Social Ecology of Supervised Communal Facilities for Mentally Disabled Adults: II. Predictors of Affiliation

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At the time of publication, author Daniel Romer was affiliated with the University of Illinois-Chicago Circle. Currently, he is the Research Director at the Institute for Adolescent Risk Communication at the Annenberg Public Policy Center, University of Pennsylvania.

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Social Ecology of Supervised Communal Facilities for Mentally Disabled Adults: II. Predictors of Affiliation

Abstract
The behavior of 304 mentally disabled adults was observed in five settings (one residence, four sheltered workshops) during periods when they were free to affiliate with peers. Regression analyses using settings, personal traits (age, sex, IQ, and diagnosis), and mediating variables (e.g., physical attractiveness, desire for affiliation, and length of institutionalization) were conducted to predict various aspects of affiliative behavior. Settings accounted 16 to 63 percent of the predictable variation independent of personal and mediating variables. Although older and mentally ill clients affiliated less extensively, neither degree of retardation, length of previous institutionalization, use of medication, or other physical disabilities appeared to affect affiliation independent of other variables. In general, clients who were physically attractive desired affiliation, and had intelligent peers in their programs affiliated more extensively and intensively with peers. In total, the findings indicate that the variables most predictive of affiliation in the present community settings were also the ones most amenable to personal or environmental change.

Disciplines
Communication | Social and Behavioral Sciences

Comments
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Social Ecology of Supervised Communal Facilities for Mentally Disabled Adults: II. Predictors of Affiliation

Daniel Romer and Gershon Berkson
University of Illinois-Chicago Circle

The behavior of 304 mentally disabled adults was observed in five settings (one residence, four sheltered workshops) during periods when they were free to affiliate with peers. Regression analyses using settings, personal traits (age, sex, IQ, and diagnosis), and mediating variables (e.g., physical attractiveness, desire for affiliation, and length of institutionalization) were conducted to predict various aspects of affiliative behavior. Settings accounted for 16 to 63 percent of the predictable variation independent of personal and mediating variables. Although older and mentally ill clients affiliated less extensively, neither degree of retardation, length of previous institutionalization, use of medication, or other physical disabilities appeared to affect affiliation independent of other variables. In general, clients who were physically attractive, desired affiliation, and had intelligent peers in their programs affiliated more extensively and intensively with peers. In total, the findings indicate that the variables most predictive of affiliation in the present community settings were also the ones most amenable to personal or environmental change.

This paper is the second in a series concerned with the affiliative behavior of mentally disabled adults in community-based sheltered-care settings. Although life in the larger community implies greater independence and self-sufficiency, friendship and affiliation between handicapped people probably continues as an important aspect in their lives (Berkson & Romer, 1980). In a previous paper, we described the methods and preliminary findings in our study of naturally occurring affiliation among mentally disabled adults. In the present paper our purpose is to report in more depth the characteristics and predictors of the social affiliation that we observed.

Research on the determinants of human sociability and affiliation has typically been focused on personal traits such as sex (cf. Maccoby & Jacklin, 1974), age (Ekerdt, Rose, Bossé, & Costa, 1976), and level of retardation (Landesman-Dwyer, Berkson, & Romer, 1979). With the exception of Landesman-Dwyer et al., these researchers have viewed affiliative behavior as a trait (e.g., sociability) that is invariant across social contexts. The ecological approach to social behavior (e.g., Barker & Gump, 1964) suggests an additional assumption, that affiliation is also dependent upon the social environment in which individuals are located. Landesman-Dwyer et al. found support for this assumption when they observed that affiliation is more strongly predicted by the size of an individual's group home and other characteristics of the residents in the home than by personal traits (sex, age, and intelligence). One purpose of the present research, therefore, was to extend the investigation of personal traits for predicting affiliation and to determine the relative importance of these traits in relation to the social context. This was done by observing individuals in one of five settings (four workshops and one residence) with some persons observed in both their workshop and residence.

Trait Predictors of Sociability

In a field where stereotypes abound, there is perhaps none stronger than the one...
that women are more sociable and have a higher need for affiliation than do men (Maccoby & Jacklin, 1974). Although some research with nondisabled adults supports the stereotype (Latané & Bidwell, 1977), Maccoby and Jacklin, in their review of research with nondisabled children, noted that considerable evidence contradicts the hypothesis. A second stereotype, that older adults are less sociable than are younger ones, has been less heavily researched. Nevertheless, consistent with Newgarten's (1977) disengagement hypothesis, Ekerdt et al. (1976) found that nondisabled adults saw themselves as less likely to socialize the older they were. In testing these stereotypes, no systematic observations of either nondisabled or mentally retarded adults have been performed. We were interested, therefore, in determining the validity of these stereotypes with our present sample and methods.

What little evidence we have on the relation between level of retardation and affiliation suggests that intelligence is only weakly related to sociability (Landesman-Dwyer et al., 1979; Romer & Berkson, 1979). With the exception of profoundly retarded people, nearly equal sociability has been observed. In community settings for handicapped individuals, there are many clients of both average and below average intelligence who are diagnosed as mentally ill. Since this type of handicap might be associated with lowered sociability, the relation between intelligence and sociability might be reduced. It was important, therefore, to control for this variable in testing for the social correlates of intelligence.

Mediators of Sociability

In addition to the previously discussed personal traits, we also studied variables that might mediate relations between these traits and sociability. In particular, research with normal adults suggests that individuals differ in desire for affiliation (Edwards, 1954; Mehrabian & Ksionzky, 1974; Murray, 1938). To measure this desire, we administered a nonverbal preference inventory for social activity. Another variable considered to be important in social behavior is physical attractiveness. Research with normal children and adults indicates that attractiveness is a source of social status (cf. Berscheid & Walster, 1974) that by implication should be associated with greater affiliation. We measured attractiveness by asking staff members to rate clients along this dimension; although staff judgments may not coincide with client perceptions, they do provide information about culturally defined attractiveness.

In handicapped populations, older clients are likely to have been institutionalized prior to community placement. Although institutionalization effects are varied (Zigler & Balla, 1977), this earlier experience might continue to affect affiliation in the community. Any relations between personal traits and sociability might also be mediated by other disabilities (e.g., communication handicaps) or by medications that clients frequently receive. Finally, length of attendance or residence in a setting should mediate affiliation. Exposure to others is an important source of attraction that could be sufficient in and of itself to produce affiliation (Harrison, 1977; Zajonc, 1971).

Dimensions of Affiliation

Previous research with mentally retarded adults (Landesman-Dwyer et al., 1979; Romer & Berkson, 1979) has revealed two independent dimensions of affiliation: the first, called extensity, refers to the number of different groups a person affiliates with, and the second, called intensity, refers to the amount of time (or proportion of observations) a person spends in any particular group. Extensity corresponds to the tendency to spend time with many different people, the characteristic most often associated with sociability. Intensity, however, corresponds to the tendency to form more intimate and close relationships with particular people, the characteristic most often associated with intimacy. We anticipated that the same factors would appear in the present studies and that predictors of affiliation might differ depending upon the dimension studied. In addition and intensity, we analyzed be seen in aggregate with engaged in the same behavior in communication with the that this characteristic (could be an additional type behavior with its own correlation.

Finally, we interviewed as possible concerning their choices and asked staff members about friendships that they were more traditional sociometrically observed as additional indices and affiliation.

Method

Subjects and Settings

The present analyses are based on the same sample of 315 clients. Berkson and Romer (1981) were set-up an agency that provided sheltered workshops, training and programs at facilities. A large number of clients (81) also resided in a single care living facility that was part of the transportation or commuting distance of the workshops. Observations were performed in four workshops and in the residence.

Most of the clients were mentally retarded (67 percent) or mentally disabled (23 percent). Eleven clients who were not mentally disabled were not included in the present analyses. Since some were observed in both their home and facility (one subject was observed in both workshops), the total number of observations in the present analyses was 386, 13 percent of these clients were mentally disabled (IQ = 58 (standard deviation = 23), and their mean age, 41.13).

Affiliation Indices

Clients were observed during meals (one hour, 20 minutes) and breaks (15 minutes) in workshops and during meals in the residence (a complete description of the observation procedure is forthcoming).
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chemical attractiveness. Research
children and adults indicates
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and that predictors of affil-
her depending upon the di-
mension studied. In addition to extensity
and intensity, we analyzed the tendency to
be seen in aggregate with others while en-
gaged in the same behavior but not actively
in communication with them. We thought
that this characteristic ("aggregation")
could be an additional type of social behavior
with its own correlates.

Finally, we interviewed as many clients
as possible concerning their friendship
choices and asked staff members to name
friendships that they were aware of. These
more traditional sociometric measures
served as additional indices of sociability
and affiliation.

Method
Subjects and Settings

The present analyses are based on the
same sample of 315 clients described by
Berkson and Romer (1980). Nearly all
clients (95 percent) were served by a single
agency that provided sheltered-workshop
training and programs at four separate
facilities. A large number of these clients
(81) also resided in a single intermediate-
care living facility that was within walking
or commuting distance of the various
workshops. Observations were performed in all
four workshops and in the residence.

Most of the clients were diagnosed as
mentally retarded (67 percent) or mentally
retarded with mental illness (14 percent).
Eleven clients who were not diagnosed as
mentally disabled were not included in the
present analyses. Since some clients were
observed in both their home and work set-
ting (one subject was observed in two
workshops), the total number of cases in the
present analyses was 386. Sixty-six per-
cent of these clients were male; their mean
IQ was 58 (standard deviation [SD] =
23), and their mean age, 41 years (SD =
13).

Affiliation Indices

Clients were observed during lunch (30
minutes) and breaks (15 minutes) at the
workshops and during meals and free time
in the residence (a complete description of
the observation procedure is contained in
Berkson & Romer, 1980). Clients were
observed an average of 106 times, which in-
cluded an average of 94 observations of
behavior and 12 absences from the setting.
Each client's affiliative behavior was sum-
marized in terms of the frequency (or propor-
tion of observations) of occurrence of
various kinds of behavior. For present pur-
poses, the most important of these frequen-
cies was the proportion of observations that
a client spent in a particular group. This
measure defined the intensity of the group.
The number of groups a client was seen in
for at least 3 percent of the observations
measured the extensity of that client's affil-
iation.

Use of this 3 percent criterion ensured
that a subject was seen in a group more than
once or twice and thereby excluded encoun-
ters that could have occurred by chance.
Since most of the observed groups
were dyadic, this measure was virtually
identical to the number of people a client
was seen with (r = .97). The average size of
these nonchance groups served as a second
indicator of extensity. A subject's overall
intensity of affiliation was measured by the
average intensity of the subject's non-
chance affiliations (Zigler, 1971).

Finally, length of at-
ence in a setting should
on. Exposure to others is an
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 the tendency to form more
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the characteristic most often
intimacy. We anticipated
actors would appear in the
and that predictors of affil-
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Sociometric Questionnaires

As many clients as possible were interviewed (74 percent). Clients who were deaf, had unrecognizable speech, or did not wish to be interviewed were not interviewed. These clients were somewhat less intelligent (IQ 232) than those who were interviewed. The interview consisted of several questions concerning the people clients liked to spend time with and whom they regarded as close friends. The critical items for the present report were “whom do you like to talk to” (in the setting) and “who is your best friend,” “next best friend,” etc. The number of unique individuals who were named in response to these questions and who were present in the workshop or home setting served as the measure of client sociability.

Staff members in the workshop and residence completed a questionnaire in which they were asked to list (for every client they knew) the names of other clients with whom they were known to interact. In addition, the staff members were asked to rate each friendship pair along a 5-point scale, where 1 indicated that the pair were “definitely not friends” and 5 that the pair were “definitely friends.” The number of people listed whose average rating, over staff members, was greater than or equal to 3.5 served as the measure of sociability perceived by staff members.

Attractiveness Ratings

Ratings of physical attractiveness were obtained in two workshop settings (WI and WE) for a total of 176 clients. Four or five staff members and observers in each setting were asked to rate “each client as if (they) were seeing him/her for the first time (for example, walking down the street).” They were also asked to make their judgments disregarding their “knowledge of the client’s disability.” Ratings were made using an 8-point scale ranging from 1 (“very unattractive”) to 8 (“very attractive”).

Factor analyses of these judgments revealed that from 62 to 69 percent of the variation in each workshop was attributable to a single dimension, and so subsequent analyses were based on the mean rating over staff members.

Desire for Affiliation

Many researchers have postulated a need or desire for affiliation by normal populations (e.g., Murray, 1938; Mehrabian & Ksionzky, 1974). We were interested, therefore, to determine whether a similar motive existed for our mentally disabled sample. Because many clients could not complete the typical personality inventories that measure this motive, we constructed a scale more appropriate for this population. The Social Self-Concept Scale is composed of 10 line drawings showing an adult male or female (depending upon the client’s sex) in various situations. The situations vary in their degree of social involvement from a person sleeping or watching TV alone to a person talking to friends or attending a party. All possible pairs of the situations (n = 45) are presented to subjects, individually, and they are asked to choose the activity they would prefer to engage in (e.g., what would you rather do: watch TV or have lots of friends?). Preferences for the various activities are determined by totaling the number of times each activity is chosen.

Nearly all clients (80 percent) completed the scale without difficulty. A heterogeneous subsample of 15 clients was retested a week later to provide reliability information. A factor analysis and varimax rotation revealed three interpretable factors accounting for approximately 40 percent of the total variation. The first factor reflected a desire to “help other people” and to “have lots of friends” vs. a distaste for “watching TV” and “eating alone.” The second factor was highly similar except that on this dimension, clients most preferred to “go to parties and dances” and least preferred to “do things alone.” The third factor reflected various preferences among nonsocial activities and for having “other people help me.” This factor seemed to have little bearing on sociability.

Although the first two factors were orthogonal, the factor scores were highly correlated (r = .60); therefore, we used the scores from the first factor to measure the desire for affiliation and to represent affiliation tendencies. Such scores were found to be highly test–retest measure of reliability.

Other Client Characteristics

A number of client characteristics obtained from the Agency's case records were noted, as were important abilities, length of time the client had been in institutions prior to coming, and the amount of time he had been in the present workshop setting. These pieces of information were recorded in the files and were summarized for computer analysis. Medications were grouped into nine categories: antipsychotics, anxiolytics, anticonvulsants, antipsychotics, sleeping medications, and other medications (e.g., vitamins or laxatives). The percentages of clients taking medications were antipsychotics (54 percent) and other medications (45 percent). As noted, 25 percent of the sample receive no medication whatsoever.

Physical disabilities were also divided into nine categories: motor (7 percent), auditory communication (6 percent), severe visual impairment and other defects (2 percent), those who had one of the disabilities or handicaps, they received a score appropriate category, otherwise the scores were 0.

Approximately 60 percent of clients had been institutionalized for at least 17 years. Fifteen clients had not been institutionalized for brief but unknown periods. The rest were scored as having no institutionalization; however, to distinguish those who had ever been institutionalized but who had never been institutionalized for 17 years, we scored noninstitutionalized clients as having a time score of -1.

Tenure in the present workshop setting was calculated in months. Exposure to new settings is logarithmically to affective...
Other Client Characteristics

A number of client characteristics were obtained from the Agency's files. In particular, medications that the client received were noted, as were important physical disabilities, length of time the client had spent in institutions prior to community placement, and the amount of time the client had been in the present workshop or residential setting. These pieces of information were recorded directly as they appeared in the files and were summarized later by computer analysis. Medications were later grouped into nine categories (anticonvulsants, antipsychotics, antidepressants, lithium carbonate, minor tranquilizers, medications to control side effects of antipsychotics, sleeping medications, stimulants, and other medications such as vitamins or laxatives.) The most frequent medications were antipsychotics (30 percent) and other medications (26 percent), but 25 percent of the sample were known to receive no medication whatsoever.

Physical disabilities were divided into six categories: motor (7 percent), visual (6 percent), auditory communication (9 percent), cosmetic (6 percent), seizure (7 percent), and other defects (2 percent). When clients had one of the disabilities or received medications, they received a score of 1 in the appropriate category, otherwise their scores were 0.

Approximately 60 percent of the sample had been institutionalized for an average of 17 years. Fifteen clients had entered institutions for brief but unknown periods and were scored as having no institution time; however, to distinguish them from clients who had never been institutionalized, we scored noninstitutionalized clients as having a time score of -1.

Tenure in the present workshop or home setting was calculated in months. Because exposure to new settings is often related logarithmically to affective and social responses (Harrison, 1977; Zajonc, 1971), we took the log (base 10) of the time measure plus 1 as the index of tenure in the setting. Clients had spent an average of 23 months in their settings at the time of observations.

Results

Means and SDs of the various behavioral indices are shown in Table 1. A principal axis factor analysis followed by varimax rotation (of factors with eigenvalues greater than 1.0) produced the three factors in Table 1. The first factor, which contains loadings from percentage of affiliation, number of groups, and average group size, corresponds to the extensiveness of affiliation. It is noteworthy that the tendency to affiliate in larger sized groups (trios and quartets) loaded almost as heavily as did the tendency to affiliate in dyads. The large loading from the initiation variable indicates that persons who were seen in many groups tended to initiate rather than receive affiliation.

The second factor, which contains loadings from both average and highest intensity, represents the intensity of affiliation. Unlike extensity, dyads were the only group size to load on this factor, and the zero loading of the initiation variable suggests that persons were no more likely to initiate than to receive intense affiliation. It is encouraging that the number of observations performed on subjects did not correlate with either intensity or extensity and, therefore, that variation in these tendencies was independent of subject observability.

Although the intensity and extensity factors replicated the findings of our earlier research (Landesman-Dwyer et al., 1979; Romer & Berkson, 1979), additional measures (distance and aggregation) formed a third factor independent of the other two. This factor represents the tendency of clients to aggregate with others at close range even though they were not actively affiliating at the time. It contains a moderate loading (.40) from number of observations, suggesting that subject observability was related to this tendency. Further analysis indicated that, in fact, clients observed in their residence had, on the aver-
Table 1

MEANS, SDs, AND VARIMAX ROTATED FACTOR MATRIX OF AFFILIATION INDICES

<table>
<thead>
<tr>
<th>Variable</th>
<th>Extensity</th>
<th>Intensity</th>
<th>Aggregation</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>General affiliation (%)</td>
<td>.90</td>
<td>.35</td>
<td>.20</td>
<td>39</td>
<td>23</td>
</tr>
<tr>
<td>Time alone (%)</td>
<td>-.90</td>
<td>-.37</td>
<td>-.19</td>
<td>55</td>
<td>26</td>
</tr>
<tr>
<td>Time dyads (%)</td>
<td>.71</td>
<td>.49</td>
<td>.14</td>
<td>32</td>
<td>18</td>
</tr>
<tr>
<td>Time triads (%)</td>
<td>.79</td>
<td>.15</td>
<td>.22</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Time quartets (%)</td>
<td>.65</td>
<td>.00</td>
<td>.19</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Average size of groups</td>
<td>.82</td>
<td>.12</td>
<td>.09</td>
<td>2.6</td>
<td>2.4</td>
</tr>
<tr>
<td>Average intensity (%)</td>
<td>.61</td>
<td>.40</td>
<td>.06</td>
<td>1.8</td>
<td>4</td>
</tr>
<tr>
<td>Largest intensity (%)</td>
<td>.15</td>
<td>.93</td>
<td>.12</td>
<td>5.7</td>
<td>6.3</td>
</tr>
<tr>
<td>Distance (SD)</td>
<td>.38</td>
<td>.80</td>
<td>.17</td>
<td>9.1</td>
<td>9.7</td>
</tr>
<tr>
<td>Distance (meas)</td>
<td>-.38</td>
<td>-.26</td>
<td>-.79</td>
<td>3.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Initiation (%)</td>
<td>-.19</td>
<td>-.10</td>
<td>-.87</td>
<td>2.7</td>
<td>1.7</td>
</tr>
<tr>
<td>Aggregation (%)</td>
<td>.41</td>
<td>.07</td>
<td>.02</td>
<td>82</td>
<td>15</td>
</tr>
<tr>
<td>Number of observations</td>
<td>.15</td>
<td>.10</td>
<td>.57</td>
<td>81</td>
<td>16</td>
</tr>
<tr>
<td>% of total variance</td>
<td>-.03</td>
<td>-.01</td>
<td>.40</td>
<td>106</td>
<td>29</td>
</tr>
</tbody>
</table>

Table 2

MEAN AFFILIATION SCORES ACROSS SETTINGS

<table>
<thead>
<tr>
<th>Setting</th>
<th>Extensity</th>
<th>Intensity</th>
<th>Aggregation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workshop</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WA</td>
<td>37.51</td>
<td>5.12</td>
<td>4.57</td>
</tr>
<tr>
<td>WI</td>
<td>29.13</td>
<td>4.67</td>
<td>2.45</td>
</tr>
<tr>
<td>WH</td>
<td>44.18</td>
<td>6.42</td>
<td>3.12</td>
</tr>
<tr>
<td>WE</td>
<td>33.54</td>
<td>7.54</td>
<td>2.14</td>
</tr>
<tr>
<td>Residence</td>
<td>29.48</td>
<td>4.88</td>
<td>3.52</td>
</tr>
</tbody>
</table>

Note. Extensity = percentage affiliation, intensity = average intensity of groups, and aggregation = average distance of closest person.
AFILIATION INDICES

<table>
<thead>
<tr>
<th>Aggregation</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>.20</td>
<td>39</td>
<td>23</td>
</tr>
<tr>
<td>.19</td>
<td>55</td>
<td>26</td>
</tr>
<tr>
<td>.14</td>
<td>32</td>
<td>18</td>
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<tr>
<td>.22</td>
<td>9</td>
<td>8</td>
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<tr>
<td>.19</td>
<td>4</td>
<td>5</td>
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<td>.09</td>
<td>6.6</td>
<td>2.4</td>
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<td>1.8</td>
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<td>3.1</td>
<td>1.4</td>
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<tr>
<td>-.87</td>
<td>2.7</td>
<td>1.7</td>
</tr>
<tr>
<td>.02</td>
<td>8.2</td>
<td>15</td>
</tr>
<tr>
<td>.57</td>
<td>81</td>
<td>16</td>
</tr>
<tr>
<td>.40</td>
<td>106</td>
<td>29</td>
</tr>
<tr>
<td>.15</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Romer and Berkson

TABLE 3
CORRELATION MATRIX OF AFFILIATIVE BEHAVIOR AND PERSONAL AND MEDIATING VARIABLES

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Extensity</td>
<td>.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2. Intensity</td>
<td>-.58</td>
<td>.37</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Aggregation</td>
<td>-.24</td>
<td>-.09</td>
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Thus, the analysis suggests that the influence of context was largely independent of the influence of personal traits and that the setting differences we observed were not attributable solely to the personal characteristics of the clients in the settings.

The final stage of the analysis increased prediction only moderately (5 percent) but shows that some of the previous prediction of personal traits was attributable to mediating variables. In particular, amount of time in the setting, desire for affiliation, and physical attractiveness added significantly to prediction; however, intelligence no longer predicted.

Supplementary analyses indicated that holding just attractiveness and context variables constant was sufficient to eliminate IQ as a predictor. This result was somewhat surprising, because attractiveness was not strongly related to extensity (r = .12); however, in one of the two settings in which attractiveness was measured (WI), IQ was negatively related to extensity. It seems that this negative relation actually attenuated the correlation between attractiveness and extensity; therefore, when the setting \times IQ interaction for WI was held constant, the stronger relation between attractiveness and extensity emerged. Thus, not only was IQ an inconsistent predictor of affiliation across settings, but its relation to extensity was largely attributable to its confounding with physical attractiveness and with differences between settings.

To obtain an estimate of the relative pro-

dictors were intercorrelated, however, regression analyses were needed to determine the ones that truly predicted affiliation independently of other variables. In performing these analyses, we entered the predictors sequentially so that changes in prediction could be noted; personal traits were entered first, followed by context variables, and their interactions with traits, and then mediating variables.

**Extensity.** The results of the analyses for percentage of affiliation presented in Table 4 indicate that personal traits alone account for 34 percent of the variation. Although each of the predictors was significant, the results may be misleading because the analysis at this stage ignores the contribution of context and other mediating variables that might be confounded with the trait predictors. The second stage of analysis, incorporating context predictors, produced a large increase in prediction (12 percent); however, sex as an individual characteristic was no longer significant. Apparently, sex was a predictor only because more females were seen in more sociable settings. The settings that seem to account for this finding were Workshops WA, WH, and WE, each of which had more extensive affiliation than average. A striking feature of this analysis is the relative absence of Trait \times Context interactions. Only IQ in setting WI appeared to predict extensity differently from other settings. Actually, in that setting, IQ was slightly negatively related to extensity (r = -.26).

course, whether these differences are artifacts of differential IQ were intercorrelated, however, regression analyses were needed to determine the ones that truly predicted affiliation independently of other variables. In performing these analyses, we entered the predictors sequentially so that changes in prediction could be noted; personal traits were entered first, followed by context variables, and their interactions with traits, and then mediating variables.

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To obtain an estimate of the relative pro-
portion of variation accounted for by settings vs. individual difference predictors, we calculated the variation attributable to settings and to all other predictors that were significant (see Cohen & Cohen, 1975, for details on this procedure). For extensity, settings accounted for 49 percent of the predicted variation.

Intensity. The analysis of average intensity of clients' affiliation contrasted sharply with the results for extensity (Table 5). Diagnosis and age were the lone predictors in the first analysis, with only 6 percent of the variation predicted at all. The inclusion of context increased prediction to 9 percent, but no setting predictor was significant. When mediating variables were added, prediction increased to 15 percent, with the desire for affiliation and attractiveness significant (communication disabilities were marginally significant). Apparently, intensity is difficult to predict except for the influence of these variables. This result would not be surprising if intensity were a less reliable dimension than extensity; however, the test-retest reliability of intensity ($r = .66$) was not substantially lower than that for extensity ($r = .73$). It appears, therefore, that other variables are more important for predicting intensiveness of relationships than the ones we have studied. Furthermore, the relative prediction due to settings was only 16 percent, which was considerably lower than the prediction of extensity.

Aggregation. The analysis of distance to others showed increased considerable predictor variation. All four traits were associated with aggregation and accounted for 46 percent of the variation. At this stage, IQ no longer predicted aggregation; a regression equation accounted for 46 percent of the variation, with each setting predicting on average. As with the analysis of extensity, there was little evidence of interactions between settings and traits (IQ predicted to aggregation in Works & CAbec with mediating variables were entered as independent variables).
mediating variables were entered, personal traits remained significant, but the desire for affiliation, attractiveness, and time in the setting added to prediction. Aggregation was the behavior most sensitive to settings, with 63 percent of the predicted variation attributable to settings.

**Questionnaire Indices**

Perhaps the most striking finding in the analysis of affiliative behavior was the absence of any prediction for intelligence once context and mediating variables are held constant. We were interested to see whether this result would also obtain with the questionnaire measures of affiliative choice. The number of friends whom clients

### Table 5: Regression Analysis of Intensiveness

<table>
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<th>Variable</th>
<th>Stage 1a</th>
<th>Stage 2b</th>
<th>Stage 3c</th>
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* $R^2=.25, 381 df.$
* $R^2=.09, 361 df.$
* $R^2=.15, 355 df.$
* $p < .05.$
* $p < .01.$
named was significantly correlated with observed extensiveness \( (r = .28) \), suggesting that the indices are partly overlapping. No trait or mediating variable came close to predicting client friendship choice across settings, however. The only significant predictors were settings.

The frequency of friendship namings by staff members was uncorrelated with client namings \( (r = -.10) \) but significantly related to the observations \( (r = .33) \). There was a tendency for staff members to think that more intelligent clients had more friends \( (F = 4.74, 1/355 df, p < .05) \), and they appeared to feel the same way about more attractive and mentally retarded (vs. mentally ill) clients \( (F_s = 13.82 \text{ and } 6.69, \text{ respectively}, 1/355 df, ps < .05) \). There was considerable variation in namings across the settings, with more friendships stated by residential staff members. Furthermore, in the residence older clients were seen as having fewer friends; this was not true in the workshops.

These analyses suggest that client and staff judgments about client affiliation are not necessarily congruent with each other or with observational indices. Nevertheless, client judgments of sociability were again not predicted by intelligence, whereas staff members saw intelligence as a correlate of sociability.

The staff index of popularity was highly correlated with the rest of sociability \( (r = .69) \). It was necessary, therefore, that staff members thought intelligent clients were more attractive \( (r = .54, 1/355 df, p < .01) \). Popularity based on client judgments was only marginally correlated with the index of sociability \( (r = .20) \), however, intelligence was uncorrelated with popularity. The only predictors of popularity were attractiveness, influence of setting, time in the setting, age, and institution time.

In addition to popularity, the number of friendships that were reciprocal for each sociometric method and the popularity measures, observed population measures were highly correlated with their respective indices of sociability \( (r = .70 \text{ and } .80, \text{ respectively}) \), while mutual namings were less strongly related to intelligence \( (r = .29) \). None of the mutual indices related to intelligence, however, individual difference predictors were significant for all three indices of time in the setting. The desire to be popular was important for clients, but intelligence and age were important in these analyses.

### Influence of Setting

The present behavioral analysis demonstrated that from 16 to 63 participants were...
Popularity and Mutual Choice

One reason for the absence of any effects of intelligence upon sociability is the possibility that the friendship lists obtained from the three sources of information (observations, clients, and staff) do not reflect mutually reciprocal choices. To explore this possibility, we analyzed the extent to which clients were named as friends (by each of our sociometric methods), a measure usually associated with popularity and status. Because the observations were obtained randomly, observational popularity should be highly correlated with the number of people clients were seen with; and indeed this was the case \( r = .67 \). As with the observational measure of extensity, therefore, intelligence was uncorrelated with observational popularity.

The staff index of popularity was also highly correlated with the respective index of sociability \( r = .69 \). It was not surprising, therefore, that staff members thought that intelligent clients were more popular \( F = 9.11, 1/355 \text{ df, } p < .01 \). Popularity based on client judgments was only marginally correlated with the client index of sociability \( r = .20 \). Again, however, intelligence was uncorrelated with popularity. The only predictors were settings, time in the setting, and physical attractiveness.

In addition to popularity, we calculated the number of friendships that were reciprocal for each sociometric method. As with the popularity measures, observation and staff estimates were highly correlated with their respective indices of sociability \( rs = .70 \text{ and } .80 \), respectively), whereas client mutual namings were less strongly related \( r = .29 \). None of the mutualty indices was related to intelligence, however. The only individual difference predictor that was significant for all three indices was length of time in the setting. The desire for affiliation was important for clients, but attractiveness and age were important for staff.

Influence of Setting

The present behavioral analyses demonstrated that from 16 to 63 percent of the predictable variation in the affiliation dimensions could be explained by context as opposed to individual difference variables. These findings suggest that the setting in which individuals are located is a strong predictor of affiliative behavior. One might still argue, however, that other traits not included in the analysis might account for the variation predicted by setting. To evaluate this hypothesis, we analyzed data for the subset of 81 subjects who were observed in both their workshop and residence (see Figure 1). If prediction due to context were still possible, then it would be unlikely that individual traits would account for the variation. Indeed, even if sociability were completely stable across setting, the overall level of affiliation could
still be affected by context. This was apparently the case for extensity, which was correlated .80 across home and workshop settings. Nevertheless, the data shown in Figure 1 substantiate the power of the setting. Clients affiliated more extensively in the workshop setting \( (F = 29.20, 1/77 df, p < .01) \), but the interaction was nonsignificant \( (F = 2.42, 3/77 df, p < .08) \). Intensity of affiliation, which was less stable across settings \( (r = .47) \), was not uniformly greater in the workshops, but the Group \( \times \) Setting interaction approached significance \( (F = 2.63, 3/77 df, p < .06) \). Finally, the workshop setting produced more aggregation in all cases except Workshop WA \( (F = 8.36, 3/77 df, p < .01) \). The effect of context was most pronounced on this behavior, but individual stability was lowest \( (r = .24) \). These results suggest that whether individual stability was high (extensity) or low (aggregation), the social context affected social behavior independent of individual characteristics.

**Setting characteristics.** The preceding analyses show that both individual and setting variables are important in predicting sociability and affiliation. What has not been reported are the environmental characteristics that might predict the sociability of a setting. Landesman-Dwyer et al. (1979) found that average IQ of group home residents predicted sociability more than did individual IQ. Persons who were surrounded by others of high IQ were more sociable no matter what their own IQ. This result was also true in the present five settings; average setting IQ was correlated .31 with extensity and .12 with intensity, holding individual IQ constant. Unfortunately, average setting IQ was correlated .97 with proportion of females in the setting, so that disentangling these variables was virtually impossible. Nevertheless, we determined the average characteristics of clients who were most likely to socialize within the various settings. For example, we subdivided the residence by floors and the workshops by programs when possible. This subdivision reduced the confounding between sex and intelligence substantially \( (r = .19) \). We also calculated the average age, diagnosis, desire for affiliation, and attractiveness of clients in these programs and entered these variables along with the corresponding individual predictors in a stepwise regression. The only program characteristic to predict affiliation was average client IQ, which accounted for 14 percent of the predictable variation in intensity \( (F = 35.67, 1/376 df, p < .01) \) and 18 percent of the predictable variation in intensity \( (F = 17.66, 1/378 df, p < .01) \). It appears, therefore, that the average intellectual composition of clients in a setting is a potent predictor of the affiliative behavior of those clients.

**Discussion**

The present results provide information about the factors that underlie affiliation and the variables that predict these dimensions in community settings for handicapped people. Consistent with our expectations, extensity, intensity, and aggregation were identified as separate affiliation tendencies. Although several predictors of these tendencies were isolated, the variables that were unrelated to these tendencies are perhaps most notable. First, intelligence was unrelated to affiliation and did not seem to be important in predicting the frequency of clients' own affiliation choices. Second, although many of the clients we observed were once institutionalized, received drugs, and suffered other disabilities, none of these factors appeared to affect affiliation when other variables were controlled. Apparently, individuals adapt socially despite the potentially inhibitory effects of these factors. Of course, it is not appropriate to generalize these conclusions beyond affiliation within a mentally disabled population. If affiliation between mentally disabled and nondisabled adults were observed, prediction for some of these variables might be more apparent.

The two personal traits that predicted affiliation most consistently were age and diagnosis. Older and mentally ill persons were less likely to affiliate extensively and to aggregate with others. Although the precise mediation of these relations is unclear, the findings are consistent with the notion that older adults are inclined toward withdrawal from all activity (Ekeberg, 1977). Furthermore, diagnosis as a disability is perhaps more likely to be reached by an unwillingness to engage in social relationships; however, the definition of mental illness as a disability should be reached (McLemore & Blaney, 1974). The present results suggest that observational measures are a powerful approach to the definition of categories (cf. Rosen, Tuerch, Johnson, Lyons, & Davis, 1974).

It is also evident, however, that diagnosis are not powerful predictors of intensity of affiliation. This finding suggests that although older and mentally ill persons have fewer relationships, their relationships are no less intense than those of younger and nonmentally ill persons. Furthermore, the frequency of verbal and naming by these clients are not different from those of other clients.

Neither sex nor IQ was a predictor of extensity, intensity, or aggregation. Variables that predicted affiliation were related to age and diagnosis. These findings are consistent with previous research that has found IQ to be a good predictor for IQ (Landesman-Dwyer, 1979; Romer & Berkson, 1974). These findings are also consistent with previous research that has found IQ to be a good predictor for IQ (Landesman-Dwyer, 1979; Romer & Berkson, 1974). The results are particularly encouraging because IQ is a reliable variable for measuring intelligence. Whether these relationships were rich or complex as they might be, IQ is a more reliable variable for measuring intelligence.

Physical attractiveness and sociability appear to be mediators of affiliation not necessarily predictors of both extensity and intensity of affiliation. Although physical attractiveness was correlated with sociability \( (r = .28) \), the latter did not predict any of the affiliations. This suggests that, if physical attractiveness is an important variable in determining affiliation, it is only in a small proportion of the population.

Further research needs to be done to determine the mediating role of physical attractiveness in determining affiliation. It is also evident that physical attractiveness as a variable is not as important as it is in determining affiliation. This is consistent with previous research that has found IQ to be a good predictor for IQ (Landesman-Dwyer, 1979; Romer & Berkson, 1974). The results are particularly encouraging because IQ is a reliable variable for measuring intelligence. Whether these relationships were rich or complex as they might be, IQ is a more reliable variable for measuring intelligence. It is also evident that physical attractiveness as a variable is not as important as it is in determining affiliation. This is consistent with previous research that has found IQ to be a good predictor for IQ (Landesman-Dwyer, 1979; Romer & Berkson, 1974). The results are particularly encouraging because IQ is a reliable variable for measuring intelligence. Whether these relationships were rich or complex as they might be, IQ is a more reliable variable for measuring intelligence. It is also evident that physical attractiveness as a variable is not as important as it is in determining affiliation. This is consistent with previous research that has found IQ to be a good predictor for IQ (Landesman-Dwyer, 1979; Romer & Berkson, 1974). The results are particularly encouraging because IQ is a reliable variable for measuring intelligence. Whether these relationships were rich or complex as they might be, IQ is a more reliable variable for measuring intelligence.
of clients in these programs these variables along with the individual predictors in a regression. The only program to predict affiliation was verbal IQ, which accounted for 14 the predictable variation in extensity ($\bar{r} = .67, 1/376 df, p < .01$) and 18 the predictable variation in intensity ($\bar{r} = .67, 1/378 df, p < .01$). It before, that the average impression of clients in a setting predictor of the affiliative behavior of the client.

**Discussion**

The results provide information about the factors that underlie affiliation. Among these are age, sex, and IQ. However, IQ was not related to this popularity (Maccoby & Jacklin, 1974). Increasing the desire for affiliation may be less straightforward, but the possibility deserves attention in future research. The results suggest that neither client nor staff estimates of sociability completely mirror the observational measures. Furthermore, staff and client estimates appear to reflect different aspects of sociability. The most striking discrepancy concerns the tendency of staff members to attribute greater sociability to more intelligent clients. Since staff members also provided us with estimates of job attractiveness, the possibility exists that they used intelligence as a cue for their attractiveness. Whether these relationships are as strong as those observed in the present study is unclear, but they are potentially significant. The present results suggest that observational measures are a promising approach to the definition of diagnostic categories (cf. Rosen, Tureff, Daruna, Johnson, Lyons, & Davis, in press).

It is also evident, however, that age and diagnosis are not powerful predictors of the intensity of affiliation. This finding suggests that although older and mentally ill people may have fewer relationships, the ones they do have are no less intense than those of younger and non mentally ill people. Furthermore, the frequency of friendship naminngs by these clients was virtually identical to those of other clients.

Neither sex nor IQ was a potent predictor of extensity, intensity, or frequency of friendship naming. These findings support previous research that has found either no prediction for IQ (Landesman-Dwyer et al., 1979; Romer & Berkson, 1979) or conflicting findings for sex (Maccoby & Jacklin, 1974). The results are particularly encouraging regarding IQ because they suggest that individuals over a broad range of ability can be equally successful in forming and maintaining interpersonal relationships. Whether these relationships are as rich or complex as they might be is a question, of course, that remains to be investigated.

Physical attractiveness and desire for sociability appear to be important mediators of affiliation not only because they predicted both intensity and extensity but also because they are potentially subject to alteration. Although physical attractiveness was correlated with cosmetic disabilities ($r = -.28$), the latter variable did not predict any of the affiliation dimensions. This suggests that, if other relatively plastic aspects of personal appearance (makeup, hairstyle, and clothing) could be improved, sociability might increase. The importance of attractiveness is clearly recognized for nondisabled adults and has been a potent predictor of social behavior in children and adults (Berscheid & Walster, 1974). Increasing the desire for affiliation may be less straightforward, but the possibility deserves attention in future research. The results suggest that neither client nor staff estimates of sociability completely mirror the observational measures. Furthermore, staff and client estimates appear to reflect different aspects of sociability. The most striking discrepancy concerns the tendency of staff members to attribute greater sociability to more intelligent clients. Since staff members also provided us with estimates of client attractiveness, the possibility exists that they used intelligence as a cue for their attractiveness. Whether these relationships are as strong as those observed in the present study is unclear, but they are potentially significant. The present results suggest that observational measures are a promising approach to the definition of diagnostic categories (cf. Rosen, Tureff, Daruna, Johnson, Lyons, & Davis, in press).

Despite the obtained differences among the three sources of information, settings and amount of time in the settings were consistent predictors for all measures. Furthermore, the results suggest that client perspectives on their own sociability (sociometrics and desire for affiliation) are important sources of information for predicting sociability. In a subsequent report we examine these sources of information in more detail and explore possible reasons for their similarities and differences.

An important finding is the influence of context upon affiliation. The overall regres-
Vision analyses suggest that context influenced affiliation independently of personal and mediating variables; and the more sensitive analysis of 81 clients in two settings indicated that context could affect affiliation even when individual characteristics were held relatively constant. Both of these findings are congruent with the ecological gestalt that settings in which less intelligent were held relatively constant. Both of these differences. In Romer and Berkson (1980), which places emphasis upon the potent influences of the social environment. Persons involved in the planning and design of community settings, therefore, should be sensitive to these influences upon the social adaptation of mentally disabled people.

Consistent with Landesman-Dwyer et al.’s (1979) findings, our results suggest that the average intelligence of peers was important in determining how affiliative individuals will be in a setting. They also suggest that settings in which less intelligent clients are segregated from others may decrease their sociability. Our present results do not indicate why this should happen or what other factors might produce setting differences. In Romer and Berkson (1980) we examine the preferences that individuals have for social partners and provide more information about determinants of setting differences. It is clear, however, that future researchers should focus on the environmental variables that determine sociability in community settings for handicapped people.

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Manuscript submitted 5/15/79.

References

This research was supported in part by National Institute of Mental Health Grant HD 10321 from the National Institutes of Health and the National Institute on Disability and Rehabilitation Research. Special thanks to the following people for assistance in conducting these studies: Tamar Heller, Lilian To, Marge Melstrom, Russel Puetz, and Jacklin, C. M. The psychology of sex differences. Stanford: Stanford University Press, 1974.