The study examined the extent to which family membership disability affects the magnitude of internal family interaction. Metropolitan (M), and nonmetropolitan (NM), and family structural type were controlled. Data were obtained from black families living in a Southeast Texas county (M), the county seat, and two small open-country villages in an East Texas county (NM). Interviews were conducted during the summers of 1970 (NM) and 1971 (M). The respondents were female homemakers not over 65 years of age and not under 18 (unless the mother of a household child) with children under 18 in the household. An overriding study limitation was the small number of disabled families in the two study units, thus making the findings on degrees of disability vs. degrees of interaction rather tentative. Major conclusions were: (1) disabled families generally experience lower levels of internal family interaction; (2) no universal relationships exist between the degree of family membership disability and the degree of internal family interaction; (3) neither community nor family type significantly influence the impact of the incidence of family membership disability on the magnitude of internal family interaction; and (4) certain community and family types influence relationship between the degree of family membership disability and the degree of internal family interaction which are not universally observable. (NQ)
RELATIONSHIPS BETWEEN FAMILY DISABILITY AND INTERNAL FAMILY INTERACTION:  
THE CASE OF SOUTHERN METROPOLITAN AND NONMETROPOLITAN BLACKS*

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This paper presents data reported a year ago on the same subject (Taft and Jackson, 1973). After last year's proceedings were in print an error in programming was found which nullified the findings reported therein. The error has been corrected and the data reanalyzed. The corrected findings are reported here.

The underlying concern of sociological inquiry is the social organization of human behavior (Bates, 1967:6); its task is to investigate the laws of "action and reaction" in the different parts of the social system (Comte, 1855:442). Human social behavior is seen as occurring in a social system, generally following its established patterns. However, not all persons behave accordingly.

Since a social system's functioning is assumed largely dependent upon the actors' adherence to prescribed behavior patterns, the system's functioning itself may be affected by behavioral variations caused by differentials in actors' biological and personality systems. Therefore, the problem of interest is to determine the extent of influence an actor's psychological and physical makeup has upon the social system's functioning, through social behavior not conforming to accepted patterns.

Since disability is social behavior not conforming to accepted social patterns because of biological and/or personality system malfunctions (Taft and Jackson,

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1973), this under-researched area was selected in which to examine the basic problem. This was done by exploring the impact of disability upon social system functioning.

As the most basic and universal social sub-system, family is the most crucial one in which to examine this problem (Spencer, 1910:437). With the family's functions—personal needs, maintenance, reproduction, and socialization (Zanden, 1970)—so important to family and society's continued existence, relatively high degrees of interpersonal interaction among family members is necessary for effective family functioning. Therefore, the major research question considered was: "To what extent does family membership disability affect the magnitude of internal family interaction?"

THEORETICAL FRAMEWORK

The basic assumption which was partially tested in this study is that system levels of action interpenetrate one another. More specifically, the primary thrust was to examine the penetration of biological and personality systems into the social system (Figure 1).

Roles link an individual, as a composite of personality and biological systems, to a social system. If there were no roles, by definition, an actor would not be behaviorally accountable to the system, since rules define the rights and obligations of positional incumbents in relation to the system's other actors. These rights and obligations are defined in terms of expected behavior—what an incumbent should do—and expected attributes—what an incumbent should be (Cross, Mason, and McEachern, 1966:67). On the other hand, role behavior is an incumbent's actual performance, and a role attribute is one of his actual qualities (p. 64). The complement of role relationships, a role-set, relates a position to the remaining positions in a social system or sub-system (Merton, 1968:423).

Figure 1 presents the particular orienting framework used in this study; it was adapted from social system (primarily Parsons, 1951) and role theorists. Conceptually, it shows how a distinct individual is linked to the social system by his roles, thereby becoming an actor in that system. Although important, the major problem in this work was not the impact of biological and personality systems on a person's behavior in the social system. It was the influence of an actor's role behavior, dependent to some extent on his own psychological and physical makeup, on the social system's functioning.

Family disability is conceptualized as a composite of the disabilities of the individual family members. Individual member disability is defined as the inadequacy of an individual to perform a role generally expected of his age peers, because of a psychological or physical malfunction (see Taft, 1973b:31-34, for a more complete examination of this concept; see Kuvlesky, Byrd, and Taft, 1973,
Figure 1. Specification of the Orienting Framework in Relation to the General Problem Considered Herein.
for a discussion of this and related concepts.

Internal family interaction is conceptualized as the gross social interaction taking place among the various family members. Social interaction is an encounter between two or more people (Hodges, 1971:12) in which each person acts and reacts to the behavior of the others, generally according to accepted roles (Johnson, 1960; Zanden, 1970).

This framework suggests two possible control variables: community and family type. The two communities, indicated in the framework, contain families in a geographic area having "a substantial degree of integrated social interaction" and a sense of common membership not based on consanguinity (Inkeles, 1964:68).

In studying family interaction, family type or structure is a logical control because of the different positions possible in different family structures and their probable effect upon internal family interaction.

In terms of the above orienting framework, the general question of concern in this paper is "what is the impact of an individual's role behavior on the operation of a social sub-system?" The general research objective for examining this problem is "what is the impact of membership disability on the magnitude of internal family interaction?"

REVIEW OF LITERATURE

A review of relevant literature suggests that membership disability affects internal structure and interaction but is vague as to its actual effects. Among 2370 families in a Pittsburg health district (Hrubec, 1959), the disabled and their families had more social problems than the non-disabled and their families; among these problems were problematic intra-family relationships. Disabled husbands in central Ohio, dependent upon their wives, N=79, were not as involved in the family decision-making process as disabled husbands not dependent upon their wives, N=86 (Ludwig and Collette, 1969). Families of disabled mothers were less likely to eat their meals together than those of non-disabled mothers, in a study of 402 low-income Appalachian families (Deacon, Maloch, and Bardwell, 1967).

The intimate face-to-face relations existing among family members (Krech, Crutchfield, and Ballachey, 1962:214) suggest that any role behavior not meeting expectations should affect internal family interaction patterns. The research cited above indicates that disability tends to stifle internal family interaction. But all of these studies examined were predominately White populations in the North-Central region of the United States; what about southern Blacks? Do more-disabled southern Black families experience higher degrees of internal family interaction than less-disabled or non-
disabled southern Black families?

The degree of internal family interaction is affected by metropolitan (M)-nonmetropolitan (NM) community type (Taft, 1973a:17-18, 74), as is the incidence of family membership disability (p. 76). On the other hand, the incidence of family membership disability is affected by family structural type (pp. 76-77); the degree of internal family interaction is not affected in a consistent manner (pp. 18-19, 75). In view of this information the decision was made to control both M-NM community and family structural type in the analysis which follows. The use of these controls suggest an additional question for analysis, "Are there any M-NM community or family structural type differentials in the impact of family membership disability on the degree of internal family interaction?"

SOURCE AND COLLECTION OF DATA

The data were obtained during the Summers of 1970 (NM) and 1971 (M) from interviews with Black female homemakers, not over 65, and not under 18 (unless the mother of a household child), with children under 18 in their households (Table 1).

Table 1. Disposition of Families Screened in the NM and M Counties.

<table>
<thead>
<tr>
<th>Action</th>
<th>NM</th>
<th>M</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households Screened</td>
<td>556</td>
<td>802</td>
<td>1358</td>
</tr>
<tr>
<td>Households Eligible</td>
<td>264</td>
<td>302</td>
<td>566</td>
</tr>
<tr>
<td>Homemakers Interviewed</td>
<td>259</td>
<td>294</td>
<td>553</td>
</tr>
<tr>
<td>Families Analyzed</td>
<td>259</td>
<td>294</td>
<td>553</td>
</tr>
<tr>
<td>Individual Family Members</td>
<td>1393</td>
<td>1372</td>
<td>2765</td>
</tr>
</tbody>
</table>

The NM respondents were 98% of the eligible Black homemakers living in the county seat and two small open-country villages in an East Texas county. The county was largely agricultural and seventy-five percent rural. It had a high rate of low-income families, compared to the state. About 25% of its 20,000 population was Black. The county was adjudged relatively representative of traditional southern culture (Kuvlesky and Cannon, 1971). The county seat had a population of 5,000, with the same proportion of Blacks as the county. The two open-country villages were predominately Black and physically isolated.
The M respondents were 97% of the eligible Black homemakers in a 50% sample of households located in an urban ghetto in a Southeast Texas county. The county, Harris, has the South's largest and the nation's seventh largest population, 1,832,000. It has one of the smallest percentages of low-income families in the state. Its population is 21% Black. The county was adjudged part of a larger cultural configuration characteristic of the traditional South (Kuvlesky, Warren, and Ragland, 1972). Houston, the county seat, is the sixth largest city in the nation with over 1.2 million people, 27% of whom are Black (Reader's Digest Association, 1971). The urban ghetto was a set of contiguous neighborhoods adjacent to the central business district of Houston. It was predominately Black and largely low-income; therefore, it was not representative of the total Black M population.

The respondents' mean age was thirty-seven. About one-third fell into each of the following three educational categories: eight grades or less, 9-11 grades, and 12 grades of formal education. M families (4.67 mean size) were slightly smaller than NM families (5.38 mean size). Family income was about $500 more for NM families (similar on per capita income: about $1000) with $4955 per year overall mean family income. The M breadwinners had lower occupational prestige than the NM ones. On the other hand, M families had better physical facilities (see Taft and Byrd, 1972, for a more complete description).

INDICATORS AND MEASURES

The indicators for the variables used here were scattered throughout the NC-90 regional questionnaire.¹ A brief description of each follows with statements regarding the measures utilized.

Family Disability

The question designed to reveal disability was, "Is anyone in this family sick all the time or disabled in any way?" If a respondent answered "yes," she was asked to describe the seriousness of the disability by selecting the appropriate degree from the following alternatives:

1. Not able to work, keep house, go to school, or play at all (choice depended on the person's age)--code 4.

¹The NC-90 Technical Committee developed the questionnaire used in all 13 participating states.
Able to work, etc., but limited in kind or amount of work, etc.--code 3.

(3) Able to work, etc., but limited in other activities (not applicable to preschoolers)--code 2.

(4) Not limited in any of the above ways--code 1.

(5) Not disabled--code 0.

Family disability was indicated by a family disability index computed in the following manner. The coded degrees of disability (0-4) for family members were summed and divided by the number of family members with responses coded. This figure was then multiplied by twenty-five, placing the score between zero and one hundred to simplify interpretation (see Taft and Byrd, 1972, for a discussion of strengths and weaknesses of the index).

Since disability degrees were needed, it was decided to use only three (low, medium, and high degrees): the number of disabled families being extremely small (NM = 75 and M = 68). In order to divide these distributions relatively equally, the three-category breakdown with the most consistent intervals able to do this was selected for the measures of the degrees of family membership disability. The three categories are 1-10 (low), 11-20 (medium), and 21 and over (high). The qualitative difference between a family with no disability and one with a "1" degree of disability prohibited the inclusion of non-disabled families in the "low" category; therefore, additional analysis uses a nominal measure of family disability, comparing non-disabled families with disabled families.

**Internal Family Interaction**

Two questions of a four-question scale were used to indicate internal family interaction:

1. How often do you go places together as a family?

2. How often do family members work around the home together?

The two questions not used were dropped because they did not discriminate among the families. Over 75% of the families ate at least one meal a day together and relaxed around the home together relatively often.

The response categories available in the questionnaire were never, seldom, sometimes, and often. These were combined into "low" (never and seldom), "medium" (sometimes), and "high" (often) degrees of internal family interaction.
In addition to the two questions a composite internal family interaction score was used. It was calculated by summing the degrees of interaction (1-low, 2-medium, and 3-high) on the two questions for each family, and dividing these sums by two. This procedure yielded five possible composite interaction scores: 1, 1.5, 2, 2.5, and 3. These were combined into the degrees of composite internal family interaction used herein: low (1 and 1.5), medium (2 and 2.5), and high (3).

Magnitude of internal family interaction, used in the analysis of the impact of the incidence of family membership disability on the magnitude of internal family interaction, was measured by mean rank interaction scores. Mean rank interaction was calculated by multiplying "low" interaction frequencies by one, "medium" interaction frequencies by two, and "high" interaction frequencies by three, summing the products, and dividing by the total frequency in each of the three categories.

Community Type

A description of the communities has already been presented. The small town and two villages are considered NM communities. The set of contiguous M neighborhoods are considered a large M community. The NM and M data were never physically combined in this analysis.

Family Type

Eighteen possible relationships to the female respondents were used to determine what kinship positions were occupied in each family. These kinship positions were used in determining family structural type. Each family was identified as one of four structural types: complete nuclear, incomplete nuclear, complete extended, or incomplete extended. A complete nuclear family had a respondent, spouse or male companion—a male companion is viewed as essentially the same relationship as a spouse—and sons and/or daughters and/or step children. An incomplete nuclear family had a respondent, and a son and/or daughter and/or step child, but did not have a spouse or male companion. A complete extended family had a respondent, a spouse or male companion, and at least one of the following: grandchild, parent, parent-in-law, brother, sister, brother-or sister-in-law, son-or daughter-in-law, grandparents, great aunt or uncle, aunt, uncle, nephew, niece, cousin, or other relatives. An incomplete extended family had the same relationships as a complete extended family excepting a spouse or male companion.

Table 2 gives the distribution of families with disability and interaction information coded by community and family type.
Table 2. Families with Disability and Interaction Information Coded, Categorized by Community and Family Type.

<table>
<thead>
<tr>
<th>Family Type</th>
<th>NM</th>
<th>M</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Complete Nuclear</td>
<td>133</td>
<td>106</td>
<td>239</td>
</tr>
<tr>
<td>II. Incomplete Nuclear</td>
<td>38</td>
<td>107</td>
<td>145</td>
</tr>
<tr>
<td>III. Complete Extended</td>
<td>47</td>
<td>25</td>
<td>72</td>
</tr>
<tr>
<td>IV. Incomplete Extended</td>
<td>41</td>
<td>50</td>
<td>91</td>
</tr>
<tr>
<td>Total</td>
<td>259</td>
<td>288</td>
<td>547</td>
</tr>
</tbody>
</table>

RESULTS

Degree of Disability Versus Degree of Interaction

No universal relationships were observed between disability and interaction degrees as indicated by the signs and magnitudes of the gammas (Table 3). It is concluded that there is no universal relationship between degrees of family membership disability and degrees of internal family interaction.

M gammas were more frequently negative and significant than NM gammas. For family types with M-NM differences between gammas (Table 3), whether consistent across both or only one interaction type and COMPOSITE interaction, the same pattern was observed. It is concluded that community type influences the relationship between degrees of family membership disability and degrees of internal family interaction; M relationships are more frequently negative than NM relationships.

Gammas of complete nuclear families were consistently negative; whereas, gammas of other family types were inconsistent in sign, varying by community and interaction type (Table 3). It is concluded that family type influences the relationship between degrees of family membership disability and degrees

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2The gamma statistic (Mueller, Schuessler, and Costner, 1970:279-294) indicates direction and degree of association. Gammas greater than |.50| are considered significant, indicating over 50% degree of association between two variables.
Table 3. Summary Table of Gammas Indicating the Degree of Positive or Negative Relationship Between the Three Degrees of Disability and the Three Degrees of Interaction for Disabled Families.

<table>
<thead>
<tr>
<th>Community Type</th>
<th>Nonmetropolitan (N=75)</th>
<th>Metropolitan (N=68)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Going Places Together</td>
<td>Working Together</td>
</tr>
<tr>
<td>Interaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Type</td>
<td>------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>I. Complete Nuclear</td>
<td>-.43</td>
<td>-.50</td>
</tr>
<tr>
<td>II. Incomplete Nuclear</td>
<td>+.09</td>
<td>+.29</td>
</tr>
<tr>
<td>III. Complete Extended</td>
<td>+.22</td>
<td>+.23</td>
</tr>
<tr>
<td>IV. Incomplete Extended</td>
<td>+.16</td>
<td>-.57(^2)</td>
</tr>
<tr>
<td>I. Complete Nuclear</td>
<td>-.17</td>
<td>-.81(^2)</td>
</tr>
<tr>
<td>II. Incomplete Nuclear</td>
<td>-.68(^2)</td>
<td>-.19</td>
</tr>
<tr>
<td>III. Complete Extended</td>
<td>+.31</td>
<td>-.33</td>
</tr>
<tr>
<td>IV. Incomplete Extended</td>
<td>+.08</td>
<td>+.56(^1,2)</td>
</tr>
</tbody>
</table>

\(^1\)One metropolitan disabled family had no response on WORKING TOGETHER interaction.

\(^2\)Adjudged statistically significant in magnitude.
of internal family interaction; relationships of complete nuclear families are negative while others vary by community and interaction type.

Incidence of Disability Versus Magnitude of Interaction

A general pattern of impact was noted between the incidence of disability and the magnitude of internal family interaction (Figures 2, 3, and 4). Non-disabled families interacted internally more often than disabled families. The significance of this pattern varied by interaction type; the impact of disability was highly significant on internal family interaction away from home but not on internal family interaction at home. It is concluded that the incidence of family membership disability influences the magnitude of internal family interaction; non-disabled families interact internally more often than disabled families. The significance of this patterned influence is greater for away from home interaction than at home interaction.

On the whole, NM-M community type did not differentiate on the influence of the incidence of disability on the magnitude of interaction (Tables 4, 5, and 6). There was some NM-M differentiation by family and interaction type, complete nuclear families on WORKING TOGETHER interaction and incomplete extended families on COMPOSITE interaction, but these were only two inconsistent cases of the twelve possible. It is concluded that community type does not consistently influence the relationship between the incidence of family membership disability and the magnitude of internal family interaction.

No general impact of family type was noted on the influence of the incidence of disability on the magnitude of internal interaction (Tables 4, 5, and 6). Only one consistent impact was noted; incomplete extended families had positive relationships on WORKING TOGETHER interaction. This impact did not show up in GOING PLACES TOGETHER interaction. It is concluded

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The significance of the consistency with which the mean rank interaction scores of disabled families are lower than those of non-disabled families is determined by the probability of the random occurrence of that consistency. The probability is derived from "The Sign Test" (Siegel, 1956:68-75).

The differences in direction of impact of the incidence of disability on the magnitude of internal family interaction are presented in Tables 4, 5, and 6. A positive (+) impact indicates higher mean rank interaction scores for disabled than non-disabled families. On the other hand, negative (-) impact indicates higher mean rank interaction scores for non-disabled than disabled families.
Figure 2. Mean Rank Composite Interaction Controlled for Community and Family Type.
Figure 3. Mean Rank Going Interaction Controlled for Community and Family Type.
Figure 4. Mean Rank Working Interaction Controlled for Community and Family Type.

Non-Dis.

Disabled

P = .363
Table 4. Direction of Impact of the Incidence of Disability upon the Magnitude of Composite Interaction by Community and Family Type.

<table>
<thead>
<tr>
<th>Family Type</th>
<th>NM</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Complete Nuclear</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>II. Incomplete Nuclear</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>III. Complete Extended</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IV. Incomplete Extended</td>
<td>+</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 5. Direction of Impact Between the Incidence of Disability and the Magnitude of Going Places Together Interaction by Community and Family Types.

<table>
<thead>
<tr>
<th>Family Type</th>
<th>NM</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Complete Nuclear</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>II. Incomplete Nuclear</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>III. Complete Extended</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IV. Incomplete Extended</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 6. Direction of Impact Between the Incidence of Disability and the Magnitude of Working Together Interaction by Community and Family Types.

<table>
<thead>
<tr>
<th>Family Type</th>
<th>NM</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Complete Nuclear</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>II. Incomplete Nuclear</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>III. Complete Extended</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IV. Incomplete Extended</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>
that family type does not consistently influence the impact of the incidence of family membership disability on the magnitude of internal family interaction.

Summary of Major Conclusions

From the above analysis four major abstract conclusions can be drawn:

(1) Disabled families generally experience lower levels of internal family interaction than non-disabled families.

(2) There are no universal relationships between the degree of family membership disability and the degree of internal family interaction.

(3) Neither community nor family type significantly influence the impact of the incidence of family membership disability on the magnitude of internal family interaction.

(4) Certain community and family types influence relationships between the degree of family membership disability and the degree of internal family interaction which are not universally observable.

Limitations of the Study

Several factors limited this study. First, the rural study units included three populations, and the urban study unit included a sample of a rather restricted population sector. Both study units were selected on the basis of qualitative criteria, not a randomized design. However, it is felt that one could easily find similar Black populations in the rural South and in southern urban ghettos with which to compare those examined here. This problem does limit generalizations from the findings to similar populations in a rather restricted sense. However, findings of NM-M differentials should be highly general because of the polar-opposite nature of the two community types (Taft, 1973a:26).

The indicators and measures of the variables present a further study limitation. Statistical alternatives are severely limited because the measures used were, at best, ordinal, but generally nominal. Regarding internal family interaction, the indicators and response categories allowed no other alternatives than nominal and ordinal measures. Regarding family disability, the small number of disabled families prevented the utilization of interval measures in this work.
Additionally, the internal family interaction indicators limited the coverage of interaction modes within the two interaction types. There was only one interaction mode in each interaction type. This restricts the total picture of internal family interaction.

The disability indicator prohibits the determination of the effects of actors' psychological and physical states upon the functioning of the family sub-system. The indicator simply provides no means for determining the actors' psychological and physical states.

An over-riding study limitation is the small number of disabled families in the two study units. This restriction makes the findings on degrees of disability versus degrees of interaction rather tentative. This limitation was somewhat overcome by measuring disability nominally, disabled and non-disabled incidence of disability.

DISCUSSION

Empirical Implications

Past research suggested that disabled families have more interaction problems than other families. This study concluded that non-disabled families interact internally more often than disabled families. This supports past research findings. It was additionally discovered that this pattern is more pronounced for away from home interaction than at home interaction. The reason appears obvious; the mobility of a disabled family is restricted.

Neither community nor family type impacted consistently upon the influence of the incidence of disability on the magnitude of internal family interaction. Magnitudes of interaction of disabled families were consistently lower than those of non-disabled families, this explains the lack of community and family type impact.

Past research suggested that more severe degrees of disability tend to lessen interaction with friends and relatives. This study concluded that there was no universal relationship between degrees of family membership disability and degrees of internal family interaction. This does not support the sparse findings from past research. However, it must be again pointed out that this conclusion was based on a very small number of disabled families.

Both community and family type controls pointed to some relationships between degrees of disability and degrees of interaction. M community type relationships were more frequently negative than NM relationships. Complete nuclear families had negative relationships while the relationships of other family types varied by community and interaction type. These findings extend existing knowledge.
Suggestions for Future Empirical Research

This study suggests several needs for future empirical research. The distribution of family disability among the different sectors of the populations needs to be established. For example, do southern Black populations have similar rates of disability, and how do they compare with southern non-Black populations?

Concentration on the distribution and correlates of the incidence of disability (disabled as opposed to non-disabled) should yield much-needed empirical insights not available through the examination of degrees of disability alone. Nonetheless, the examination of the distribution and correlates of degrees of disability remains high on the list of future research needs.

Additionally, research on the relationship between degrees of disability and degrees of internal family interaction needs to concentrate on other population sectors. Are the relationships demonstrated herein indicative of those that might be demonstrated in other population sectors? This same focus is needed in examining the influence of the incidence of disability upon the magnitude of internal family interaction.

Numerous correlates of the incidence and degree of disability need to be examined. Of course, there is a great need for determining what factors cause family disability, as well as its effects.

Methodological Implications

This author's conceptualization of family disability presents a means for deriving more precise family disability indicators not developed before. Although the particular disability indicator and response categories used in this study need revision in order to measure these conceptual distinctions, the family disability index is apparently the first of its kind and a methodological contribution in its own right. It measures the magnitude of family membership disability. The index controls both family size and the degrees of disability of family members.

The interaction scale needs expansion. Indicators of different aspects of the two kinds of internal family interaction need to be more completely covered in the scale. Since little research has keyed on internal family interaction, the attempt at measuring gross internal family interaction in this work is significant. In addition, the interaction response categories used here are more feasible than those suggested by the NC-90 instrument which did not supply the full range of alternatives; "always" was left out.

Community and family type are needed controls in studies of the relationship between degrees of disability and degrees of internal family interaction.
On the other hand, in studies of the influence of the incidence of family disability upon the magnitude of internal family interaction, neither community nor family type seem to be useful controls.

Going back to the study design and its inherent limitations, some practical implications are suggested. This study was limited in generalizing beyond the particular study groups because one was a population and the other was a sample of a specific population segment. From the outset it was determined to study southern Blacks in a rural setting and in an urban ghetto; so for these purposes it was useful, but it does limit the researcher's ability to generalize.

One additional practical consideration is that one should have a sufficiently large "N" for meaningful statistical analyses. For southern Blacks the "N" should be twice the "N" used in this study to examine the influence of the incidence of disability upon the magnitude of internal family interaction, across the control variables. For examining degrees of disability and degrees of internal family interaction, an "N" of six to ten times the 143 used here is suggested.

Suggestions for Future Methodological Research

Methodologists need to revise the indicator and response categories of disability. The indicator should elicit both psychological and physical functioning so that each could be examined separately. Additionally, it should indicate if an individual's role behavior and/or attributes are affected by psychological and/or physical malfunctions. Finally, the particular types of role behavior and attributes affected need to be distinguishable. The response categories should elicit the magnitude of psychological and physical malfunction, of role behavior and attribute inadequacy, and of the impact of psychological and physical malfunctions on role behavior and attribute inadequacy.

Methodologists should consider possible weights for the disability index—positional location of disabled family members, age, sex, etc.—in addition to the present weights of family size and disability degree. The data in this study are too incomplete for such an undertaking; therefore, continuing research is needed.

Gross internal family interaction could be more completely covered by a larger cluster of family activities. But, are the two interaction types suggested here the only two around which internal family interaction activities cluster? Special attention, then, needs to be given to developing an adequate gross internal family interaction indicator. Also, the response categories should more thoroughly represent the full range of alternatives; those used here are limited. Future research might find that different interaction types behave differently to the influence of disability.
Theoretical Implications

The conceptualization of family membership disability and its accompanying typology of psychological and physical states adds new dimensions to previous disability definitions. In addition, the conceptualization of internal family interaction defines it in a grosser sense than normal.

System level interpenetration was the main thrust of the general sociological problem in this study. In this connection, implications regarding several different aspects of systemic interpenetration flow from the conclusions.

Malfunctions of personality and biological systems cause less efficient family sub-system functioning, through the incidence of inadequate role behavior. Disabled families had consistently lower internal family interaction rates than non-disabled families.

In general, personality and biological systems do not penetrate into the functioning of family sub-systems through the degree of inadequacy of role behavior. The relationships between disability and interaction degrees were inconsistent and inconclusive for the specific population segments examined. Both community and family structure impacts upon personality and biological system penetration into the functioning of family sub-systems. This impact is weak; M community and complete nuclear family structures had more negative relationships between degrees of disability and interaction than NM community and other family structures.

Suggestions for Future Theoretical Research

The theoretical area on which future research efforts should concentrate, in this author's opinion, is system level interpenetration. The particular interpenetration aspects dealt with in this study should be more thoroughly examined (see Taft, 1973a:105). Additionally, aspects of interpenetration suggested by the author's general orienting framework (see Taft, 1973a:6) need to be examined.

For example, how do class, racial, regional, or community sub-cultural variations in health care, dietary, sanitation norms influence the effectiveness of government funded health agencies in reducing family disability among the different population segments with whom they deal? This problem deals with sub-cultural variations in the effectiveness of the penetration of government agencies into family sub-systems, through the role behavior of family members. Slightly changing the focus in order to become more specific, one might examine the impact of the operation of free community clinics, manned by paramedics, on a community's
rate of family disability among various sub-cultural groupings (Whites, Blacks, Protestants, Catholics, etc.).

Working from the bottom end of the framework, a question was suggested by the conception of disability but was not explored in this study because of an inadequate indicator. What influence do psychological and physical states of disabled family members have upon the impact of member disability on family functioning? This question keys on the penetration of the functioning of biological and personality systems of family members into family functioning. Again becoming more specific, do member disabilities caused by psychological malfunctions impact more severely on family functioning than those caused by physical malfunctions? Further, do member disabilities caused by physical deformities, such as lost limbs, blindness, or burns, impact more severely on family functioning than those caused by physical illnesses, such as diabetes, tuberculosis, or cancer?
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