

**THE ADJUSTMENT OF RORSCHACH COMPREHENSIVE
SYSTEM PROCEDURES FOR SOUTH AFRICAN LEARNERS**

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ABSTRACT

In this article the researchers describe the adjusted procedures that were developed in a study that focused on the assessment procedures for administering the Rorschach Comprehensive System (RCS) to young South African learners. Multiple case studies with non-patients were used within a pre-test/post-test design. During pre-testing the standard procedures for conducting the RCS were used. Half of the participants (n=5) failed to provide the required 14 responses that would allow interpretation in terms of the Rorschach system ($X = 12,7$). Subsequently an adjusted procedure was developed - based on the observations of the researchers, a review of the literature and consideration of possible inhibiting factors, such as participant variables, researcher variables and procedural variables. During post-testing, 10 months later, the Adjusted Rorschach Comprehensive Procedures for conducting the test were used. The response rates of participants increased significantly, with most of the participants (n=8) providing more than the required number of responses ($X = 16,1$).

INTRODUCTION

There is a growing sensitivity to diversity and cultural¹ issues in assessment practice and research. This is accompanied by concern about methodological difficulties encountered when using personality tests for cross-cultural psychological purposes (Allen & Dana, 2004). These difficulties include the absence of meaningful normative data for diverse population groups, as well as the difficulties inherent in developing such normative data (Franchi and Andronikof-Sanglade, 1999).

In many respects, South African tests and testing practices may be regarded as the direct offspring of corresponding developments in the United States of America, Britain and Western Europe. As a matter of fact, some South African tests are simply standardized adaptations of overseas tests (Huysamen, 1980). In this regard Hall and Maramba (2001) state that psychology must address issues of diversity if it is to be responsive to the needs of the population it serves. According to them (Hall and Maramba, 2001), most theories and research in psychology have been developed by male European Americans, often without taking social contexts into account. The study by Foxcroft, Paterson, Le Roux and Herbst (2004) also indicated that practitioners are in need of tests that are appropriate for the diverse South African context – regularly updated and available in all official languages. Thus, in this particular research context, it seems important to determine how much attention is being devoted to diversity in psychology and what impact research and theories on diversity have on the field.

¹ We acknowledge the fact that the term “cultural” is a contested term. Within this article we use the term in a fairly narrow sense by applying it with specific reference to the use of psychometric tests with participants of whom the biographical variables differ in terms of language and socio-economic/social background, from the group of participants with whom the test procedures were ‘standardised’.

Pedersen, Draguns, Lonner & Trimble, (2002) maintain that making the client's social context central rather than peripheral in the provision of psychodynamic, behavioural and humanistic services strengthens rather than weakens those traditional psychological perspectives. In current psychological practice, psychologists are faced with the challenging task of assessing clients who come from diverse social backgrounds. Such assessments are often fraught with difficulty and uncertainty, and require special consideration to assure appropriate evaluation. According to Paniagua (1998), learning and applying skills that indicate that one is competent in the assessment of clients from diverse social groups constitutes a major task for health practitioners across the entire spectrum of mental health disciplines. Psychologists face the difficult task of making extremely important decisions and recommendations about individuals based on procedures and techniques developed in countries such as the United States of America and European countries.

One of the major obstacles when conducting psychometric assessments in a diversity context is the requirement for standardized testing procedures. According to Gregory (1996), a test is considered standardized if the procedures for administering it are uniform from one examiner and setting to another. Louw and Edwards (1993) maintain that psychological tests that are standardized remain the most widely used methods for gathering psychological data. The Rorschach Inkblot Method (RIM) is one such instrument. Foxcroft *et al* (2004) indicate that the Rorschach is one of the most frequently used tests in international studies in the USA, Europe and Spanish- and Portuguese-speaking countries. When conducting the RIM psychologists are required to adhere strictly to these standardized testing procedures in order to create valid and reliable psychometric profiles of their clients.

With some tests, such as the Rorschach Comprehensive System, the number of responses (or the lack thereof) can render the entire assessment invalid. If a client provides less than 14 responses during a RCS assessment, the results from the assessment cannot be interpreted. Meyer (1992) suggests that response frequency (R) is not a problem when the Rorschach is used as ‘a fully idiographic instrument’. However, when the test is utilized in a nomothetic manner, it introduces clinical and research problems. For this reason, response frequency has been the focus of some studies focusing on Rorschach administration. Jaffe (1988) has used the ‘Altered Atmosphere Procedure’ that was proposed by Applebaum in 1959, in which the patient is asked, after the standard administration of the Rorschach test, to take a second look through all of the cards and provide one more response. Based on this procedure, Jaffe then developed the Selected Response Procedure. He drew on the strengths of the ‘Altered Atmosphere Procedure (e.g. encouraging a more relaxed attitude and providing opportunities to re-associate with the inkblots) and added further desirable qualities to the procedure (e.g. for instance, focusing on the discovery of more responses and/or creating an awareness of the tests’ ending). Jaffe (1988) also re-iterates the importance of understanding responses within a theoretical framework and within its clinical context. Ritzler and Nalesnik (1990) examined the effect of inquiry on the administration of the RCS. They found that the absence of inquiry significantly *reduced* the means for several factors, e.g. Form Quality – unusual (FQu), Developmental Quality-vague (DQv), the sum of color responses (SumC), the sum of shading responses (Sum Shading), and the weighted thought disorder measure (W Sum6 SP SC). However, it significantly increased pure form (F). Similarly, Hartmann (2001) compared the administration of the RIM under two instructional sets (e.g. short and long instruction) with 60 healthy participants. She

found that the short instruction elicited a higher frequency of questions about the test and more brief protocols ($R < 14$). She suggests that a more elaborate standard instruction may be preferable.

In this article, the researchers contend that an adjustment of the standardized administration procedures for the RCS can increase the response rates among a number of clients/learners, and can therefore open up an entire avenue of psychometric data that would otherwise have been inaccessible. Dana (2000) maintains that standard or Anglo-American 'emic' (insider's perspective) instruments are culture-specific but are often applied as if they were 'etic' (outsider's perspective) instruments. They are labelled 'pseudo-etics' to suggest their unproved authenticity as universal instruments. These standard instruments may, however, be modified, adjusted or corrected for use with diverse populations. The researchers support this latter argument by providing the results from a study in which the standard administration procedures for the RCS were indeed adjusted and the response rate of the participants did increase significantly.

THE RATIONALE FOR THE STUDY

As psychologists, the researchers who undertook this study experience challenges when administering psychological tests that are standardized for the Western population, to South African adolescents. According to The Professional Board for Psychology (1998), the post-apartheid state inherited a system of separate tests designed for racially defined groups, with the result that few tests standardized for all South Africans were and are available. Owing to the lack of adequate measures, it has become common practice to use tests developed for a white, Westernized population

on other social groups, albeit applying the norms with caution. As very few empirical studies have been done on test bias, testers are left with very little certainty about the validity and appropriateness of the measures that they use. How to guard against the potential misuse of psychological tests, and the need to adapt and develop appropriate measures have been important points of discussion for some time, but few concrete steps have been taken to redress the situation. External pressures are beginning to spur psychologists and test developers into action.

Against this background, the researchers became interested in investigating the inhibiting factors that could affect the response rate and the development of adjusted administration procedures for the Rorschach system when administered to South African adolescents. The rationale for this study then is to develop an administration procedure that would make the RCS more accessible to psychologists working with young South African learners.

RESEARCH QUESTION

The research question that guided the study under discussion was as follows:

What adjustments can be considered and made to the administration procedure for the RCS that might enhance the probability of a higher response rate from adolescents in South Africa and hence more reliable response profiles?

RESEARCH GOAL

The general goal of the research was the development of adjusted standardized RCS administration procedures and their implementation so as to increase participants' responses. The researchers therefore administered the RCS to the participants with the intention of identifying the variables that might inhibit them from giving sufficient responses (14 responses are considered sufficient) and developed the adjusted RCS administration procedures with the intention of accommodating the participants' background.

RESEARCH DESIGN

This study consists of empirical research in which the researchers were involved with numeric (Rorschach response rate) as well as textual data (administration procedures for the RCS). The key research question is of an exploratory, descriptive, explanatory as well as an evaluative nature. This research reflected the testing of RCS (administration procedures) on a South African sample, using a test that was developed in the USA. Diagram 1 presents the research design that was followed for adjusting the RCS administration procedures.

[INSERT DIAGRAM 1 HERE]

Multiple Case Studies as a Research Format

Multiple case studies were chosen as the research format for this study because they allowed the researchers to improve the way in which the RCS was administered to adolescents and also to gain an insight into the reasons why certain adjustments may

or may not be working. Case studies also allowed them to focus on one aspect of a problem, for example, the administering procedures for the RCS and to explore it in depth. In this study, the researchers focused on observing the participant's reaction in order to identify the inhibiting factors that might have prevented the participants from responding adequately to the RCS. The case study process was divided into three sections, namely: data collection, data analysis, findings and conclusions.

Data collection

Setting and participants

Qualitative researchers go directly to a particular setting in which they are interested in order to observe and collect their data. In this study the Rorschach Comprehensive System tests were conducted in four schools, which were or are still considered to be disadvantaged, in the Gauteng Province in South Africa. The schools are considered disadvantaged because they are situated in a disadvantaged community or poverty-stricken area. Two of those schools' buildings were dilapidated and school furniture not properly maintained. In some classes windows, doors and door handles were broken, and light bulbs were missing so that there was insufficient light. The walls were dirty and full of graffiti. The classes were over-crowded, that is, fifty to sixty learners to one classroom. In comparison with these schools, the other two schools were well maintained.

All participants were non-patient Zulu and Tswana learners aged fourteen. According to Skosana (1998:9) isiZulu, isiXhosa and isiNdebele are classified as belonging to the Nguni language group whereas South seSotho, Northern seSotho and

seTswana are classified under the seSotho language group. IsiZulu, seTswana and Northern seSotho were the only African languages taught in the schools involved in this study. The sample was selected from the two main language groups, to wit Nguni and seSotho. Participants whose home language was isiZulu were selected because isiZulu was the only Nguni language taught at schools. SeTswana-speaking participants were selected because seTswana-speaking learners were in the majority in those schools.

Fourteen-year-old learners were selected for the study because it was their first or second year of high school learning and experience. They were not yet as concerned about their final matriculation (Grade 12) examination as the 16, 17 and 18-year-olds in Grades 11 and 12. They were willing to participate in the research project because, unlike the Grade 12 learners, they did not have extra lessons in the afternoons. Six girls and four boys participated in the study.

The researchers obtained permission from the participants' parents and the Department of Education to conduct the research. Informed consent of individual participants was also obtained. The tests were conducted in the afternoon to ensure that classes were not interrupted. The researchers ensured that the participants had something to eat before the RCS assessment and also that they arrived home safely after the assessments. The researcher conducting the assessments was female, black and fluent in the mother tongues of the participants.

This study was divided into two phases, namely pre-test and post-test. Ten participants were first tested with the Rorschach according to the Comprehensive System's strict rules and procedures (pre-test phase) and after 10 months the same participants were retested according to the *adjusted* RCS procedures (post-test).

Interviews

Interviewing was used in this study because it is one of the most common and powerful ways of attempting to understand our fellow human beings during a research process. However, interviews are not neutral tools of data collection, but tools of active interaction and contextually based results. Thus the focus of interviews is moving to encompass the 'how' of people's lives as well as the traditional 'what' (Denzin & Lincoln, 2000).

The researchers conducted the background interview before formally administering the RCS test. The interviews took place at the participants' schools. The participants were exempted from sweeping the classrooms so that they could be interviewed. The interviews enabled the researchers to get to know the participants better and to form a friendly relationship with them.

Observation

Owing to the case-study format of the research, observation was a key data-collection method. It enabled the researchers to capture the language and behaviour of the participants. In this study, observations were recorded in field notes, which consisted of free-form jotting taken down immediately. They were often written on two levels: the direct descriptions of what was observed and / or verbatim recording of what was overheard and the speculation concerning what it meant. During the Rorschach administration, the researchers noted what was observed and verbatim recording was done when the participants responded to the Rorschach cards.

Field notes

The researchers took detailed notes of the setting while observing and interviewing the participants. What was heard, seen, experienced and observed was noted as field notes, and formed part of the research data. The participants' reactions during the RCS administration were also noted.

**ADMINISTRATION OF THE RORSCHACH COMPREHENSIVE SYSTEM:
PRE-TEST AND POST-TEST**

According to McMillan and Schumacher (2001), standardized tests provide procedures for administering and scoring instruments. This includes the Rorschach Comprehensive System. The scoring of responses is usually objective and most, but not all, standardized tests have been given to a norm group. The norm group allows comparison of a score with the performance of a defined group of individuals. This provides important and valuable information. However, researchers should still take care when interpreting norm-referenced scores.

According to Bless and Higson-Smith (2000), in the pre-test /post-test design, the researcher measures the dependent variables before (pre-test or baseline) and after (post-test) the event that is expected to bring about some change. The scores on the dependent measure can be compared over two points in time and the difference between the pre-test and post-test, according to Higson-Smith (2000), may be due to the event that occurred between them. It may also *not* be due to the event, but these considerations will be shared later in this article. The pre-test and post-test phases of this study are explained below.

Pre-test Phase

The goal of the pre-test in this study was to identify variables that could prevent the participants from providing sufficient responses when the RCS is administered to them. The RCS was administered to ten participants who had never before been exposed to psychological tests. The purpose of the pre-test phase was also to find out what adjustments should be considered and made in order to develop the adjusted RCS that might enhance the probability of a higher rate-of-response profile among the participants.

The pre-test results were analysed according to the observation notes of the researchers. They were also compared with the RCS norms and used as samples for adjusting the RCS administration procedures.

Post-test Phase

RCS adjustments were made from the data acquired from the pre-test phase. The same (ten) participants were re-tested after ten months, using the adjusted Rorschach (ARCS) administration procedure. (These procedures are presented later in this article.)

The post-test results were analysed in accordance with the researchers' observations and notes and compared with the pre-test results. They were also used as a guideline when administering the RCS to South African adolescents.

Data analysis, data segmentation and synthesis

Data analysis in this study relied heavily on description. Even when certain statistics were calculated, they were used in a descriptive way. The participants' responses constituted part of the data when administering the RCS and were analysed.

In this study the participants initially responded to the Rorschach cards and during the inquiry phase, the participants provided the researchers with more and specific information about their responses. The data from the responses was segmented by concentrating on the responses to each card by each participant, then on the responses to the ten Rorschach cards by each participant and finally on all the responses of ten participants.

When the Rorschach (RCS) was administered to the participants in this study, the researchers counted the number of responses given by the participants. The research steps followed by the researchers are summarised as follows:

1. An analysis of the participants' verbal and non-verbal responses
2. An analysis of the researchers' observation of the participants' behaviour and reaction during the testing phase
3. An analysis of the questions posed by the participants during the testing procedures
4. An analysis of the participant's language usage and social background.

PRE-TEST FINDINGS

During the pre-test phase, five participants gave less than 14 responses (Participants 1, 5, 6, 8 and 9), which, according to Exner (1995), is invalid and could not be scored.

Five participants gave more than 14 responses (Participants 2, 3, 4, 6 and 10), which can be scored. The sum total of responses by all participants given during the pre-test phase was 127. The average number of responses given was therefore 12,7. During the pre-test phase the researchers observed and noticed certain behaviours and reactions. These are indicated below.

No eye contact

Six out of 10 participants (Participants 1, 2, 4, 6, 8 and 9) were shy and did not make eye contact during assessment. Some were nervous, bit their nails and bowed their heads when talking to the researchers. South African adolescents often avoid eye contact with adults as a sign of respect.

Uncertainty when giving responses

Five of the participants (Participants 1, 2, 6, 7 and 8) were uncertain during the testing procedure. This could be due to the fact that they had never been exposed to psychological tests before. As a result, some of them wanted the researchers' approval of the correctness of their responses, and some were hesitant and silent for a while before they responded.

Lack of interest and hesitance about verbal expression

The researchers also noticed that two participants (Participants 1 and 6) showed a lack of interest and hesitation when responding to some of the cards. Despite efforts

to encourage them, they kept on saying that they did not see anything and did not want to attempt to respond. This could be because the participants had never been exposed to inkblot drawings during their early childhood or during the preschool period. It could also be the result of factors such as a high level of discomfort with the assessment situation, negative previous experiences with testing in general or affective factors unknown to the researchers at the time.

Sometimes the participants were hesitant to say what they saw because they were embarrassed to say certain sensitive words such as 'vagina', or 'menstruation' to an adult. This may have stemmed from the social custom that children are not supposed to utter vulgar words or any word symbolising human private parts in the presence of an adult. As a result, it could have been difficult for them to say what they saw.

Perseveration: repetition of concepts

During the RCS test, the researchers noticed that two participants repeated concepts, (Participants 3 and 9). This might have been due to various factors, e.g. limited language competency; a tendency towards perseveration, e.g. the continuance or recurrence of a sensation, impression or idea during subsequent activity (Colman, 2003); a limited expressive vocabulary; or some visual perceptual limitations. It could also have been a way of coping with the challenges of the testing situation.

Inability to remember the initial response

During the inquiry phase, two participants could not remember what they had said or seen during the response phase (Participants 6 and 9). They needed to be reminded

by the researchers. This could be the result of short-term memory problems or a lack of focus and concentration or interest in what they were looking at or saying.

Side-by-side seating between researcher and respondent

The preferred seating for RCS administration, according to Exner (1993), is the placing of the subject and examiner side by side. This can be done at a table or using two comfortable chairs with a small table between them, or any of several variations on this. The reasons for the side-by-side seating, Exner (1993) explains, are to reduce the effects of inadvertent and unwanted cues from the examiner that might influence the participant and to afford the examiner a much better view of the features of the blot as they are referred to by the participant.

It was evident that seven participants (Participants 1, 2, 4, 5, 6, 8 and 9) were comfortable with the side-by-side seating arrangement. They simply sat where they were told to, without any objections. However, three of the participants (participants 3, 7 and 10) seemed uncomfortable with the side-by-side seating. They indirectly showed their discomfort by shifting the chairs frequently.

Home language deficiency

Nine of the participants gave more concepts in English than in their home languages (Participants 1, 2, 4, 5, 6, 7, 8, 9 and 10). English is the medium of instruction at school and hence the learners are familiar with English concepts, for instance, names

of animals, parts of animals and humans, plants, flowers, insects and birds. This may have prompted the overwhelming majority of English responses.

It was also noticed that four of the Zulu participants gave more concepts in Northern seSotho than in their home language. Those learners only speak their home languages at home and speak Northern seSotho with their friends or neighbours. Therefore they have limited home language concepts. This may be a reflection of how children are often exposed to different languages and learn different languages from childhood. English is introduced at Grade 3 level in the participating schools and so most of the learners acquire some English vocabulary. Some of the participants whose parents work or worked for Afrikaans-speaking families as domestic workers, knew Afrikaans concepts taught by their parents. Four participants gave responses in Invented Language (Participants 1, 4, 5 and 10). 'Invented Language' in this study refers to the language that people from the townships have invented by using borrowed words from other different languages.

All of the participants reflected similar language difficulties during the testing situation. The participants preferred using concepts borrowed from other African languages as well as Afrikaans and English. It is clear though, that the use of English concepts was more frequent because of the increased exposure to English as the medium of instruction at the schools the participants were attending. In this regard it was also noted that some of the participants felt embarrassed to mention their concepts and ideas in their mother tongue, preferring to articulate them in English.

Most of the time they preferred to respond in English even if the prompt was formulated in their home language. A few of them, who gave certain concepts in Afrikaans, indicated that they had heard those concepts from their mothers who were domestic workers and were exposed to Afrikaans-speaking employers. It was thus a

normal reaction that the influence of the employer's language affected the mothers to such an extent that they imparted their experiences and acquired knowledge of the language to their children at home.

The participants seemed to be used to one-way communication, whereby the adult who was a teacher gave instructions and information, and they received information passively. The RCS testing was a new experience because they were required to talk and express themselves while the researchers listened and wrote down what they said.

During the process it was found that the standard RCS (Exner) administration procedures did not elicit optimal response rates from the participants in this study. This was evident from the fact that half of the participants did not provide the minimum number of responses to facilitate further interpretation of their responses. Based on the observations during this phase, we developed an assumption that certain adjustments to the standard administration procedures might accommodate the unique differences (from the norm group) that seem to be inhibiting these participants. It was also assumed that such adjustments would still comply with the scientific criteria that are applicable when the RCS is administered.

THE ADJUSTMENT OF THE RORSCHACH COMPREHENSIVE SYSTEM (RCS) ADMINISTRATION PROCEDURE

Variables to be considered for the adjustment of RCS

It was evident from the pre-test findings that these South African adolescents did not respond optimally when the RCS procedures were used. After thorough analysis of the findings, the researchers identified variables that need to be considered when the

RCS is administered to South African adolescents. The variables are divided into three categories:

- participant variables,
- researcher variables and
- procedural variables.

Participant variables

Poverty and nutrition

According to Hofmeyr (1996), a poor diet is one result of poverty that in turn is responsible for poor development and health. Another effect of poverty is the wearing of inferior clothing, which, especially for adolescents, results in a poor self-image. A poor self-concept and lack of self-confidence are often perceived as the result of slovenliness, neglect and a physically poor environment. The adolescents therefore might evaluate themselves according to the image the community has of the family and a physically poor environment as well as the stigma attached to the family. It might make them feel like outcasts and might also lead to a fear of strangers. A lack of security often leads to uncertainty and distrust in adolescents. Hofmeyr (1996) further maintains that the lack of food can result in poor health, fatigue, low concentration and poor achievement. All of these have an impact on test performance. Most of the participants' parents in this study were unemployed, single and illiterate. In this study the researchers arranged drinks and snacks for the participants before the test to compensate to some extent for the impact of hunger on test results.

Participants' background

The researchers analyzed the participants' information obtained from the interview and on the basis of that, suggest that the following factors be taken into consideration when RCS administration procedures are adjusted:

1) The participants had never been exposed to psychological tests before. They had never previously consulted a psychologist. They were, however, familiar with general practitioners and traditional healers; 2) The participants were at first shy when interviewed by unfamiliar people; 3) The participants were from a low socio-economic background, with a high level of unemployment and illiteracy amongst their parents. There was little or no parental involvement in school activities; 4) The school curriculum was written in English as a first language, which makes the mastering of the content difficult. In many instances it seemed that the comprehension of the content was neglected. 5) The participants were used to repeating content in order to master it. It was also important during the Rorschach test to repeat the instructions so that the participants could understand them. This practice might have provided the participants with some form of familiarity; 6) It seemed that the participants may not have been encouraged to question adults. They may have been taught to accept instructions and passive learning seemed to have been encouraged. During the RCS this might have meant that participants were reluctant to ask for further clarification if they did not understand the instruction.

Participants' social background

The major factors the researchers needed to consider were the interpretations of shyness and/or respect and the use of non-standard English. The social backgrounds of the participants in this study mandated that a child demonstrates respect for an older person by being shy, avoiding eye contact when talking to older people, speaking in a low and soft voice, rubbing hands and forehead and being hesitant when articulating certain sensitive concepts.

According to Aponte, Rivers and Wohl (1995), non-standard English is usually learned from family and peers in informal settings. It is associated with, and used to convey, intimacy. It is used spontaneously and reflects a feeling of solidarity with others who share its use. During the assessment it was therefore imperative that the researchers should identify the dominant language among the bilingual or multilingual participants.

Interpersonal interaction

Interpersonal interaction is influenced by beliefs and values, which may mean that different participants react differently in certain situations. For instance, an individual might view self-disclosure in a clinical situation as inappropriate and would therefore not participate willingly. This may also be the case for the participants in this study who have not been exposed to psychological testing before. Shyness and non-disclosure can sometimes be considered to be a virtue. The reluctance evinced by the participants in this study can therefore be viewed as appropriate and functional behaviour. In adapting the administration procedure, the researchers should thus be respectful of such responses and then consider ways in which to incorporate them into the adapted administration procedure.

Researcher variables

Relationship between the researcher and the participant

According to Janson (1999), it is important during RCS administration for the researchers to be aware of their roles in the test situation and also to understand how they can influence the interpersonal relationship between tester and respondent. When administering the RCS to the participants, the researchers in this study took care to show interest in and respect for them. When introducing ourselves to the participants, we reassured them that we were not teachers but psychologists. The learners regard teachers as authority figures and are therefore often not spontaneous with them. The participants were also reminded about the role of the psychologists and asked whether they knew anything about psychologists and psychological tests.

Researcher's expectations

The expectations of the researchers could also affect the results because of the inclination towards self-fulfilling prophecy. These expectations could become apparent through subtle postural and facial cues to which the participants could also respond. While administering the RCS, the researchers combated this notion to some extent by consciously taking note of their own expectations of the outcomes of the process. Even though expectations cannot be entirely separated from the administration procedure, their effect can probably be limited through *awareness* of the potential problem.

Procedural variables

Appropriateness of testing procedures

Ethical and valid testing entails administering tests in the language in which the test-taker is sufficiently competent (draft policy document of the South African Medical and Dental Council (SAMDC), 1998:5). Aponte, River and Wohl (1995) mention that the participants could also resist if they are suspicious of the test. Some participants may therefore require more introductions to the process than just a sentence or two. Instructions should be clearly explained and repeated to make sure that the participants understand them. The participants should also be allowed to respond in the language with which they are comfortable.

In this study, during the pre-test phase, the Rorschach was administered strictly according to RCS procedures. When adjusting the RCS administration procedures, the researchers took into account the language and social factors that inhibited the participants from giving sufficient responses during the pre-test phase.

Testing environment

Taylor and Dick (1997) state that the researcher should prepare a quiet room for the test. Anastasi and Urbina (1997) also mention that special attention should be given to the selection of a suitable room, which is not noisy, and has adequate lighting, ventilation, seating facilities and working space for test takers.

Even though the schools where data collection took place did not have ventilation facilities, the researchers looked for a brighter and cool room in which to conduct the RCS according to adjusted procedures. A sign with the words 'Do not disturb, quiet please', 'Testing in process' or 'Silence is required in this area' was put on the door, to ensure uninterrupted engagement during the testing procedure.

Seating arrangement

Different scholars of Rorschach prefer different seating arrangements. According to Exner (1993) Klopfer, Hertz and Piotrowski prefer side-by-side seating. Beck preferred to sit behind the participant, whereas Rapaport recommended face-to-face seating and Weiner, side-by-side or catty-corner.

In this study we took into account the social backgrounds of South African adolescents from the historically black townships, e.g. home and school backgrounds. Some of the children are highly influenced by their tradition and social background, whereas others are influenced by formal education, which has elements of Western social influences. For instance, some social customs prohibits children from making eye contact with adults, which could make Exner's side-by-side seating more suitable. At school the learners sit facing the teacher and are required to make eye contact with him or her.

The seating choice during this study was left to the participants in both phases of the study. The researchers gave the participants at least the following options: side-by-side; face-to-face or opposite the researcher, or catty-corner, that is at the corner of the table.

RCS and the ARCS administration procedures

As previously stated, according to Exner & Weiner (1995), a record of less than 14 responses should not be accepted as a valid number of responses for interpretative purposes. From the pre-test it was evident to the researchers that the standard RCS procedures do not elicit enough responses when applied to the participants in this study. The researchers therefore highlighted factors that should be considered when making RCS adjustments in order to accommodate the participants.

After carefully analyzing factors to be considered for RCS adjustments, the researchers adjusted the testing phases as follows:

- Presentation Phase (P-Phase)
- Re-Emphasizing Phase (RE-Phase)
- Preliminary Response Phase (PR-Phase)
- Inquiry (I-Phase) and
- Re-Inquiry Phase (RI-Phase).

Both RCS and ARCS phases are summarized and discussed in Table 1, which illustrates the adjustment procedure:

[INSERT TABLE 1 HERE]

Explanation of the ARCS

Presentation Phase (P-Phase)

The researchers made the participants feel comfortable by being friendly, greeting them warmly and by introducing themselves. The seating procedure was explained and the participants were allowed to choose where they wanted to sit. The participants' seating options were noted.

The researchers explained the aim of the test in order to alleviate the participants' anxiety. It was also explained to the participants that the test was not going to affect their scholastic performance. The procedure for showing and handing over the cards was explained. The instructions were repeated in order to make sure that the participants knew what they should do with the cards.

Re-Emphasizing Phase (RE- Phase)

The main aim of this phase was to re-emphasize the procedure for the actual handing over of the card to the participants. The researchers made sure that the participants understood the procedure very well after explaining at least twice. The participants were allowed to ask questions if they were still not certain about what to do with the cards.

The researchers took into consideration the fact that the participants' exposure to psychological tests was limited to the pre-testing and that they might still be anxious and not know what to expect from the session. To make sure that the participants understood the instructions, the researchers repeated or re-emphasized the test instructions.

Preliminary Response Phase (PR- Phase)

Some of the participants during the pre-test reacted to the first card with shock. This did not necessarily reflect the traditional interpretation of a shock reaction, but can rather be interpreted in accordance with the participants' social background, i.e. not having been exposed to any previous psychological tests and then suddenly being exposed to an ink blot that did not allow or facilitate any association within their social background or previous experiences.

During this phase, the participants were given the card with the traditional RCS instruction, but the role of the researchers was the following: to facilitate in a more supportive manner spontaneous responses and reactions, without giving the participants any answer or suggestion for the content, and to answer the participants' questions on what to do, by repeating the instructions but in a more informal way.

During this phase the researchers took into consideration the following problems that the participants experienced in the pre-test session:

Language problem

It was found during the pre-test that none of the participants were able to stick to their home language when giving responses. They spoke at least two African languages, or used concepts borrowed from Afrikaans and English. The researchers therefore made allowances for the fact that the participants' environment is the cause of the language mixing that existed, and did not penalize them for it. The participants were allowed to respond in any language with which they felt comfortable.

Difficulty with concepts

Some of the participants had difficulty in relating their answers in any of the languages, indicating that they knew what the blot or part of the blot is, but did not have an appropriate word for it. In such cases, the researchers reacted by supporting the participants in explaining the image or even drawing what they saw so that the researchers could identify the image in order to reflect what was drawn within the language concept. The researchers made sure that the concepts derived from the participants' drawings or descriptions were exactly what the participants meant.

Inquiry Phase (I-Phase)

During the pre-test phase, the inquiry was done after all ten cards had been responded to. It was found that during the inquiry phase, some of the participants could not remember what their initial responses had been. During the post-test the researchers suggested that the inquiry be conducted immediately after each card was responded to. The researchers prompted and encouraged the participants.

Re- Inquiry (RI- Phase)

During the pre-test phase, some of the participants could not give 14 or more responses, probably because they gave one or no response to a card. The re-inquiry phase addresses this problem. The participants who gave less than 14 responses were required to go through the cards again, starting with the cards where no or only one response was given. Those participants were given another chance by going through the cards again in order to gain more responses.

RESULTS

Post-test rate of responses

During the post-test phase, eight participants gave a sufficient number of responses, which is 14 or more (Participants 1, 2, 3, 4, 5, 7, 9 and 10) and 2 participants gave less than 14 responses (Participants 6 and 8). The rate of responses is illustrated in Figure 1.

[INSERT FIGURE 1 HERE]

The rate of responses is indicated vertically on the graph and the participants, horizontally. Figure 1 indicates the participants' responses from the most to the least responses as follows: P4 (20), P3 (19), P9 (19), P10 (19), P1 (16), P2 (16), P7 (15), P5 (14), P8 (12) and P6 (11). During the post-test phase, the total responses of the 10 participants amounted to 161 and the total average was 16,1. The possible reasons for the increase are indicated in the discussion section of this study.

Seating arrangement

During the post-test phase, the participants' choice of seating was as follows:

- Face-to-face seating: six participants (Participants 1, 2, 4, 5, 6 and 8).
- Side-by-side: three participants (Participants 3, 8 and 10).

- Catty-corner: one participant (Participant 7).

The seating arrangement that was favoured in this study was face-to-face. According to Exner (1993), side-to-side is the preferred seating arrangement during RCS, because it reduces the effects of inadvertent and unwanted cues from the researcher that may influence the participant. It has been established that this does not apply to the participants in this study. The reason why most of the participants chose face-to-face seating could be because of the influence of formal education. Face-to-face is the most common way of conducting interviews and testing in schools. It is also possible that this preferred seating arrangement could be attributable to factor(s) as yet unconsidered in this study.

Re-Inquiry Phase

Four participants (1, 5, 6 and 8) gave more responses during the re-inquiry phase. Those responses increased their number of responses (R).

Strategies to acquire concepts

Description

Some of the participants increased their responses by using the descriptive method. For instance 3 of the participants (1, 6 and 9) did not know the concept and as a result they described it so that the researchers could identify what they saw on the inkblot. The participants' description helped to increase the R.

Drawing

The use of drawing was also helpful during the ARCS phase. Two participants (1 and 6) did not know the concepts. They drew what they saw on the inkblot so that the researchers could identify what they saw. The participants' drawings also helped to increase the number of responses.

Viewing / seeing

One participant (Participant 6) did not know the concept even after she drew it. The participant drew a tree but she could not say the concept. The researchers asked the participant to stand up and look through the window where one could see many trees. After seeing a real tree, the participant mentioned the concept 'tree'. This activity helped to increase the participant's responses.

Reactions

Embarrassed to respond

Two participants (9 and 10) were embarrassed to verbalize sensitive concepts. The researchers encouraged the participants by saying that they could say anything even if they thought it embarrassing because to the researchers it was not. These two participants then got up the courage to say what they wanted to say. This type of encouragement helped to increase these participants' response rate.

Emotionality and an inability to recall

One participant (Participant 6) cried during the post-test phase. According to the participant it was frustrating for her because she could not recall her initial responses. She also mentioned that she experienced the same thing at school. Her reactions could have been aggravated by a recent traumatic experience - the death of her father. The response pattern of Participant 6 during ARCS differs significantly from that of the other participants. This participant's emotional responses to the assessment are therefore noted, but not regarded as significant in terms of the ARCS.

Relaxed

Nine participants (Participants 1, 2, 3, 4, 5, 7, 8, 9 and 10) seemed more relaxed as compared to their first Rorschach test. This could possibly be ascribed to:

- The participants' previous exposure to the psychological test during the pre-test phase. During the post-test phase, they knew what to expect.
- The ARCS administration procedures may have allowed them to be more responsive while the test was being conducted.

Language used

One of the researchers spoke the participants' home language and as a result the tests were administered in their home languages. The participants were also given the

choice of using any other language with which they were comfortable. Nine participants gave more concepts in English during the post-test (Participants 1, 2, 4, 5, 6, 7, 8, 9 and 10). One participant (Participant 3) gave more concepts in his home language. Nine participants did not know some concepts in their home language but preferred to give responses in Invented Language.

DISCUSSION

Highly structured assessment procedures can be administered in a sensitive and responsive manner (Hoge, 1999). Dependence on standardized assessments can rob the examiner of the opportunity to demonstrate flexibility and professional discretion when dealing with clients. This study provides evidence to support these positions.

The differences in the rate of responses during the RCS and ARCS are clearly indicated on the graph (Figure 1). During the pre-test, the total responses (R) of the ten participants amounted to 127, reflecting an average of 12,7 per participant, whereas during the post-test administration the total responses (R) stand at 161 with an average of 16,1 responses per participant. These findings indicate that the participants gave more responses during the post- test phase than during the pre-test phase. The difference between the two phases is 34 responses, which reflects an average increase of 3,4 responses per participant. None of the participants gave fewer responses during the ARCS procedure than during the standard RCS administration procedure.

The main research claim of this study, therefore, is that the Adjusted Rorschach Comprehensive System (ARCS) procedures produced more responses when administered to South African adolescents from historically disadvantaged schools.

The *increase in response rate* during the ARCS could be attributed to the following:

(a) The flexibility of the ARCS administration procedure

The instructions were thoroughly explained and repeated. The participants were allowed to use any language of their choice as well as different ways of responding, for instance, drawing, viewing and describing. The participants were not told where and how to sit but were allowed to have a seating choice.

(b) Expectation of psychological tests

The participants were familiar with the Inkblots and testing procedures. They knew what to expect during the assessment.

(c) Participants

The participants were familiar with the researchers. During ARCS the participants were 10 months older and more mature.

LIMITATIONS OF THE STUDY

Although this study has demonstrated that there can be an increase in Rorschach responses when the Adjusted Rorschach Comprehensive System (ARCS) administration procedures are used, it has some limitations.

Test effect can be one of the biases. According to Bless & Higson-Smith (2000), prior exposure to a test or measurement technique can bias a person's responses. This could be the case with this study, particularly during the post-test administration. The general increase in responses and the positive reaction towards the test could be due to the exposure of the test during the pre-test session. We suggest therefore that further studies on this theme should opt for a randomized control design where *parallel* groups are assessed within the same procedures and pre-test post-test design. The **sample** from which data were collected for this study is also **small**. Further studies should be done with larger samples. **Gender specificity** may be a further limitation of the study. The gender breakdown of the participants were unequal (male, n=4 and female, n=6). However, since this study used only a small sample, high inference interpretations about gender factors would not have been possible – thereby neutralising this limitation to some extent.

CONCLUSION

The researchers described the development of the adjusted RCS (ARCS) administration procedures after careful analysis of the participants' responses, reactions, language and concept usage during the pre-test phase. When developing the ARCS procedures, the researchers took into account the *participant variables*, which include *poverty, background, social background and interpersonal interaction*; the *researcher variables* which include *relationship between the researcher and the participant, researcher expectations*; and *procedural variables*, which include *appropriateness of testing procedures, testing environment and seating arrangement*.

During the post-test phase when ARCS administration procedures were applied, the participants were allowed to use the language they were comfortable with, and also to use description, drawing and viewing/seeing. According to the findings, the participants gave more responses when ARCS administration procedures were applied than when RCS procedures were strictly applied.

This study indicates that the response rates of participants during RCS testing can be increased by carefully examining and adjusting the standard RCS administration procedures. However, other factors could not be ruled out conclusively. Even though this study cannot be generalized to the broader population of learners in South Africa, it may hold some suggestions for administering the RCS in contexts where exposure to psychological tests has been limited and where a variety of factors impact on the way in which children react to psychological assessment procedures. It is therefore suggested that further studies be conducted on the comparison of data obtained from ARCS and other psychological assessment strategies.

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DIAGRAM 1: RESEARCH DESIGN FOR ADJUSTING THE RCS ADMINISTERING PROCEDURE

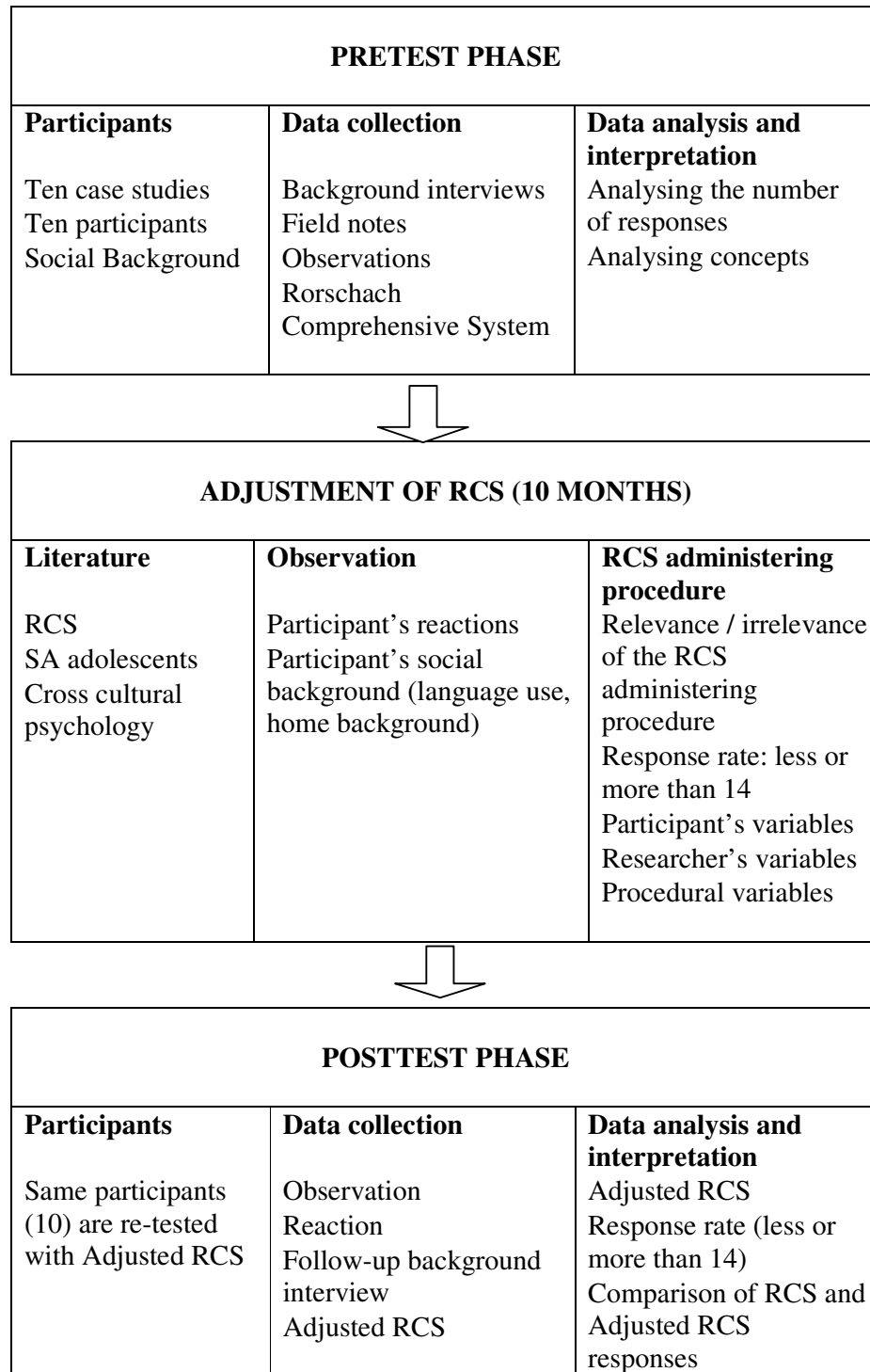


TABLE 1: COMPARISON OF STANDARD RCS ADMINISTERING PROCEDURE AND THE ADJUSTED RCS ADMINISTERING PROCEDURE

| RCS | ARCS |
|--|--|
| <p>Instructions of the test</p> <ul style="list-style-type: none"> • <i>Greetings (not as emphasized as in ARCS)</i> • <i>Side-by-side seating is emphasized</i> <p><i>The researcher passes the first block and asks; “What might this be?”</i></p> <p><i>If despite of the pre-test preparation the participant comments, “ It’s an inkblot”, the researcher should counter with an acknowledgement plus a restatement of the basic instruction such as “That’s right. This is an inkblot test, and what I want you to tell me is: “ what it might be.”</i></p> | <p>Presentation Phase (P Phase)</p> <p>Introduction: <i>“Good morning/Good Afternoon (greetings are emphasized). My name is (...). I am not a teacher or school inspector, but a Psychologist. I work with people in order to know them better. Today I am looking forward to work with you. At the end of the session I hope to know you better.</i></p> <p>Explanation of Rorschach test: <i>“Please relax. This test is not a typical school test and it has got nothing to do with your school performance. There are no correct and incorrect answers. This test will give me an idea of how you see things around you. Your answers will help me to know you better.”</i></p> <p>Presentation of inkblots: <i>“I am going to show you ten cards. I will start with the first one and I want you to tell me “what might this be.” I will show you all the cards one by one.”</i></p> <p>Re-emphasizing Phase (RE-Phase)</p> <p>In order to make sure that the participant understood the instructions the researcher should say:</p> <p><i>“I have just said that I am going to show you 10 cards, I will start with the first one. I want you to tell me “what might this be?” Let me make sure that you understand. After I have given you a card you must please tell me “What might it be”. Do not feel embarrassed to tell me because nothing is embarrassing to me. Did you understand? Please feel free to ask any questions before we start.</i></p> |

| | |
|---|--|
| <p>The Response or Association Phase</p> <p><i>The researcher must avoid injecting any set, bias or direction into the situation except when encouragement is required or comment is necessary eg, “mmmhmm”</i></p> <p><i>Participant’s questions: Should I use the whole thing? Researcher: It’s up to you. More people find more than one thing...”</i> <i>Take your time, it’s up to you...”</i></p> | <p>Preliminary Response Phase (PR-Phase)</p> <p><i>“Now you have the card and you know it is only an inkblot. You can now decide on anything that can be. Do not worry about the correctness or incorrectness of the answer. People see different things, you can too. You can touch it and turn it as you wish. Use any language you prefer. Feel free to say anything even if it seems embarrassing to you, because to me it is not. If you do not know the correct word you can:</i></p> <ul style="list-style-type: none"> • <i>describe what it might be</i> • <i>you can even make a simple drawing of what might it be. I will therefore discuss the drawing with you until we get the relevant word or name of what you are drawing</i> • <i>you can look around and show me what it might be.</i> |
| <p>Inquiry</p> <p><i>OK. We’ve done them all. Now we are going to go back through them. It won’t take long. I want you to help me see what you saw.</i></p> <p><i>I am going to read what you said and then I want you to show me where on the blot you saw it and what there is there that make it look like that, so that I can see it too. I’d like to see it just like you did, so help me now. Do you understand?”</i></p> <p><i>Examiner: “Here you said... or then you said...”</i></p> | <p>Inquiry Phase (IP)</p> <p><i>I have just read your initial response. Relax and take your time, then show me on the card where do you see what you have said, so that I can see it just like you did.</i></p> <p><i>Please ask questions if you are not sure of what you are supposed to do.</i></p> <p>Re-Inquiry Phase (RI)</p> <p><i>Examiner: count the responses</i></p> <p><i>If less than 14, the researcher explains to the participant that they are going through the cards that had only one or no response.</i></p> <p><i>The participants must feel free to describe, draw or show/point at what it might be if they do not know the correct word.</i></p> |

FIGURE 1: PRE-TEST AND POST-TEST RATE OF RESPONSES