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A COMPARITIVE COST-BENEFIT ANALYSIS OF THE EFFECTIVENESS OF A GROUP COUNSELLING PROGRAMME AND AN INDIVIDUAL COUNSELLING PROGRAMME WITH BLACK STANDARD TEN PUPILS.

ROSEMARY GAIL DAVIES

RESEARCH REPORT SUBMITTED TO THE FACULTY OF EDUCATION, UNIVERSITY OF WITWATERSRAND, IN PART FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF EDUCATION (SCHOOL COUNSELLING)

Johannesburg, 1987.

ABSTRACT

The purpose of this study was to conduct a cost-benefit analysis of the comparitive effectiveness of a group counselling programme and an individual counselling programme in increasing the Career Maturity of Black Standard 10 pupils. Career Maturity was measured using the Attitude Scale of the Career Maturity Inventory and a student evaluatory questionnaire was used as an additional outcome criterion. Students' locus of control oricntation measured by Rotter's I - E Scale was included in the analysis as an independent variable. A student questionnaire was used to assess the factors affecting students career choice.

Students' locus of control orientation had no significant differential effect on student gains in Career Maturity levels following the two types of counselling. Both the individual and group approaches produced significant gains in Career Maturity levels when compared to the control group and there was no significant difference in the gains resulting from the two approaches. A cost analysis found the group approach to be more economical than the individual approach.

It was concluded that there were grounds for replacing the individual approach with the group approach and it was suggested that Black lay counsellors should be trained as group leaders. Student needs for information and practical help with career planning were examined, and guidelines were suggested for implementing career guidance programmes in Black Schools. The merits and demerits of using the CMI Attitude Scale and I - E Scale with Black students were discussed.

DECLARATION

I hereby declare that this dissertation is my own work. It is being submitted for the degree of Master of Education (School Counselling) in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.

R. G. Davies

ROSEMARY GAIL DAVIES

28th August, 1987.

ACKNOWLEDGEMENTS

I wish to express my gratitude to:

Prof. Mervyn Skuy, my supervisor, for his guidance and interest

The staff at the National Institute of Personnel Research particularly Jonathen Cook, Rita Hulme, Charles Chemel, Penny Holburn and Annelize du Toit.

The staff and students at St. Anthony's College, Rieger Park, particularly Mrs. Pienaar, Brother Finnigan and Sally Hogan.

My husband John, for his support and encouragement.

Mrs. Jackie Eppel for her patience and efficient typing of the manuscript.

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1. INTRODUCTION

1.1 Career Guidance Facilities for Black South Africans

Career Guidance Facilities for Black students are extremely limited, both within and outside of the School system. In the light of the increasing numbers of Black school leavers and the political changes which are opening up more occupational avenues to Blacks (Bendix, 1979; Cloete, 1981) there is an urgent need to remedy this situation.

Until 1981 the guidance in Black schools was carried out by itinerant staff whose primary task was to maintain a testing service for statistical and research purposes, (Watts, 1980). The main object of this exercise was to guide vocational decisions according to the manpower needs of the country, (Africa, 1977 pp 145 - 154). This concurs with the finding of Cloete and Le Roux (1979) that 481 first year students had received little or no official guidance before entering the University of the North.

In 1981 the Department of Education and Training (DET) introduced guidance into the Black High Schools, and in 1982 introduced it into the Black primary schools. However, it would seem that the guidance programme incorporates very little Vocational Guidance. Chuenyane (1983) found that about 90 percent of the secondary school population were experiencing serious career planning problems encompassing facets such as lack of adequate self understanding and decision making skills, and lack of occupational and educational information.

The facilities for Vocational Guidance for Black students outside the school system are equally inadequate. A NIPR Report (1982) p.5. in its section "Career Guidance facilities for Blacks" found that only 1,1 percent of Blacks have access to some kind of Vocational Guidance service outside the school system. In the Johannesburg area Career Counselling facilities are offered by Organisations such as the Education Information Centre (EIC) and the Soweto Career Centre (SCC).

The writer suggests a two pronged approach to the problem. Firstly, there is a need to build on the existing infrastructure, evaluating programmes that are in use, and making the maximum use of trained personnel. Secondly, there is a need to train further personnel and to develop and implement new programmes.

1.2 The Need for Evaluative Studies of Career Guidance Programmes

Literature reviews (Fretz, 1981; Holcomb and Anderson, 1977; Pickering and Vacc, 1984) indicate that only about 10 percent of the entire domain of Career Psychology is devoted to evaluative research of career programmes. Holcomb and Anderson (1977) further state that programme evaluation research in community and government agencies is virtually non existent.

Research on programme evaluation has received even less attention in South Africa. Laubscher (1977) found that the Career Maturity of coloured students was enhanced by a short term career counselling programme, and Leisegang (1985) obtained similar results with a highly advantaged White sample of students. A study by Hall (1980) using student evaluatory questionnaires as outcome criteria indicated that the NIPR individual counselling programme was suitable for use with black students. The writer was unable to find any reference to comparitive evaluative studies conducted within South AFrica.

1.3 A critical Review of Evaluative Research Studies in the Literature

Super and Hall (1978) found that many of the career interventions recorded in the literature were superficially planned and executed, and concur with other researchers (Fretz, 1981; Holcomb and Anderson, 1977; Pickering and Vacc, 1984) in suggesting the need for comparitive studies. The present review of research in the field of evaluation of career counselling has therefore been confined to comparitive studies. The salient aspects of these studies are tabulated in Appendix A pp. 44-48 for ease of comparison and analysis.

It may be seen that the number of studies tabulated is almost equailed by the number of instruments used to measure the dependent variable. Oliver (1979) states that the majority of measures used have involved self reports and judges ratings, which have a lower validity than more objective assessment devices. He concurs with Ganster and Lovell (1978) in recommending that studies should use instruments of known reliability and validity wherever feasible, in addition to employing as many outcome criteria as possible.

The results of the tabulated sample concur with the more broadly based finding of Takai and Holland (1978) and Pickering and Vacc (1984) in that most of the interventions result in small yet consistently detectable gains, despite gross differences in method, format, personnel and resource costs. It can also be seen that in six of the twelve studies tabulated there were no significant differences in the improvements found using different treatments. Fretz (1981) in his review of the literature found that when group and individual approaches were compared, the outcomes of the group approaches were equal to or better than the outcomes of the individual approaches.

Kivlighan, Hageseth, Tripton and McGoven, (1981) pointed out that in most of the studies in which no significant differences were found between counselling approaches, treatments were compared without regard to relevant personality characteristics. This represents a methodological limitation which may have masked differences which were in fact significant. It might therefore be more productive in future research to consider personality type as a critical independent variable. Such research would hopefully lead to the identification of which clients respond best to which treatments, and would allow for the future matching of clients and treatments (Kiesler, 1979) to facilitate the counselling process.

Gable, Thompson and Glanstein (1976) found that internally controlled women have higher vocational maturity scores than externally controlled women, and suggested that a clients "Locus of Control" orientation may affect the outcome of Career Counselling interventions.

There has been very little documented research on the differential effects of career counselling interventions on "internally" and "externally" controlled clients and the results of studies that have been done are conflicting. A study by Thornton, (1978) found that "Internals" reported more career planning activity following a career workshop than "Externals". In addition respondents to follow-up questionnaires were more internally oriented than non-respondents. In contrast Wachowiak, (1973) found that students' gains in Career Maturity following a traditional counselling approach and a model reinforcement counselling approach showed no significant correlation with their locus of control orientation. A later study by Arreola (1978) also found no interactive effects when approaches using the Self Directed Search (SDS) and the Vocational Preference Inventory (VPI) were used.

The writer was unable to find any South African studies relating Locus of Control to Career Maturity. However, Locus of Control scores have been shown to correlate with sex, age and family size in a sample of White South African student teachers (Skuy and Erikson, 1979) and with sex and academic performance in a sample of Black South African student teachers (Mwamwenda and Mwamwenda, 1986). Both studies used the Rotter (1966) I - E scale to measure Locus of Control orientation.

1.4 The Use of Personnel Resources

In view of the shortage of trained counsellors, particularly black counsellors in South Africa there is a need to use personnel resources in the most efficient and effective way possible.

A number of research studies (Banks, 1977; Brown, 1974; Hoffman, 1976) have documented the effectiveness of lay counsellors. There is also considerable evidence (Harrison, 1975; Banks, 1977; Carkhuff and Pierce, 1967) that counselling is more effective where Black counsellors are counselled by Black rather than White counsellors. Black lay counsellors would have the further advantage of being able

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to be drawn from the same communities as their student clients. They would therefore be better able to "enter into, and empathise with, and be effective within a client's frame of reference." (Spence, 1982, p.36).

It would appear therefore, that in order to use the existing trained career counsellors most effectively, they should be encouraged to become involved in training Black lay counsellors. There would be a concomitant need to develop programmes which could be used by lay personnel.

1.5 The Focus on Accountability

The focus on "accountability" of the helping professions in America, together with the budget restraints of many colleges and universities, has led to an increasing interest in evaluating the cost-effectiveness of counselling programmes (Fretz, 1981; Pickering and Vacc, 1984; Oliver, 1979; Krivatsky and Magoon, 1976). This aspect of evaluation assumes even greater importance in South Africa with the almost complete lack of counselling facilities and trained personnel, coupled with the vast and increasing demands for career guidance. Coffman, Slaikeu and Isaac (1979) have provided a detailed example of how to develop and use cost data which might usefully be incorporated into future career intervention studies.

1.6 Summary

Research studies have stressed the gross inadequacy of Vocational Guidance services for Blacks, both within and outside of the school system. There is a consequent need to develop and evaluate new Career Guidance programmes, as well as to evaluate those that are in current use. Literature reviews have focused on the paucity of programme evaluation research and have pointed out serious shortcomings in the studies that have been done. It has been suggested that future research should focus on comparitive studies, using measuring instruments of established reliability and validity and

incorporating the subjects personality type as a critical independent variable. There is evidence to suggest that the personality attribute "Locus of Control" is related to Career Maturity and that it may affect the outcome of Career Guidance interventions.

In view of the extensive research evidence indicating the effectiveness of lay counsellors it has been suggested that Black lay counsellors might be used to alleviate the shortage of trained Career counsellors.

The American focus on accountability is even more applicable to South Africa where the demands for Career Guidance far outweigh the available resources. It is therefore essential that evaluative studies should take into account the Cost-Benefit ratio of programmes.

2. THE STUDY

2.1 Rationale and Aims

There is extensive evidence to indicate the need for evaluative studies of Career Guidance programmes for Black students. As research workers are in agreement that comparative studies are of more value than those focusing on a single intervention, the present study aimed to compare the effectiveness of an individual counselling programme with a group counselling programme which was developed by the National Institute of Personnel Research (NIPR). It was felt that this was a valid comparison as the objectives of the two approaches are very similar, despite the differences in the methods used to accomplish them. Both approaches place a greater emphasis on what Helwig (1984) terms "internal information" or personal factors within the individual than on "external information" such as career and study requirements and opportunities. In both cases students are referred to outside sources to research their own "external information" rather than providing them with extensive information during the counselling session.

In view of the shortage of trained counsellors, and the documented effectiveness of lay counsellors, it has been suggested that Black lay counsellors should be used for career counselling. Lay counsellors could not be used for the individual counselling approach as it requires the services of a psychometrist (Honours Graduate) to administer the aptitude and intelligence tests, and a registered counselling psychologist (Masters Graduate) to interpret them. However, a lay counsellor with some training in group work, and a working knowledge of a variety of careers would be able to administer the group programme.

Research has indicated that the personality attribute "Locus of Control" is correlated with Career Maturity levels and may influence the outcome of Career Guidance interventions. It was therefore considered necessary to establish whether "Locus of Control" showed a correlation with Career Maturity in the present sample of Black students.

A study by Thornton (1978) found that internally oriented students obtained greater benefit from career counselling programmes than externally oriented students, as they are more active in their attempts to control their environment by actively participating and seeking information in the counselling sessions. It is hypothesised that externally oriented students will gain greater benefit from the individual counselling programme than the group counselling programme, which requires greater unsolicited participation and effort from students. Internally oriented students on the other hand may be expected to derive equal benefits from the group and individual programmes as their participation and involvement in the counselling process would be internally rather than externally determined. It is further hypothesised that internally oriented students would obtain greater benefit from both programmes than externally oriented students. If the results of the present study indicate that locus of control orientation does affect the outcome of the two counselling interventions as hypothesised, then locus of control should be included as an independent variable in the evaluation of the two approaches.

Research on career counselling outcome measurement has emphasised the importance of using instruments of known reliability and validity, as well as using more than one outcome criterion. It was decided to use the Career Maturity Inventory in the present study, as its efficacy in career education research has been well demonstrated and it has an established reliability and validity. An evaluatory questionnaire to be filled in by students was used as an additional measure.

A number of studies have emphasised the importance of weighing the benefits of Career Counselling Programmes against the costs involved. Both the individual and group approaches require a similar time commitment of approximately six hours from each student but very different counsellor time commitments. The individual approach requires twenty minutes of a psychometrists time per student, plus an hour and a half of a registered psychologists time per student. The group counselling approach requires thirty-six minutes of a lay counsellors time per student which represents a considerable saving both in terms of counsellor time and expertise.

Research has indicated that group counselling is as effective or more effective than individual counselling. If this is found to be the case in the present study, then it would appear that a cost-benefit analysis of the two programmes would provide support for replacing the individual counselling programme presently in use with the group counselling programme.

In summary, therefore, the purpose of the present study was to conduct a comparitive cost-benefit study of two counselling programmes with Black students. The study would further determine whether the student attribute "Locus of Control" affected the comparitive performance of students in the two interventions. It was hoped that the results would provide a clear empirical basis for determining which programmes might be more effectively employed in the future,as well as possible indications of the type of client who would benefit most from the respective programmes.

2.2 Hypotheses

This research is designed to test the following hypotheses :-

Hypothesis 1 There would be a significant correlation between the locus of control orientation of Black Standard 10 pupils and their levels of Career Maturity.

Hypothesis 2 Black Standard 10 pupils with an internal locus of control would show greater increases in Career Maturity following participation in the individual and group counselling programmes than students with an external locus of control.

Hypothesis 3 Black Standard 10 pupils with an external locus of control would show a greater increase in Career Maturity on the individual counselling programme than those with an external locus of control would show on the group counselling programme.

Hypothesis 4 There would be no significant difference between the gains in levels of Career Maturity of Black Standard 10 pupils with an internal locus of control who had participated in the individual counselling programme, and those with an internal locus of control who had participated in the group counselling programme.

Hypothesis 5 Black pupils in Standard 10 would develop significantly higher levels of Career Maturity following their participation in the individual counselling programme.

Hypothesis 6 Black pupils in Standard 10 would develop significantly higher levels of Career Maturity following their participation in the group counselling programme.

Hypothesis 7 There would be no significant difference between the gains in levels of Career Maturity of Black pupils who participated in the group programme and Black pupils who participated in the individual programme.

2.3 Method

2.3.1 Forms of Intervention

2.3.1.1 The Individual Counselling Programme

The individual counselling programme is currently used by the Soweto Career Council (SCC) and the Education Information Centre (EIC). It was introduced to these centres by the National Institute of Personnel Research (NIPR) and is based on the career counselling service offered to White students by NIPR.

Two registered psychometrists and three registered counselling psychologists were used to administer the programme in the present study. These personnel had all had extensive experience with the NIPR individual counselling programme.

The students selected for the individual counselling programme were given a comprehensive biographical questionnaire which they were required to complete and return at the testing session. Two psychometrists conducted a single testing session of approximately five hours during which all the individual counselling students were given the following test battery :-

1) The Rothwell - Miller Interest Blank
2) NIPR Intermediate Level Mental Alertness Test
3) The Figure Classification Test
4) NIPR Intermediate Level Comprehension Test
5) NIPR Intermediate Level Computation Test
6) Spot the Error

Descriptions of each test are given in Appendix B pp. 49-51.

The psychometrists compiled a file for each student containing their marked and normed test data, and their biographical questionnaire.

Each psychologist was assigned ten students and spent approximately half an hour reviewing the file for each student before seeing the student for an hour of individual counselling. During the counselling session the psychologists explained test results to the students, discussed career options with them, and as far as possible answered any questions that they might have. Students were also referred to outside sources to obtain bursaries and to further research career opportunities and requirements.

2.3.1.2 The Group Counselling Programme

The Group Counselling Programme "The World of Work and Me" (Appendix C pp. 52-70) has been developed by NIPR for use with Black students.

It was administered by the same three psychologists used for the individual counselling programme. They were given a joint two hour training session on the programme "The World of Work and Me" in order to ensure some standardisation of their approach.

Each of the psychologists was then assigned ten students for a six hour period of group counselling during which the students completed the programme "The World of Work and Me". This is a structured programme requiring students to focus on their abilities, interests, personal qualities and aspirations and to relate these to possible career choices. The psychologists acted both as facilitators and information givers, encouraging students to discuss some of the issues as a group or in sub-groups and to work on others individually through introspection. During the session students questions were answered and as with the individual counselling, they were referred to outside sources for further information.

2.3.2 Subjects

The subjects for this study were forty-five male and forty-five female Black matric students from St. Anthonys College in Rieger Park.

Author Davies R G
Name of thesis A comparative cost-benefit analysis of the effectiveness of a group counselling programme and an individual counselling programme with black standard ten pupils 1987

PUBLISHER:
University of the Witwatersrand, Johannesburg
©2013

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