for it to serve as a cosmogram mapping and/or cosmogram exploration guide. It is believed that by the time the client may have finished responding to the scale, a reasonably clear picture of the individual’s cosmogram would have emerged to aid the cosmoanalyst in his analysis and cosmotheraphy or HRTherapy. The scale helps as a starting point in the probing to discover discordant relationships. After the cosmoanalyst or therapist has used the scale to evaluate the individual’s cosmos, he/she will then use the responses to plot the client’s cosmogram (which is mapping out all the relationship which are important to the individual (Ebigbo et al., 1995)). He/she then performs a diagnosis for the restoration of health (Ebigbo et al., 2000) or the diagnosis which is used to initiate restorative process (Ebigbo, 2004). After the administration of the scale, further cosmoanalysis could be done with the responses through the process of in depth interview.

Although there are limitations especially in the absence of comparison groups like clinical samples and lack of multiplicity of measures for further construct validity, it is important to note that the scale developed is reliable enough to measure harmony-disharmony in persons. The internal consistency result also collaborates the validity of the instrument. Since the present study did not make use out patients like Ebigbo et al (2013), this is a good direction for future studies. Also, development of a short version of this instrument and convergent validity between this scale and that of Ebigbo et al (2013) would make both scales robust as an instrument that measures harmony-disharmony in persons.

The present scale items like the one by Ebigbo et al (2013), takes into cognisance the cultural dimensions and beliefs of the average Nigerian client which is indeed necessary for effective psychotherapy. This being an initial validation study, it is believed that with further studies and therapy application of the
scale by cosmoanalysts, this scale will become a robust instrument for effectively tapping harmony-disharmony in with the intent of re-establishing rapprochement between a person and the components of his/her cosmos as one begins the journey towards harmony with ones cosmos (Igbokwe, 2014).

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