

Development and Validation of
Disciplinary Management Skill Assessment Scale for
Secondary School Principals in
Anambra State

Obidike Ngozi Diwunma, Ph.D.

Faculty of Education

Nnamdi Azikiwe University, Awka

Anambra State, P.M.B.5025

Email: drngoobidike @ yahoo. co.uk

Phone: 08033256187

ABSTRACT

This study was designed to develop and validate an instrument, which will be used in the assessment of disciplinary management skills of the secondary school principals. This is an instrumentation designed study. All the secondary school principals in Anambra State were used for the study. Factor analysis was used for validation and Cronbach Alpha test was used for test of reliability. Twenty-five items of the instrument were properly loaded and therefore accepted and the high reliability index confirms that the instrument has high inter-item consistency and therefore reliable.

INTRODUCTION

Discipline is one of the crucial issues in Nigerian Education (Ezeocha, 1990). This is because it is very essential for the smooth running of educational institutions (Ikeoku, 1990). The Nigerian society has observed a lot of acts of indiscipline among our youths especially within the walls of the educational system. Efforts had once been made at the national level to stop it through the posting of soldiers to schools to assist in control of students' behaviour. At another time the War Against Indiscipline and Corruption (WAIC) was launched. Conferences have also been held by educationists at various levels to abate the situation without much significant positive change. In fact it has become almost normal in many secondary schools for adolescent students to break the school regulations with impunity, to show lack of respect for authority, to damage school property, beat up their teachers, to riot at the slightest opportunity and even to inflict violence on one another to the extent of using acid. The adolescent students are known to engage in all kinds of anti-social activities, immorality, alcoholism and more. They are known to beat up their parents and teachers to the extent that some principals today fear to punish or

correct their students misbehaviour (Ndu, 2000). In fact, this raises the doubt as to whether school principals have the skills and potentials to control and discipline secondary school youths.

Akubue, (1991) and Ezeocha, (1989) broadly characterised discipline as *a functional product of orderliness, self-control, self-restraint, respect of oneself and others, perseverance, tolerance and recognition of human dignity*. In his explanation, Beach (1975) sees it *as involving the conditioning or molding of behaviour by applying rewards and penalties. It is training that molds, corrects, strengthens or perfects and it is achieved when sound leadership using positive motivation is applied by management* (Wedster, 1975).

Disciplinary Management skill therefore, can be said to mean a rational, objective and practical approach to the issues of discipline. (Obidike, 2004). In other words, it implies the training of the mind and the character based on sound and constructive policies, rules and sound educative principles in handling students' discipline. Lack of disciplinary management skill among secondary school principals might lead to violation of one or more of the fundamental rights of the students and that might give rise to students' unrest. (Anambra State Ministry of Education Circular, 1990).

Study Purpose and Rationale.

Available research evidence (Igbo, 1997; Ezeperu, 1998 and State Ministry of Education Circular, 1990) tends to blame the problems of secondary school youths to poor disciplinary management skill among principals. Although, the general opinion is that secondary school principals are deficient in disciplinary management skills, the extent of their deficiency in this skill is merely speculated since the development of a valid and reliable measuring instrument in this skill domain has received only marginal attention in the organizational and theoretical literature. (Blake, Copper & Conley, 1991).

Furthermore, while there are recommendations that in-service training be organized for principals who are deficient in administrative disciplinary management skills and also the recommendation of the inclusion of disciplinary management skill as essential component of the Annual Evaluation Report (APER) of school principals, the assessment of such skills is solely dependent on the availability of measuring instrument. This implies that all efforts towards identification and recommendation of disciplinary management skill deficiencies hinges on and is greatly challenged by unavailability of measuring instrument in this skill domain. This study is a response to this challenge and is faced with the problem of developing a valid and reliable instrument for assessing the disciplinary management skill of secondary school principals.

The study focuses on the following research questions: How valid are the items of the Disciplinary Management Skill Assessment Scale in terms of its factor loading? What is the reliability coefficient of the Disciplinary Management Skill Assessment Scale?

Method of Data Collection

This study adopted an instrumentation research design. According to Mehrens and Lehan, (1991) an instrumentation research is the type which aims at developing and certifying the efficacy of an instrument for the measurement of a given behaviour or construct.

The study was carried out in Anambra State of Nigeria and all the five Education Zones in the State were covered in the study. The sample for this study comprised all the two hundred and fifty-nine (259) secondary school principals in Anambra State.

Instrumentation Procedure

The items were generated by the researcher based on available literature (Ezeocha, 1985, Akubue, 1991, Ndu, 2002) on disciplinary management especially those disciplinary factors that emphasize expertise of the school principals in student discipline and also on the researcher's

practical experience as a teacher. The initial draft copy of the Disciplinary Management Skill Assessment Scale (DMSAS), is a 40-item Scale that provides self-reports of behaviours and strategies used to assess the disciplinary management skills of the secondary school principals. Respondents indicate how frequently they engage in various skills related to disciplinary management of students. The Likert-type response continuum ranges from 1=Always Never to 4=Almost Always. High scores indicate frequent use of the skills.

Eight specialists in various related educational departments were requested to examine and scrutinize the items in terms of content relevance, items clarity and coverage of dimensions of disciplinary management. To establish the construct validity of the instrument *factor analysis using orthogonal varimax rotation* was used. The trail testing or the preliminary assessment of the instrument was carried out with thirty- (30) principals in Enugu Education Zone of Enugu State. Their scores were subjected to *factor analysis using principal component analysis*. Twenty-nine (29) items attained the minimum loading of 0.35 (Meredith, 1969) and was accepted as valid. Check for internal consistency using *Cronbach Alpha* yielded an alpha coefficient of 0.87.

Data Analysis

The 29-item of the instrument (DMSAS) were administered to the 259 principals and their scores subjected to *factor analysis using principal component and varimax rotation* to verify the factorial composition of the instrument as well as define the common measure. Six factors were extracted. Summary of the varimax rotated factor loading for the twenty-nine items/variable is shown in table 1 below.

The surviving twenty-five (25) items were subjected to *Cronbach Alpha* test for test of reliability to determine how well the items that reflect the same construct yield the same result.

The summary of the data analysis is shown in table III below:

Results

Results of the factor analysis reported in table 1 indicate that out of the twenty-nine items of the DMSAS subjected to factor analysis with varimax rotation using the 259 principals, only twenty-five items attained the minimum loading of 0.35 and was accepted as valid. The 25 valid items are asterisk. It is important to note that item 10 was loaded on two factors and was considered factorially complex (Meredith, 1969).

Table 1: Summary of Factor Analysis for the DMSAS using Varimax rotation.

| ITEMS | FACTOR 1 | FACTOR 2 | FACTOR 3 | FACTOR 4 | FACTOR 5 | FACTOR 6 |
|-------|----------|----------|----------|----------|----------|----------|
| 1 | .50217* | .31284 | .21543 | .01648 | .32351 | .21334 |
| 2 | .41719* | .15291 | .02263 | .01243 | .32134 | .34634 |
| 3 | .07242 | .32152 | .23514 | .03046 | .33261 | .33260 |
| 4 | .00321 | .23432 | .64421* | .06742 | .31334 | .25621 |
| 5 | .30262 | .03456 | .23412 | .46532* | .02531 | .04326 |
| 6 | .19989 | .24621 | .04232 | .36721* | .30462 | .24236 |
| 7 | .30123 | .26026 | .32023 | .30232 | .42623* | .24263 |
| 8 | .32142 | .01245 | .32752 | .29302 | .37634* | .30243 |
| 9 | .05161 | .32141 | .01003 | .24326 | .32431 | .47326* |
| 10 | .39672 | .30462 | .22321 | .41881 | .24621 | .20146 |
| 11 | .56141* | .01345 | .33197 | .34846 | .31390 | .08194 |
| 12 | .28174 | .14334 | .65426* | .09114 | .34061 | .00621 |
| 13 | .09961 | .04244 | .10927 | .62146* | .14639 | .04444 |
| 14 | .34026 | .03942 | .14034 | .33426 | .22128 | .28128 |
| 15 | .13326 | .02468 | .32246 | .00245 | .37381* | .11246 |
| 16 | .21224 | .14638 | .01142 | .02411 | .10124 | .36728* |
| 17 | .32426 | .01640 | .24346 | .39421* | .11263 | .17343 |
| 18 | .30994 | .09116 | .10439 | .08330 | .39426* | .13112 |
| 19 | .14693 | .16228 | .34106 | .31334 | .22219 | .47128* |
| 20 | .44681* | .11424 | .29366 | .31112 | .16874 | .06934 |
| 21 | .33501 | .32142 | .10246 | .20001 | .40216* | .08891 |

| | | | | | | |
|----|---------|--------|---------|---------|--------|---------|
| 22 | .11127 | .02332 | .11112 | .24342 | .10042 | .42342* |
| 23 | .00241 | .11231 | .32104 | .12032 | .30021 | .10201 |
| 24 | .36102* | .17829 | .20211 | .30144 | .05688 | .10412 |
| 25 | .31024 | .21002 | .41482* | .12462 | .10112 | .24101 |
| 26 | .17117 | .06113 | .13225 | .69668* | .09114 | .14104 |
| 27 | .37882* | .33466 | .03310 | .33466 | .30162 | .03310 |
| 28 | .31298 | .04441 | .49491* | .06829 | .23222 | .09117 |
| 29 | .32996 | .01324 | .31143 | .37149* | .16394 | .06442 |

The 25-valid items were distributed along five factors (1, 3, 4, 5 and 6). These factors explain factors such as School Morale, Punishment Attitude of School Authority, Discipline Policy, and Recognition of Symptoms of discipline problems as it pertains to discipline management. Summary of the factorial valid five factors and their associated items/ variables are as shown in table II below with their factor loadings and communalities.

Table II: Summary of factor loading for the surviving 25 items on the five valid factors.

| FACTORS | ITEMS | FACTOR LOADING | COMMUNALITY |
|---------|-------|----------------|-------------|
| 1 | 1 | .50217 | .81267 |
| | 2 | .41719 | .87358 |
| | 11 | .56141 | .89802 |
| | 20 | .44681 | .79274 |
| | 24 | .36102 | .72345 |
| | 27 | .37882 | .86342 |
| 3 | 4 | .64421 | .51962 |
| | 12 | .65426 | .50799 |
| | 25 | .41482 | .60647 |
| | 28 | .49491 | .62886 |
| 4 | 5 | .46532 | .66843 |
| | 6 | .36721 | .65348 |
| | 13 | .62146 | .61772 |
| | 17 | .39421 | .52485 |
| | 26 | .69668 | .62579 |
| | 29 | .37149 | .73856 |
| 5 | 7 | .42623 | .65464 |

| | | | |
|---|----|--------|--------|
| | 8 | .37634 | .69105 |
| | 15 | .37381 | .59961 |
| | 18 | .39426 | .63261 |
| | 21 | .40216 | .62424 |
| 6 | 9 | .47326 | .61670 |
| | 16 | .36728 | .62446 |
| | 19 | .47124 | .52821 |
| | 22 | .42342 | .62384 |

Furthermore, summary of result shown in table III on Cronbach Alpha test on the 25 items of DMSAS indicates that the instrument has a substantially high internal consistency value of 0.82 indicating that the instrument is a reliable one.

Table III: Cronbach Alpha Test on 25 items of DMSAS for its internal Consistency.

| | | | | | | |
|------------------------|-----------------|---------------------|---------------------|------------------------|--------------------|-------------------|
| Statistics for Scale | Mean 55.5341 | Variance 58.9366 | Std. Dev. 7.6770 | No. Of Variables 25 | | |
| Item Means | Mean 2.2214 | Minimum 1.5670 | Maximum 3.2945 | Range 1.7275 | Max/Min 2.1024 | Variance .2271 |
| Item Variances | Mean .9144 | Minimum .5676 | Maximum 2.9307 | Range 2.3631 | Max/Min 5.1630 | Variance .1924 |
| Inter-Item Correlation | Mean .0761 | Minimum .2803 | Maximum .5203 | Range .8008 | Max/Min -1.8567 | Variance .0188 |

Reliability Coefficients for 25 items

Alpha = .8765

Standardized item alpha = .8740

This is further confirmed by high inter-item consistency co-efficient of the various sub-scales; 0.83 for School Morale, 0.88 for Punishment, 0.89 for Attitude of School Authority, 0.90 for Discipline Policy and 0.80 for Recognition of Symptoms of discipline problem.

Discussion

The values under the communality column are the communalities for the valid 25 items. For example, item 1 has a communality index of 0.81267 (apart from rounding errors). It can be seen that the communality indexes of the items are fairly high. That is to say, most of the variance for the variables is accounted for by the five common factors (Fraucher, 1984).

Factor loadings (both large and moderate loadings) in table 1 above indicate how the variables are related to the factors. High-factor loading indicates a higher correlation of the item to the factor. For example, it can be seen that item 1 is almost entirely accounted for by factor 1 while item 4 is accounted for by factor 2. Summarily, items 1, 2, 11, 20, 24, 27 in table 2 above are accounted for by factor 1 while item 4, 12, 25, 28 are accounted for by factor 2 etc. As a result, 25 valid variables of the DMSAS related strongly to five factors (Meridith, 1969) as in a previous study using comparable data (Ezeocha, 1990).

While the loading of 25 items confirm the validity of the items, it must be appreciated that the suitability of the items also depends to a great extent on its stability with respect to some surrounding personal variables such as professional experience and gender, except where there are available theories or empirical findings that justify any form of instability on the responses to the items across a given variable (Anastas and Urbina, 1997).

Conclusion

The result of the study shows that a Disciplinary Management Skill Assessment Scale has been developed and validated. The developed inventory has 25 items properly loaded and therefore, accepted. The loading of these items confirms the validity of the 25 items of DMSAS. The high reliability index confirms that the instrument has high inter-item consistency and therefore reliable.

Recommendation

DMSAS is therefore, recommended for use by the School Board and Ministry of Education in assessing the disciplinary management skills of all secondary school principals.

The Norm upon which one can determine the Disciplinary Management Skill of a Principal.

The Norm for the DMSAS was derived based on the responses of the Secondary School Principals. The Mean and Standard Deviations of the responses of the principals were used to derive the norm. The norm for the males was based on the responses of the male principals only while that of the females were based on the responses of the female principals only. A combined norm for males and females was presented based on the combined responses of male and female principals.

Table 4: An Integrated table of Norm for the interpretation of scores

Range of Scores

| Male only | Female only | Male & female combined | Interpretation. |
|-----------|-------------|------------------------|-----------------|
| 89 | 92 | 91 | Excellent |
| 83-89 | 84-92 | 84-91 | Very Good |
| 77-83 | 76-84 | 77-84 | Good |
| 71-77 | 68-76 | 70-77 | Above Average |
| 69-71 | 60-68 | 63-70 | Below Average |
| 69 | 60 | 63 | Poor. |

The norm of the DMSAS has been interpreted as a norm-referenced scale.

Usability of the DMSAS

The DMSAS is quite suitable for wide spread use in that is simple to use. The user will just give the instrument to the respondent to indicate to what extent he practices those skills outlined in the inventory. It could be administered to individuals and average time required is 10

minutes. The language used is simple. The scale is scored according to each option, and the weights added up for the 25 items. The sum is then compared with the norm to see in which category it falls. The score is then interpreted according to the norm provided.

Reference

- Akubue, A.U. (1991). *Classroom Organization and Management: A 5 – Point Strategy*. Ibadan: Wisdom Publishers Ltd.
- Beach, Dales (1975). *Personnel: The management of people at work*, New York, Macmillian Publishing Company.
- Ezeocha, P.A. (1989). *Educational Administration. Concepts and Cases*. Obosi: Pacific Publishers.
- Ezeocha, P.A. (1990). *Educational Administration and Planning*. Nsukka: Optimal Computer Solutions.
- Ezepuru, N.P. (1992). *Strategies for Effective Administration of Secondary Schools in Nsukka Educational Zone*. Unpublished Thesis of University of Nigeria.
- Igbo, A.C. (1997). *Management of Disciplinary Problem of Secondary School Students by Principals in Lagos*. Unpublished Thesis of University of Nigeria.
- Ikeoku, Chimere (1990) Apprenticeship, discipline and development. In proceedings of the National Conference on discipline and motivation in schools organized by the Federal Ministry of Education, at Durbar Hotel, Lagos from 25th- 30th November.
- Meredith, G.M. (1969). Dimensions and Faculty of Course Evaluation. *Journal of Psychology*, 5.
- Mehrens, W.A. and Lehman I.J. (1991). *Measurement and Evaluation in Education and Psychology*. New York: Holts Rinehart and Winston.
- Ndu, A. (2000). “The Role of the Family in managing Indiscipline Among the Youths in Nigeria”. *Journal of Counseling*, 2(1) 45-51.
- Obidike, N.D. (2004). *Development and validation of disciplinary management skill assessment*

scale for principals in Anambra State. Unpublished Ph.D. thesis of Nnamdi Azikiwe University, Awka.

State Ministry of Education Circular Letter Ref. ME/S. 317/vol 111/44 of 9th May 1984 caption, "Powers of principals and Headmasters in The Enforcement Of Discipline." Webster (1975) Wedsters Collegiate Dictionary Springfield Mass G&C Merrian Coy.

APPENDIX I

DISCIPLINARY MANAGEMENT SKILL ASSESMENT SCALE

SECTION A: PERSONAL DATA

NAME:

NAME OF SCHOOL:

SECTION B: DISCIPLINARY MANAGEMENT SKILLS

INSTRUCTION: Please indicate with a tick (X) in the appropriate column how the following aspects of administrative practices relating to disciplinary management skill applies to you.

| S/N | ITEMS | ALMOST ALWAYS | USUALLY | SOMETIMES | ALWAYS NEVER |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------|-----------|--------------|
| 1. | Giving many opportunities to students to experiment with the values and benefits of being a good school citizen. E.g. Opportunity for leadership. | | | | |
| 2. | Treating students with courtesy and patience. E.g. Thanking students for a work well done or appreciating his/her efforts. | | | | |
| 3. | Using verbal or written warning on light offences | | | | |
| 4. | Respecting the feelings of the students. E.g. reverting a disciplinary decision, which you think, may have adverse effect on students when implemented. | | | | |
| 5. | Upholding humanitarian principles and ideals while dealing with disciplinary problems of students. E.g. considering the implication of your punishment to the health of the students such as keeping students under the sun. | | | | |
| 6. | Observing disciplinary policies that are in harmony with the principles of human rights. E.g. fair hearing. | | | | |
| 7. | Following the rules and procedure laid down by the state school Board in enforcing discipline. E.g. communicating the school board before a student is expelled. | | | | |

| | | | | | |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| 8. | Identifying the unset of discontent in students and dealing with them. E.g. Uncooperativeness. | | | | |
| 9. | Creating opportunities for self-analysis and self-discipline. E.g. Helping a student to realize why he/she deserves punishment or to see his mistakes | | | | |
| 10. | Avoiding physical punishment where possible. | | | | |

| | | | | | |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| 11. | Letting the students know clearly what the school rules and regulations are: their origin, their value and purpose, their relation to the welfare of the individual and group and the educational process. | | | | |
| 12. | Observing disciplinary policies that represent sound education practices. E.g. insisting that male teachers flog female students on their palms. | | | | |
| 13. | Recognizing the unset of student maladjustment and dealing with them. E.g. sloppy dressing, poor manners and lack of attentiveness. | | | | |
| 14. | Involving students, within reasonable limits, in formulating basic school rules of conduct and in solving school problems in certain well-defined area. E.g. involving students' council in certain decision-making. | | | | |
| 15. | Formulating disciplinary policies that are primarily preventive, secondarily corrective. E.g. punishing students with love and explanation. | | | | |
| 16. | Being sensitive to the school atmosphere. E.g. do you take note of sudden changes in teachers and students behaviour such as grumbling and outright disobedience, student appearance, dirtiness or cleanliness of school compound? | | | | |

| | | | | | |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| 17. | Keeping the confidence and goodwill of all the students by being firm and fair. | | | | |
| 18. | Enforcing disciplinary policies that are positive and directed towards the goal of self-discipline. E.g. Rewarding students who take initiative to do what is right without being told or instructed. | | | | |
| 19. | Being alert to detect areas of tension while dealing with students. E.g. sensitive issues that concern the students' welfare such as changing students menu without consulting them, banning visiting or outing days, shortening students break time. | | | | |
| 20. | Showing genuine interest in the welfare of the students. E.g. caring for their academic work and their welfare and encouraging them to work harder for better results. | | | | |
| 21. | Giving punishment that is not excessive in view of the gravity of the offence. E.g. suspending a student because of noise making. | | | | |
| 22. | Recognizing the inherent dignity and rights of the students. | | | | |
| 23. | Providing educative extra-curricular activities to engage their time. E.g. organizing educative film shows, drama, debates or quiz for the students. | | | | |
| 24. | Providing the student with an alternative means of meeting their needs. E.g. providing waste paper basket as an alternative for littering the compound, or providing urinary to avoiding urinating at inappropriate places. | | | | |
| 25. | Setting examples of high standards of behaviour for the students to copy. E.g. dressing modestly, speaking the truth always and talking decently. | | | | |

