Television viewing and personality needs of South African adolescents

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According to the needs-and gratifications approach, a person actively chooses programmes, articles and films and uses the content of this mass media material to gratify certain needs in him or herself. In this paper, results of a longitudinal study of the relationship between certain personality needs on the one hand and the television viewing behaviour and television programme preferences of adolescents on the other hand, are discussed. Based on a large scale South African study of the influence of television on school-going children, the data of approximately 2 000 adolescents, retested from their 12th to 18th year, are used. Multivariate statistical techniques, e.g. profile analysis, were used to analyze the data obtained by various psychometric instruments and questionnaires.

1. Introduction
The question regarding the popularity of television is gradually becoming rhetorical as the following research results indicate: In the USA from 1970 to 1976, the average time that the household television set was on, increased from 6,5 to 6,8 hours a day (Roberts and Bachen, 1981). Furthermore, more than 25% of mothers in a recent national sample of US families reported that the television set was on for at least 9 hours a day (Newspaper Advertising Bureau, 1978, as recorded in Roberts and Bachen, 1981).

Even in South Africa, the last Western industrialized country to introduce television, the popularity of this mass medium is very high. Over 20% of a group of Standard 8 pupils watched television for more than four hours a day during weekdays in the school term — that
is, they watched from the beginning of the programmes at 6 pm till closing time at approximately 11 pm (Du Preez, 1980).

Researchers in South Africa were fortunate, because the research possibilities were realized and exploited even before the introduction of television seven years ago. A series of research projects on television were launched by the Institute for Communication Research of the Human Sciences Research Council. The largest of these projects, on the influence of television on school-going young people, constituted an investigation on a wide range of relevant matters.

The results, which are discussed in this paper, are concerned with an important aspect of the popularity of television, namely the relation between certain personality needs in adolescents and their viewing behaviour and programme preferences.

One of the more topical and fashionable approaches to the study of mass media, is the uses-and-gratifications approach. This approach focuses mainly on the active role of the audience in the mass communication process. The concept of the media user as a passive victim is replaced by that of a person who is capable of actively choosing programmes, articles and films according to his or her own goals (Marais et al., 1981). According to Blumler, Katz and Gurevitch (1974: 20), research in this area is concerned with

(a) the social and psychological origins of
(b) needs, which generate
(c) expectations of
(d) the mass media or other sources, which lead to
(e) differential patterns of media exposures (or engagement in other activities), resulting in
(f) need gratifications and
(g) other consequences, perhaps mostly unintended ones.

According to Dimmick, McCain and Bolton (1979) this description seems to imply a linear process in that the need fulfilments or gratifications derived from media or other sources affect the individual's life satisfaction or those gratifications which are derived from life in general.

One of the basic criticisms against this approach (see Becker, 1979, Swanson, 1977 and Marais, 1981) is the tendency to construct infinite lists of uses and gratifications. Most of the studies have been unremittingly media-centric in concentrating solely on media as sources of gratification. The lists of needs therefore centered around media (specifically television)-related terms such as as a habit, for companionship and to forget. Consequently we know a great deal more about media-related needs (or gratifications) than about the roles of media in the larger process of need satisfaction (Dimmick, McCain and Bolton, 1979). Murray and Kippax (1979) found in a survey of cross-national studies four basic clusters of needs in uses-and-gratification studies: needs related to the self and personal identity, needs for social contact, needs for diversion and entertainment and needs for information and knowledge about the world. According to Blumler three fundamental orientations towards the media exist: cognitive, diversion and personal. Despite a high degree of similarity in various lists (Robers and Bachen, 1981) very few studies have used standardized psychological instruments to measure the needs of children or adolescents; most have related the data to television viewing patterns or to television programming.

Faber, Brown and McLeod (1979) have suggested that entertainment programmes on television may provide material which the adolescent can use to resolve certain developmental conflicts or tasks such as accepting changes in one's body and developing a positive body image; developing more completely defined sex roles and learning about relationships between sexes; beginning to achieve economic and emotional independence (freedom from authority); preparing for future occupational roles and developing civic competence.

Empirical evidence on the interaction between certain psychological characteristics (such as needs) and television viewing patterns, and programme preferences should, as Avery (1979:68) has put it, substantially increase our knowledge about adolescents and their use of the media.

The aim of this study is therefore to investigate the relation between certain personality needs in adolescents and their television viewing behaviour and programme preferences.
2. Method

2.1 Sample and Instruments

Data used in this investigation were collected from 1974 to 1978. Pupils in provincial schools were involved on a country-wide basis. Questionnaires and psychometric tests were completed under the supervision of teachers trained by school psychologists. It was possible to use the data of approximately 2000 adolescents. These pupils were in Standard 6 in 1974, and were retested every year till they were in Standard 10 in 1978. Language and sex distribution of the sample are indicated in Table 1.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Home Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>673</td>
</tr>
<tr>
<td>Girls</td>
<td>722</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1395</td>
</tr>
</tbody>
</table>

A Biographical Questionnaire* and a Television Questionnaire* and the Group Personality Projection Test (GPPT), developed by Cassell and Kahn (1961) were used to collect the data. The Group Personality Projection Test gives an indication of the degree of anxiety-producing tension present in the individual, as well as the degree of activeness of certain psychological need states. It consists of 90 multiple-choice items, requiring responses to stick-figure drawings portraying a widely diversified range of usual life activities, each with a minimal amount of situational structuring. The six fields of the GPPT are:

1. Anxiety-producing tension. This field is concerned with obtaining an index of the anxiety-producing tension present in the individual.
2. Nurturance. This score measures the individual's inclination to give aid to others and to provide initiative in leadership or guidance.
3. Withdrawal. This score indicates the need to escape or run away from the situation or activity, and to avoid personal responsibilities.
4. Neuroticism. Here the score indicates the general inability to make sound and timely decisions, and a general need to remain indecisive.
5. Affiliation and psychosexual needs. The score is indicative of the need for group membership and for psychosexual contacts.
6. Succorance. The results indicate the subjects' needs to seek aid, and in general to play an infant role.

The validity and reliability of the instrument were researched in the USA and in South Africa*, and the results were of such a nature that the GPPT is acceptable as a suitable psychometric instrument for the investigation.

2.2 Experimental Design

To investigate the relation between personality needs of adolescents on the one hand, and television viewing behaviour and television programme preferences on the other, longitudinal and analysis methods were particularly suited to deal with the data collected over five consecutive years from the same pupils. Three methods were used to analyze the data: Analysis of Variance (ANOVA) of GPPT scores divided into quartiles was done; a Multivariate Analysis of Variance (MANOVA) on the programme preferences of the adolescents with the six fields of the GPPT as independent variables was undertaken; and a profile analysis of the longitudinal data (GPPT scores on all six fields) was done. (Profile analysis* is a multivariate technique to analyze longitudinal data.)

The sample was divided into language and sex groups after regression analyses and MANOVA had been done on the GPPT with socio-economic status, sex, home language, dwelling place and IQ as independent variables.

The analyses were undertaken on three divisions of time spent viewing television: viewing time during weekdays (Mondays to Thursdays); viewing time during weekends (Fridays to Sundays); and total viewing time each week.

3. Findings and Discussion

3.1 The relation between certain psychological needs and television viewing

The results of the profile analyses and the analyses of variance are summarized in Table 2. Significant F values were found in various groups and fields of the GPPT, to some extent confirming the hypotheses that watching television...
TABLE 2
SUMMARY OF RESULTS
(F according to Wilks A criterion)

<table>
<thead>
<tr>
<th>Group split criterion</th>
<th>Test group</th>
<th>Significant results</th>
<th>Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV viewing during weekdays</td>
<td>Afrikaans-speaking boys</td>
<td>GPPT Field 1: p &gt; F = 0.0096*</td>
<td>Profile analysis</td>
</tr>
<tr>
<td></td>
<td>Afrikaans-speaking girls</td>
<td>GPPT Field 6: p &gt; F = 0.0395**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>English-speaking boys</td>
<td>GPPT Field 6: p &gt; F = 0.01**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>English-speaking girls</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>TV viewing during weekends</td>
<td>Afrikaans-speaking boys</td>
<td>GPPT Field 1: p &gt; F = 0.0466**</td>
<td>Profile analysis</td>
</tr>
<tr>
<td></td>
<td>Afrikaans-speaking girls</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td></td>
<td>English-speaking boys</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td></td>
<td>English-speaking girls</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td>Total TV viewing</td>
<td>Afrikaans-speaking boys</td>
<td>ns</td>
<td>Profile analysis</td>
</tr>
<tr>
<td></td>
<td>Afrikaans-speaking girls</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td></td>
<td>English-speaking boys</td>
<td>GPPT Field 1: p &gt; F = 0.0422**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>English-speaking girls</td>
<td>GPPT Field 2: p &gt; F = 0.0901***</td>
<td></td>
</tr>
<tr>
<td>1974-GPPT Quartiles</td>
<td>Afrikaans-speaking boys</td>
<td>GPPT Field 5: p &gt; = 0.0745***</td>
<td>Analysis of variance</td>
</tr>
<tr>
<td></td>
<td>Afrikaans-speaking girls</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td></td>
<td>English-speaking boys</td>
<td>GPPT Field 2: p &gt; F = 0.0428**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>English-speaking girls</td>
<td>GPPT Field 3: p &gt; F = 0.0657***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GPPT Field 6: p &gt; F = 0.0231**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1978-GPPT Quartiles</td>
<td>Afrikaans-speaking boys</td>
<td>ns</td>
<td>Analysis of variance</td>
</tr>
<tr>
<td></td>
<td>Afrikaans-speaking girls</td>
<td>ns</td>
<td></td>
</tr>
<tr>
<td></td>
<td>English-speaking boys</td>
<td>GPPT Field 2: p &gt; F = 0.03**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>English-speaking girls</td>
<td>GPPT Field 3: p &gt; F = 0.1165****</td>
<td></td>
</tr>
</tbody>
</table>

* p < 0.01    ** p < 0.05    *** p < 0.10    **** p < 0.12

Adolescents who never watched television, or watched for less than half an hour a day during weekdays, Monday to Thursday, showed higher anxiety-producing tension than the moderate and heavy viewers (Field 1), and also showed a greater need to seek aid. In other words the light viewers were relatively more dependent on others (Field 6). It seemed that they tended to be less mature in their projections — especially at the end of their last school year (Std. 10) in spite of the fact that they had been less dependent than the other groups in the first three years of testing (two years without television, one year into the television era). Another interesting fact that emerged is that the so-called moderate viewers (viewing more than half an hour, but less than three hours a day during weekdays, Mondays to Thursdays) had the lowest score on tension and the highest score on independence in Std. 10, compared with the light viewers and heavy viewers. One
can therefore argue that it might have been, and according to Faber, Brown and McLeod's (1979) theory, that the moderate viewers among the Afrikaans-speaking boys used certain elements in at least some of the television programmes to help them cope with stressful situations (by means of modelling or catharsis), and with certain socializing situations (the need to be independent). The same situation was found with this group of boys with their weekend viewing time and their significant results on Field 5 (affiliation and psychosexual needs). In this respect, both the heavy (more than four hours a day viewing, during weekends) and the light viewers (no television viewing, or less than half an hour a day during weekends) had a greater need for group membership and belongingness, and psychosexual contacts, than the moderate viewing group (more than half an hour, but less than four hours a day during weekends). The normal growth of the need for group belongingness (peer group relationships) as well as the need to engage in heterosexual relationships seemed therefore to be gratified in the moderate television viewing group. Moderate viewing therefore seemed to have a positive effect on the development and internalization of needs relating to interpersonal situations (Murray and Kippax, 1979).

The only statistically significant result of the profile analysis of the Afrikaans-speaking girls was found in the case of television viewing during weekdays (Monday to Thursday) and Field 6 (succorance) of the GPPT. As in the case of the Afrikaans-speaking boys, the results indicated that the light and heavy viewers obtained higher scores in 1978 than the moderate viewers, meaning that the moderate viewers also tended to be more independent and mature than the other two groups.

In the case of the English-speaking boys the statistically significant relation between Field 1 of the GPPT and total viewing time was of such a nature that it cannot be explained in terms of the needs-and-gratifications approach because of reasonably large differences between the viewing time groups, fluctuating on a nonlinear basis from year to year. Similar results were obtained for the English-speaking girls and GPPT Field 2 and total television viewing time (that is, during the week and weekends). The only interpretation of these results that could be made was that heavy viewers (21 + hours television viewing a week) tended to avoid personal responsibility.

In summarizing the results of the profile analyses, one could therefore state that the relation found between television viewing and the psychological needs as measured by the GPPT, mainly concerned the Afrikaans-speaking boys and girls, and that television seemed to play a supplementary role in the need gratifications that relate to interpersonal relationships.

3.2 The relation between certain psychological needs and television programme preferences

The interaction between programme preferences and psychological needs, as measured by the Group Personality Projection Test (GPPT) in 1978, the final year of these adolescents' school careers, was also investigated. Table 3 indicates that statistically significant relations were found between the Afrikaans-speaking boys’ preference for religious programmes and Field 1 (tension), youth programmes (high school) and Fields 2 (nurturance) and 4 (neuroticism), nature programmes and Fields 5 (affiliation and psychosexual needs) and 6 (succorance). The results show that those Afrikaans-speaking boys who indicated that they regularly watched religious programmes on television projected a low proportion of negative feelings. This points to the presence of less anxiety-producing tension that in the case of those who stated that they never, or now and then, viewed religious programmes. Concerning youth programmes (high school) the relation found both in the case of Fields 2 and 4 suggests that the regular viewers tended to have a greater need to help others, to play the father role (Field 2) and also that they were inclined to be more firm in their decisions (Field 4) than those who never viewed or only now and then viewed these programmes. The Afrikaans-speaking boys who showed a preference for nature programmes tended to have a greater need for group membership and belongingness, for psychosexual contacts, as well as being less independent and mature than the other groups. Regular viewers of documentary programmes tended to avoid personal responsibility (Field 2), were less mature sexually (Field 5) and emotionally (Field 6)
than irregular or non-viewers of these programmes.

It seems therefore that in the case of Afrikaans-speaking boys, a relation exists between a preference for television programmes depicting people and interpersonal situations (religious programmes and youth programmes, high school) and less tension, more self-confidence and the tendency to help others. On the other hand, those who preferred nature and documentary programmes (and therefore programmes that were more objective and less interpersonal) were less mature and had a greater need for group membership than those who viewed these programmes only now and then or never.

**TABLE 3**
**SUMMARY OF RESULTS: PROGRAMME PREFERENCES**

<table>
<thead>
<tr>
<th>Afrikaans-speaking boys</th>
<th>Afrikaans-speaking girls</th>
<th>English-speaking boys</th>
<th>English-speaking girls</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ANOVA</strong></td>
<td><strong>ANOVA</strong></td>
<td><strong>ANOVA</strong></td>
<td><strong>ANOVA</strong></td>
</tr>
<tr>
<td>GPPT-field</td>
<td>GPPT-field</td>
<td>GPPT-field</td>
<td>GPPT-field</td>
</tr>
<tr>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
<td>1 2 3 4 5 6</td>
</tr>
</tbody>
</table>

- Religious programmes
- Music
- News
- Toddlers' programmes (pre-school)
- Children's programmes (primary school)
- Youth programmes (high school)
- Weather forecasts
- Sports programmes
- Stories and serials
- Light entertainment programmes
- Programmes featuring contests and quizzes
- School broadcasts
- Programme announcements
- Advertisements
- Language, cookery or other lessons
- Discussion groups
- Nature programmes
- Documentary programmes
Programme preferences also related to certain needs of Afrikaans-speaking girls. The relations found, were: Field 6 (succorance) was related to toddlers' programmes (pre-school); children's programmes (primary school) stories and serials and light entertainment programmes; Field 3 (withdrawal) was related to stories and serials; and Field 4 (neuroticism) was related to youth programmes (high school) although the MANOVA did not produce a significant F value in this last case. Those Afrikaans-speaking girls who stated that they regularly viewed toddlers' programmes (pre-school) had a greater need to seek aid in general, to play an infant role, than the non-viewers or irregular viewers. The same results were obtained with regard to children's programmes (primary school) and it seems that the girls who preferred toddlers' and youth programmes were less mature emotionally. Those who preferred light entertainment programmes also tended to be more dependent and less mature. In the case of youth programmes (high school) those Afrikaans-speaking girls who stated that they viewed them now and then, were less able to make timely decisions, and had a general need to remain indecisive, in contrast to those girls who stated that they regularly, or never, viewed them.

Although the MANOVA results of the English-speaking boys yielded no statistically significant F values, one of the ANOVA analyses did produce a statistically significant F value in the case of Field 6 (succorance) and youth programmes (high school). In this case the boys who stated that they never viewed these programmes were more dependent on others and had to a greater extent a need to seek aid, than those who stated that they now and then, or regularly, viewed youth programmes.

Certain personality needs of English-speaking girls were also statistically related to programme preferences. Field 2 (nurturance) related to news programmes; Field 4 (neuroticism) related to youth programmes (high school); and Field 3 (withdrawal) related to documentary programmes. In the case of the relation between Field 1 (tension) and religious programmes, the MANOVA did not yield a statistically significant F value. English-speaking girls who indicated that they regularly viewed youth programmes (high school) tended to be more certain in their personal planning than the other groups. Those who viewed documentary programmes regularly were less sensitive in social situations than those who did not view these programmes regularly. English-speaking girls who never watched religious programmes tended to have a higher percentage of negative feelings and experienced more anxiety-producing tension than those girls who now and then, or regularly, viewed these programmes.

4. Conclusion

In response to the question on the popularity of television which was posed in the opening paragraph of this paper, the study on the responses of 1 924 adolescents in South Africa therefore indicated that:

(a) Certain relations between television viewing and the personality needs of South African adolescents do exist.

(b) These relations could be connected to the uses-and-gratifications approach described by Blumler and Katz (1974) and Dimmick, McCain and Bolton (1979), as well as to the developmental theory of Faber, Brown and McLeod (1979).

(c) Moderate television viewing in certain cases was found to be related to less tension, social sensitivity, gratification of affiliation and psychosexual needs, and to a growth towards independence.

(d) Preferences for programmes depicting interpersonal relationships, such as religious programmes, youth programmes (high school) and stories and serials, were related to positive interpersonal relationships and the needs of the adolescents, while preferences for programmes that had a more objective, less interpersonal content such as nature and documentary programmes, were related to poorer interpersonal relationships.

(e) The relations that were found concerned only the personality needs as measured by the GPPT. Other needs, especially of diversion and entertainment, as mentioned by Murray and Kippax (1979) and Tannenbaum (1980), were not investigated, and could very well have given some answers to the relatively small variance indicated by the data.

The South African adolescents' use of television programmes as models in the develop-
mental process of learning and social practices and techniques has therefore been established. This opens some very exciting research possibilities of a more experimental nature: to determine the exact nature of these learning processes. Modern systems like the Programme Evaluation Analysis Computer (Nikerson, 1981), could perhaps be used to supplement these findings.

One should always keep in mind, however, that other socialising agents, such as parents, the school and peers, are present and are used by the adolescent. These agents also interact with each other and the adolescent. "All social influence, whether emanating from a television programme, a parental proscription, or a teacher's lesson, is mediated by conditions and contingencies that derive from other sources of influence." (Comstock et al., 1978: 286).

The television producer, the teacher and the parent therefore form a co-operative team in the socialization and education of the adolescent.

![Figure 1: Profile of Afrikaans-speaking boys according to television viewing times during week-days: Field 1 of the GPPT (Tension)](image1)

![Figure 2: Profile of Afrikaans-speaking boys according to television viewing times during week-days: Field 6 of the GPPT (Succorance)](image2)

![Figure 3: Profile of Afrikaans-speaking girls according to television viewing times during week-days: Field 6 of the GPPT (Succorance)](image3)
FIGURE 4
PROFILE OF AFRIKAANS-SPEAKING
BOYS ACCORDING TO TELEVISION
VIEWING TIMES DURING WEEK­
ENDS: FIELD 5 OF THE GPPT (AFFI-
LIATION AND PSYCHOSEXUAL
NEEDS)

FIGURE 5
PROFILE OF ENGLISH-SPEAKING
BOYS ACCORDING TO TOTAL
TELEVISION VIEWING TIMES DURING
WEEKDAYS: FIELD 1 OF THE GPPT
(TENSION)

FIGURE 6
PROFILE OF ENGLISH-SPEAKING
GIRLS ACCORDING TO TOTAL
TELEVISION VIEWING TIMES PER
WEEK: FIELD 2 OF THE GPPT
(NURTURANCE)

References

avery, b.k., september/october 1979: 53-70. Adolescents' use of the mass media. American Behavioral Scientist. 23(1).


dimmick, j.w., mccain, t.a., bolton, w.t., september/october 1979. Media use and the life span. American Behavioral Scientist 23(1).
DU PREEZ, P.H., 1980. 'n Onderzoek na die televisiekykpatrone en programvoorkeure van 'n groep standerd agt-leerlinge en die invloed wat televisie op hul studiegewoon-tes en -houdings mag hê. (An investigation into the television viewing patterns and programme preferences of a group of Standard eight pupils and the influence television might have on their study habits and attitudes.) HSRC, Pretoria.


