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Psychometric properties of the Group process questionnaire

Lucia Igou Eakins
Portland State University

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APPROVED BY MEMBERS OF THE THESIS COMMITTEE:

[redacted]

Richard W. Wollert, Chairman

[redacted]

Robert E. Jones Jr.

[redacted]

Ken M. Kempner

The Group Process Questionnaire (GPQ), a 55-item rating scale, was developed by Richard Wollert in 1981 to assess perceptions of the frequency of processes occurring in self-help groups (SHGs). The GPQ was first employed by Wollert, Eakins, and Dixon (Note 1) as the primary data collection instrument in an ongoing investigation of urban SHGs. This investigation is one of a small number of empirical studies which have attempted to specify the range of SHG activities. Due to the relatively recent emergence of SHGs as topics of research, and the unique obstacles to research presented by the independent character of these groups, previous discussions of their methods of operation have

been primarily theoretical and impressionistic in nature.

Recent empirical studies have broadened current understanding of the processes that SHGs employ and the populations which they serve, but have been limited by a lack of generalizability of obtained results. In an attempt to circumvent deficiencies of previous studies, Wollert et al. (Note 1) used the GPQ to assess several perspectives of processes occurring in a representative sample of 13 SHGs. The present investigation was undertaken to assist in the interpretation of the data gathered by Wollert et al. (Note 1), and to provide indices of the usefulness of the GPQ for measuring SHG processes. To this end, analyses of the reliability and construct validity of the GPQ were conducted. Reliability was assessed through analyses of the internal consistency and stability of the questionnaire. Aspects of construct validity were explored through four analyses designed to establish evidence that the GPQ measures what it is purported to measure. The first validity analysis measured the extent to which GPQ ratings of SHG members, non-participant observers, and non-member participant professionals were in agreement. Second, ratings of SHG members were examined for the extent to which they were influenced by a factor of social desirability. The third analysis attempted to replicate findings of Wollert, Levy, and Knight, (1982), which indicated a greater perceived frequency of behaviorally-oriented processes in groups whose goal was the control of problematic behavior than in groups which emphasized support for dealing with stress. Finally, an exploratory factor analysis, designed to provide a first approximation of the conceptual dimensions underlying the GPQ, was performed.

Results of the reliability analyses indicated that estimates of internal consistency were high (alpha = .96), while the estimate of the average stability of GPQ process items was only moderate ($\bar{r}$ = .59). Findings of the validity analyses suggested that 1) the perceptions of SHG members, observers, and professionals were generally in agreement; 2) member ratings were uninfluenced by a social desirability response set; 3) no differences existed in the perceived frequency of behavioral processes in behavioral control and support groups; and 4) at least three dimensions, dominated by a strong factor labeled support, comprise the factor structure of the GPQ.

Overall, the results of the investigation suggested that the GPQ holds considerable promise as a tool for investigating SHG processes. It was suggested that perceptions of group activities corresponded closely to actual activities, and that these activities are characterized by expressions of caring, understanding, and support for change and growth. Results also indicated that the GPQ fails to capture non-interactive processes employed by some SHGs, and that an expansion of the range of SHG processes included in the questionnaire may be justified. Finally, the finding that some groups did not conform to a generally accepted typology of SHGs based on purpose and composition suggested the usefulness of a process-based typology which could be developed from factor analyses of the GPQ.

PSYCHOMETRIC PROPERTIES OF THE GROUP PROCESS QUESTIONNAIRE

by

LUCIA IGOU EAKINS

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The members of the Committee approve the thesis of Lucia Igou Eakins presented July 29, 1983.

[redacted]

Richard W. Wollert, Chairman

[redacted]

Robert E. Jones Jr.

[redacted]

Ken M. Kempner

APPROVED:

[redacted]

David F. Wrench, Head, Department of Psychology

[redacted]

Stanley E. Rauch, Dean of Graduate Studies and Research

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CHAPTER I

INTRODUCTION

In the most general sense, the proliferation of self-help groups (SHGs) in the last 50 years may be viewed as a natural extension of a basic human inclination to group, to seek the companionship and succor of others. There is little doubt that human beings' social existence has served to ensure their survival as a species (Yalom, 1970), and is reflected in contemporary styles of life and work. In general, problems in living arise from, or at least make themselves felt in, group settings; it follows that their resolution may also be enhanced in groups. The potential of this notion was acknowledged by several groups of self-helpers in the 1930's, most notably Alcoholics Anonymous, which was founded in 1939 (Gartner and Riessman, 1977). The success of AA not only paved the way for the establishment of other "Anonymous" groups, but marked the unofficial genesis of the self-help phenomenon.

A generally accepted working definition of a SHG was proposed by Levy (1976):

> Purpose. Its primary purpose is to provide help and support for its members in dealing with their problems and improving their psychological functioning and effectiveness.
> Origin and Sanction. Its origins and sanctions for existence rest with the members of the group themselves rather than with some external agency or authority.
> Source of Help. It relies upon its own members' efforts, skills, knowledge, and concerns as its primary source of help, with the structure of the relationship between members being one of

> peers, so far as help giving and support are concerned.
> Composition. It is generally composed of members who share a common core of life experience and problems.
> Control. Its structure and mode of operation are under the control of members, although they may draw upon professional guidance and various theoretical and philosophical works.

Implicit in Levy's (1976) description is the view that SHGs may be characterized by a mutual-aid orientation and a pragmatic attitude toward their functioning; and indeed, studies of this relatively new social phenomenon have established few commonalities among groups. In terms of the concerns addressed by SHGs, the diversity is extensive. Groups exist, for example, for nearly every disease listed by the World Health Organization (Gartner and Riessman, 1977), addressing such specific issues as surgical operations, terminal illnesses, developmental disability, and rehabilitation. Many groups focus on areas of mental health, such as neuroticism, mental retardation, self-actualization, and behavior disorders. Issues of social concern embraced by SHGs include women's liberation, the rights of welfare recipients, homosexuality, single parenthood, and aging.

The heterogeneity of concerns is mirrored by the variation in modes by which SHGs function. For example, Parents Anonymous, a group for child abusers, emphasizes the recognition of sources of external pressure in members' daily lives. This strategy is seen as useful in reducing guilt and providing a framework for problem solving (Levy, 1976). Other groups, such as Alcoholics Anonymous, make use of testimonials, where members offer hope to other members by recounting

their experiences and offering "proof" of the effectiveness of the group's methods (Levy, 1976). Still a third mode of operation is found in Take Pounds Off Sensibly (TOPS), where members are weighed at each meeting, and then either rewarded or penalized for losses and gains in weight (Levy, 1976).

The aim of several typologies and classification systems has been to impose some order on the multiformity of SHGs. Generally, however, such categorization reflects the form of organizations and activities with which investigators are most familiar. Gussow and Tracy (1976), for example, focus on medical SHGs, identifying groups according to the nature of the specific disease or affliction addressed. Hansell's (1976) "predicament," "bridging," and "professionally assisted" groups emphasize methods by which individuals are brought together. Katz and Bender (1976) propose a typology based on the primary purpose: self development, social advocacy, creation of alternative patterns for living, and personal protection. Levy (1976) focuses on finer nuances of purpose and composition as the base for his classification system. The types of groups which he describes are behavioral control or conduct reorganization groups, stress coping and support groups, survival oriented groups, and personal growth and self-actualization groups. Wollert, Levy, and Knight (1982) provided some support for Levy's (1976) typology by finding differences in members' perceptions of group processes in behavioral control and stress coping groups.

Although the effectiveness of SHGs is not yet supported by controlled research, a rapidly accumulating body of evidence suggests that many groups are effective in meeting the needs of their members

(Antze, 1976; Bumbalo and Young, 1973; Hurvitz, 1970, 1974, 1976; Knight, Wollert, Levy, Frame, and Padgett, 1980; Levy, 1978; Stunkard, 1972). The influence of SHGs may best be represented by membership figures. From 1965 to 1973, for example, approximately three million individuals attended at least one session of Weight Watchers (Weight Watchers, Inc., 1972), and 15,000 people attended meetings of Recovery, Inc. in the U.S., Canada, and Puerto Rico (Recovery, Inc., 1972). One estimate places the number of SHGs in the U.S. at a half million (Katz and Bender, 1976).

The effectiveness of SHGs, however, is an issue which may best be explored in conjunction with aspects of group process (Hartman, 1979). Outcomes may be viewed as measurements which tap into an evolving, continually changing process at arbitrary points. The specification of process variables considerably strengthens outcome studies by enabling the testing of hypotheses and providing for explanations of between-group differences. Lieberman, Yalom, and Miles (1973), in a now classic investigation of encounter groups, used questionnaires and global rating scales to measure leader styles and interventions; member roles, including status, activities, and attraction to the group; and group variables such as norms, cohesiveness, and climate. By relating process measures to their outcome findings, these investigators not only greatly increased the power of their study, but helped to lend some conceptual clarity to group change methods in general.

Although a dichotomy between process and outcome persists in studies of group change methods (Hartman, 1979), SHG researchers have recently begun to acknowledge the need for a more precise description of

process variables in understanding the apparent effectiveness of these groups. Despite methodological difficulties, theoretical and impressionistic discussions of SHG functioning have gradually given way to more systematic investigations, and a small but significant body of empirically-based knowledge has begun to emerge.

CHAPTER II

SELF-HELP GROUP PROCESSES: A REVIEW OF RESEARCH

Many of the numerous theoretical and conjectural discussions of SHG processe are grounded in the small group and psychotherapy traditions. Bumbalo and Young (1973), for example, employ behavioral principles to account for much of the activity of SHGs. They suggest that forms of punishment used in these groups are viewed as less threatening when coming from peers, and are used in conjunction with mutual reinforcement and self-reinforcement for appropriate behavior. An emphasis on a here-and-now orientation, eschewing a search for underlying causes of dysfunction, is also seen as useful in reducing interpersonal threat. Such an emphasis directly addresses problem behaviors and brings immediate relief through changes in actual and perceived status, and serves to motivate individuals to continued effort.

Bumbalo and Young also cite the climate of acceptance in SHGs as important in bringing about change, and they stress the reporting of self-help successes as a source of motivation. Closely related is the operation of the "helper therapy" principle (Riessman, 1965), which suggests that the prime beneficiary of help-giving is the giver.

Caplan (1974) takes a broader view of SHG functioning, describing the groups as a component of support systems in general, which buffer individuals against the vicissitudes of life. He suggests that their

primary functions are to provide consistent communication regarding the expectations of others, to give monetary and physical assistance, to offer evaluations of behavior, and to provide a system of rewards for change. Although Caplan views SHG processes in general as protecting the individual from a chaotic society, he sees different types of groups as employing different specific methods. For example, groups which combat addictions--the most well known of which is Alcoholics Anonymous--provide help in withstanding deprivation by providing psychological support for constructive changes in lifestyle and by offering a strong ideololgy. In addition, rituals and ceremonials serve the purpose of providing emotional and spiritual support. The discomfort of withdrawal is eased through the sharing of miseries as well as by the distraction of social activities and friendships.

On the other hand, according to Caplan, groups which center on loss (Parents Without Partners, Widows Associations, Mastectomy Patients, etc.) help to carry their members through trauma by encouraging the expression and ultimately the mastery of shock and pain. By providing long term social contacts to replace the loss and to combat social isolation, individuals are helped to cope with their situations. In addition, strong cohesive bonds often develop in this type of group, which are enhanced through social advocacy for the predicament of those in similar circumstances.

Still a third view of SHG functioning is adopted by Antze (1976), who takes a cognitive approach in addressing the role of ideology in peer psychotherapy groups. He focuses on the importance of group teachings, which are often formalized into specific beliefs, rituals,

rules of behavior, and language, and which serve a persuasive function. These teachings are designed to counteract key attitudes of members and produce cognitive changes in the interpretation of reality. Antze applies his hypotheses to the methods used by three SHGs: Alcoholics Anonymous, Recovery, Inc., and Synanon. He identifies basic attitudes common to members in each group which are combatted by specific ideological tenants. In AA, the alcoholic's assertiveness and exaggerated sense of authorship in life events is countered by teaching surrender to more powerful forces. Recovery views the phenomenology of "mental illness" in a nearly opposite manner, teaching the use of willpower to augment members' sense of personal volition. Synanon, for drug addicts, reshapes the meaning of stress and how it is relieved. The isolation of members is interrupted by requiring them to engage socially and emotionally and to regularly discharge emotions in a ritualized manner, which also serves to strengthen relationships with others.

There is no doubt that studies such as these described have broadened understanding of SHGs and the populations which they serve. However, the relevance of these constructs for understanding SHGs will be clarified through investigations of their empirical correlates. Studies which provide a replicable assessment of SHG processes could provide a data base which would enable comparisons across studies of diverse methods and populations. Efforts to operationalize variables would also provide a foundation for general statements about the effectiveness of SHGs. Yet, due in part to the relatively recent emergence of SHGs as topics of research, few empirical studies have been

published. Even more critical to the paucity of data, however, have been the obstacles to research presented by the nature of the groups themselves, and the resulting lack of a suitable methodology for investigating them. For example, most SHGs do not keep membership or attendance records, most are open and therefore subject to fluctuations in composition and character, and many which organize in response to needs unserved by traditional systems reflect an estrangement from professionals associated with such systems. In addition, the generalizability of conclusions based upon research procedures which disrupt the naturally-occurring processes of SHGs may be limited. These circumstances, when combined with the vast heterogeneity of concerns and methods of operation, present challenges to investigators not encountered in other areas of research.

Through the adoption of a collaborative approach, Wollert, Levy, and Knight (1982) were able to successfully surmount some of the methodological barriers to SHG process research. Naturalistic observations of groups were conducted in which activities were recorded. The activities observed provided the basis for the development of a questionnaire designed to assess individuals' perceptions of the frequency of 28 help-giving activities. A survey methodology was employed to explore the processes occurring within a sample of eight SHGs. Results of the survey indicated that the activities rated by group members as occurring most frequently were primarily supportive in nature. The five activities rated as most frequently occurring were expressions of empathy, mutual affirmation, explanation, sharing, and reassurance. In addition, Levy's (1976) SHG typology was utilized to

identify "behavioral control" and "stress coping" groups, which were then assessed for differences between them in the perceived frequency of group processes. Results indicated a greater perceived frequency of behaviorally-oriented processes in behavioral control groups than in stress coping groups. The findings of Wollert et al. (1982) added significantly to current understanding of SHGs and their functioning, but were limited by the lack of reliability measures and more extensive validity data to support the utility of their questionnaire. In addition, the groups sampled by Wollert et al. were not a representative cross-section of SHGs.

The results of the study by Wollert et al. (1982) were generally consistent, however, with those obtained in an earlier study by Lieberman and Bond (1976), who also assessed SHG processes. These authors found that processes which group members considered significant were normalization ("sharing commonalities"), group involvement, risk-taking, gaining insight, and role analysis. A limitation of this study, however, was that only one type of SHG was surveyed, with the resulting restriction of generalizability.

The limitations of these studies served to limit the usefulness of the findings for explaining SHG phenomena. The study by Wollert et al., in failing to specify reliability data, provided no indication of the probability that similar results would be obtained in other circumstances in which the measuring instrument might be employed. The absence of additional validity data had the effect of rendering the domain of SHG processes ambiguous in terms of observable variables or lawful theory. The restricted sample employed in the Lieberman and Bond

study severely limited the generality of their conslusions. At issue in both studies is the lack of evidence to provide for the development of parsimonious explanatory principles regarding the nature of SHG processes.

In an investigation in progress by Wollert, Eakins, and Dixon (Note 1), procedures employed in previous studies were refined and extended in several ways. First, the Group Process Questionnaire (GPQ) was developed to assess the perceived frequency of 48 operationally-defined SHG processes. Based on SHG observation, the GPQ contained the 28 help-giving activities identified by Wollert et al. (1982) plus 20 additional activities. Second, a sample of 13 SHGs, larger and more diverse than samples previously studied, were surveyed. Finally, in addition to the perspectives of members, those of non-participant observers and of non-member professionals associated with groups were assessed. Through an analysis of processes occurring across a diversity of groups, the study by Wollert et al. (Note 1) proposes to provide an increased understanding of the role which SHGs play in the delivery of mental health services.

The aim of the present study was to provide an evaluation of the reliability and validity of the survey instrument, the GPQ, used in the study by Wollert et al. (Note 1). The advantages of conducting an objective assessment of the instrument's temporal and internal consistency lie primarily in allowing confidence to be placed in scores; validity analyses provide indices of the characteristics which the questionnaire measures. Without such assessment, scores provide little more than subjective opinion about the characteristics in question or of

the utility of the instrument for it's intended purpose. Knowledge of the psychometric properties of a measurement instrument also provides for its modification and refinement, and for increasingly accurate statements about the specific situations and populations for which it is a useful measurement device. Most importantly, the present analyses were intended to provide an interpretive framework in which to assess the findings of the research of Wollert et al. (Note 1), and to shed light on the significance of earlier studies of SHG processes. Increased knowledge of how these groups function, for whom, and with what degree of success may provide a fuller understanding of the nature of naturally-occurring helping processes and how they effect change in the lives of the individuals who employ them.

CHAPTER III

THE GROUP PROCESSES QUESTIONNAIRE: DEVELOPMENT, ISSUES OF EVALUATION, AND HYPOTHESES

DEVELOPMENT AND DESCRIPTION OF THE GPQ

The GPQ is the outgrowth of an instrument developed in 1976 by Richard Wollert to assess SHG members' perceptions of the activities occurring in their groups. The philosophy which guided the development of both the original questionnaire and the GPQ is articulated in the research strategy advocated by Glaser and Strauss (1967) for the development of grounded theory. This strategy promotes the adoption of a generative rather than a verifactory approach in which categories, concepts, and theory are derived from the data. In other words, rather than constructing an instrument based on conventional knowledge of how other types of groups operate, items were developed to reflect patterns of interaction which occur specifically in SHGs. To this end, observations of many SHGs were conducted, and detailed narrative summaries of activities were compiled. In addition, researchers immersed themselves in the SHG literature in an attempt to acquaint themselves with as many perspectives as possible.

In constructing items for the GPQ, those contained in the original questionnaire were retained, while 20 additional activity items were added. The resulting "process" items describe typical SHG activities and interactions, and are presented in clear, simple, and

understandable terms. In addition, five "outcome" items tap members' evaluations of their group's effectiveness and their beliefs about the factors responsible for its effectiveness. Each stimulus statement is followed by a 5-point rating scale on which, for process items, individuals rate the frequency with which each activity occurs in their group. Outcome stimulus statements are rated on a 5-point scale indicating the extent to which the group has been effective.

Although respondents provide demographic information on the questionnaire, they do not supply their names. Complete instructions are included to allow the instrument to be self-administered in approximately 30 minutes. The GPQ is contained in Appendix A.

EVALUATION OF THE GPQ

The present study utilized the data collected by Wollert et al. (Note 1) to conduct analyses which provide indicators of the utility of the GPQ, and to establish an interpretive framework for evaluating the findings of the study. Two aspects of the reliability of the instrument, homogeneity and stability, were examined. In addition, several forms of construct validity were explored. The first was an analysis of the convergence of GPQ ratings by members, observers, and professionals. The second was an assessement of the extent to which members' ratings were influenced by a factor of social desirability. Third, ratings were analyzed for the extent to which they reflect the occurrence of behaviorally-oriented processes. Finally, ratings were factor analyzed for the interrelationships among processes described in the GPQ. The discussion which follows describes the aspects of

reliability and validity which the study addressed as well as the hypotheses tested.

Reliability

Homogeniety. The analysis of the homogeneity, or internal consistency, of the GPQ addressed the extent to which all items measure the same characteristic. The reliability coefficient based on internal consistency is known as coefficient alpha, a derivation which is of prime importance in the theory of measurement error. It represents the expected correlation of an instrument with a hypothetical alternative form of equal length (Nunnally, 1978). The procedure used to obtain coefficient alpha is to find the variance of all individuals' scores for each item and the to add these variances across all items. Scores are obtained on one administration of the test. Since measurement error is determined only by the sampling of items, producing variance among items only, coefficient alpha sets the upper limit to estimates of reliability. Strictly speaking, the sampling of situational factors also influences responses to items. Manifestations of this type of error are found in the form of guessing, transient personal characteristics of the respondent (such as the onset of a headache), clerical errors (such as incorrectly marking an alternative response), and misreading or misinterpreting items. The homogeneity of an instrument estimated by coefficient alpha is therefore subject to error variance produced by the sampling of items and the sampling of situational factors which accompany a particular testing situation.

Three additional variables affect the magnitude of coefficient

alpha. One variable is the length of the questionnaire. The reliability of scores increases with the number of items sampled, provided the items are reliable. A second factor is the range of individual differences reflected in scores; the greater the variability, the higher the reliability coefficient. The third variable which influences the coefficient is based on the fact that measurement theory is large-sample theory; it is assumed that sampling error is reduced to a minimum by employing sufficient numbers of subjects. Nunnally (1978) suggests that an adequate sample consists of 300 or more subjects.

Hypothesis: In consideration of the characteristics of the GPQ, coefficient alpha was expected to be high (.80 or higher). The characteristics of the GPQ upon which this prediction was based are: 1) items were empirically developed, and are considered representative of SHG activities; 2) items are considered to reflect a common core of SHG functioning; 3) items and instructions are clearly worded and understandable, and 4) with 55 items, the GPQ is of sufficient length. Factors which may affect the coefficient are the small sample size (N=35) and a lack of variability in scores.

Stability. The objective of the stability analysis was to determine to what extent scores obtained from the same persons on repeated applications were consistent. In general, error variance in the stability coefficient reflects the amount of random fluctuation in scores from one administration to the other, due to such factors as changes in the testing environment or in transient personal conditions. The magnitude of correlations between administrations may also be reduced by actual or perceived changes in the behavior being measured.

Other difficulties in interpreting the results of a test-retest procedure include variance introduced by the effects of memory from one administration to the next as well as that produced by changes in the way a subject responds to an instrument as a result of having grasped certain principles tapped by the instrument on the previous administration (Anastasi, 1982).

Due to the many sources of measurement error, some authors consider the retest procedure to be an inappropriate method of estimating reliability in most situations (Anastasi, 1982; Nunnally, 1978). One exception is when there is a relatively long time (several months) between testings, therby reducing practice and memory effects; another is when the sheer number of ratings and nature of the stimuli is such that it becomes difficult to remember ratings from one administration to the next. In addition, while stability coefficients are generally obtained for characteristics known to be stable over time, they are often calculated even for those known to vary with time. Since conclusions are rarely drawn on the basis of test scores applicable at only one point in time, information about the stability of scores over short periods of time may be useful (Brown, 1970).

Hypothesis: The stability analysis was expected to yield a coefficient of moderate strength. The effects of memory, a major defect in the retest prodecure, were not expected to exert a significant influence on the stability coefficients. It was reasoned that with a total of 275 possible ratings (5 choices for each of 55 items), for item statements which are relatively lengthy and numerous, it would be unlikely that individuals would remember responses from one

administration to the next. Error variance was expected, as with coefficient alpha, as a product of the small sample size (N=30) and by a possible restriction in the range of obtained scores.

Construct Validity

The present assessment of the construct validity of the GPQ considered the extent to which the questionnaire was presumed to measure several theoretical traits or propositions which were developed to explain or organize response consistencies. As such, the validity analysis was concerned with the influence of systematic, or constant, as well as random error on obtained results. Cronbach and Meehl (1955) point out that definitions of constructs consist in part of sets of propositions about their relationships to other variables, such as other constructs or directly observable behavior.

The present study explored the relationships of GPQ processes to four variables: 1) the extent to which GPQ items elicited different ratings from individuals with varying experiential backgrounds, 2) the extent to which members' ratings were influenced by a factor of social desirability, 3) the extent to which members' ratings reflected differential use of behaviorally-oriented processes in different SHGs, and 4) the extent to which interrelated items clustered together to form common processes or factors which aid in the interpretation of obtained results. (It should be noted that GPQ processes are themselves untested constructs which are inferred from SHG activities. These inferred processes are presented in Appendix B.) The discussion which follows presents hypotheses about the relationships of GPQ processes to each of

the four variables.

Convergence Of Three Perspectives OF SHG Processes. Estimates of the validity of measuring instruments may be affected by test bias due to stable differences in scores based on varying experiential backgrounds of respondents (Anastasi, 1982). Two types of individuals commonly associated with SHGs who possess quite different backgrounds are members, whose involvement is based on the experiencing of a particualr problem or concern, and non-member professionals, who typically serve as unpaid group facilitators and whose qualifications are generally based in professional or academic training. Another set of individuals, although not a usual component of SHGs but which may reflect a separate and presumably objective perspective, possess still a third experiential background: the observer, whose knowledge of SHGs in general and of specific groups is based on familiarity with the professional literature and on group observations. If the content and language of the GPQ are such that they render the questionnaire of greater relevance to one class of respondents than to the others, then it's validity would be reduced.

To assess the ability of the GPQ to retain it's validity in groups of individuals with varying experiential backgrounds, correlations between the ratings of members, professionals, and observers were obtained. Coefficients were calculated for ratings of members and observers in each of 12 SHGs; in Parents United, coefficients were calculated for members and professionals, and professionals and observers. Correlations were based on ratings on process items only (Items 1-48).

Hypothesis: Test bias inherent in the GPQ is expected to produce significant differences in the ratings of SHG members, professionals, and observers, whose experiential backgrounds vary. If such differences are obtained, they will suggest that the GPQ does not measure SHG activities which are common to individuals with different perspectives, and it's validity will be reduced.

Influence Of A Social Desirability Factor. A response set to which self-report inventories are especially vulnerable is a tendency of respondents to choose socially desirable responses (Edwards, 1957a). Such a response set on the part of SHG members would reflect an unwillingness to have their group viewed in an unfavorable light. Although the assurance of anonymity may reduce the influence of a social desirability (SD) variable, distortions in ratings may still be produced by such conditions as perceived goals and expectations of the research, the desire to protect the image of the group, and the desire to please the administrator of the questionnaire (Silverman and Shulman, 1970).

An analysis was therefore conducted which assessed differences in rating patterns of members (who were subject to an SD variable) and observers (whose ratings were presumed objective). To this end, each of the 48 process items of the GPQ was designated as likely to elicit one of three types of member ratings in the presence of an SD variable: 1) higher than observers, indicating a greater perceived frequency of the activity than indicated by observers; 2) lower than observers, indicating a lower perceived frequency of the activity than indicated by observers; and 3) the same as observers, indicating no differences between members and observers in the perceived frequency of an activity.

These three sets of items formed three scales which were then examined for rating differences between members and observers.

Hypothesis: It was expected that a factor of social desirability would influence member ratings on GPQ items in such a way as to cause a given SHG to be viewed in a more favorable light. Specifically, positively-toned items were expected to elicit higher ratings (greater perceived frequency) for members than observers; negatively-toned items were expected to elicit lower member ratings (less perceived frequency) for members than observers; and neutrally-toned items were expected to elicit similar ratings from both members and observers.

Behaviorally-Oriented Processes In SHGs. As previously mentioned, members' perceptions of SHG processes were assessed by Wollert, Levy, and Knight (1982) in behavioral control and stress coping SHGs. Levy's (1976) typology describes behavioral control groups as being composed of individuals who share a desire to eliminate or control some common problematic behavior. This is accommplished by focusing primarily on group activities designed to control the problem behavior while de-emphasizing other concerns and problems of members. In contrast, members of stress coping groups seek to reduce stress associated with a common status or predicament by sharing and providing mutual support. When Wollert et al. (1982) compared members' perceptions of activities in the two types of groups, it was found that behaviorally-oriented processes were seen as occurring more frequently in behavioral control groups than in stress coping groups. The significance of this finding lay in the fact that it established an empirical basis for a generalization about SHG commonalities.

The present study attemped to replicate the findings of Wollert et al. (1982) by using the GPQ to examine differences in members' perceptions of processes occurring in five behavioral control groups and eight groups which stress mutual support.

Hypothesis: It was predicted that GPQ member ratings would reflect a greater perceived frequency of behaviorally-oriented processes in behavioral control groups than in support groups. A confirmation of this hypothesis would provide support for the validity of the GPQ as well as for a more confident assertion about one aspect of SHG functioning.

Factor Analysis. Factor analysis is an important aspect of construct validity, as it is concerned with the development and explanation of constructs. By simplifying the description of behavior through a reduction of the number of categories of behaviors to a few common factors, factor analytic techniques allow examinations of the statistical as well as the conceptual structure of sets of variables and their interrelationships. When applied to measuring instruments, methods of factor analysis consider each item a somewhat independent "method" or "test" of a construct (Curtis and Jackson, 1962), which is correlated with every other item. The correlations are then inspected for clusters among items which suggest the existence of common interrelationships among items. The set of indentified factors may then be used to delineate constructs relevant to the underlying structure of an instrument.

Several methodological issues should be considered when using factor analytic methods, as choices of technique may effect the type and

number of factors which emerge. An initial consideration is the intended purpose of the analysis. In a "confirmatory" analysis, a direct solution is employed to test hypotheses about the existence of factors, and the nature of linear combinations of variables is stated in advance. An "exploratory" analysis, on the other hand, is used when hypotheses are not formulated and when the main objective is to condense variables into a relatively small number of factors.

Although a variety of variations exist, there are two basic methods of computing the intercorrelation matrix of the variables, the first step in a factor analytic procedure. "Principal components analysis" and "principal factor analysis" differ in the values placed in the diagonal cells of the matrix. The first method places communalities (the sum of the squared factor loadings for each variable) in the diagonal which are equal to one. The second method produces diagonal values which are estimates of communalities, usually the squared multiple correlation of variables. Communalities are then stabilized by a process of iteration, involving a repetition of the factor analysis until final extracted communalities are equal to the initial estimates. Although it is argued that principal components analysis produces factors that consist of common, error, and specific variance that are mixed in some indeterminant way (Comrey, 1973), Cattell (1952) suggests that when the matrix is large (12 or more variables), the error in the communality estimate is minimized.

Factors are extracted from the correlation matrix which maximize the amount of variance accounted for by each successive factor. Approaches to the extraction process include mathematical

transformations, statistical evaluation, and predetermined characteristics of the factor structure (Cattell, 1952), with the method ultimately determined by the nature of the data set.

Once the initial factors are extracted, they are normally rotated to obtain a more interpretable set of factor loadings and to facilitate estimates of factor scores. Rotation is accomplished through one of two general methods: orthogonal rotation, which yields independent factors, and oblique rotation, producing both correlated and uncorrelated factors. Nunnally (1978), maintains that orthogonal rotations are generally preferred because they are mathematically simpler while producing much the same results as oblique rotation, and are less subject to misinterpretation. One of the most successful and widely used approaches to orthogonal rotation is the Varimax method (Kaiser, 1958), which is applied most frequently to exploratory studies employing principal components analysis (Nunnally, 1978).

The interpretation of factors involves decisions about the magnitude of factor loadings and the number of variables needed to delineate a given dimension. Disagreement remains about what constitutes an adequate factor loading, which refers to the correlation between a variable and a factor. Cattell (1952) suggests that the best loadings are in the region of .50 to .90, although loadings as low as .30 are often employed (Comrey, 1973).

A factor is more easily interpreted as the number of high loadings increases. Here again, there is disagreement about the number of "marker" variables needed, but five to twelve is genarally accepted as sufficient to provide a reliable estimate of a factor (Cattell, 1952).

The present study employed an exploratory approach to a factor analysis of the GPQ. Although previous studies and reviews of the literature provide a basis for strong hunches about potential emergent factors, specific hypotheses would have been highly speculative. Therefore, none were proferred; and although the GPQ was not considered to be a mere random collection of variables, questions about the number and kinds of derivable factors were left open.

Summary

The present study explored issues of reliability and construct validity in an effort to establish indicators of the utility of the GPQ for measuring SHG processes. Aspects of reliability which were addressed were homogeneity, or the internal consistency of the GPQ, and the stability of measures over time. The extent to which the questionnaire measures theoretical constructs was examined through several analyses aimed at establishing support for the validity of the instrument. One analysis addressed the similarity of scores obtained from members, non-member participant professionals, and observers, each of which may rate items differently based on differing experiences with SHG processes. A second analysis provided an indication of the extent to which member ratings were influenced by a factor of social desirability. The third analysis attemped to replicate an earlier study which found a higher perceived frequency of behaviorally-oriented processes in behavioral control groups than in stress coping groups. Finally, an exploratory factor analysis was conducted to delineate dimensions which underlie the structure of GPQ, and which, if found in

future studies, would provide support for the validity of the GPQ.

CHAPTER IV

METHODS

RELIABILITY

Subjects

Subjects for the reliability portion of the study were 35 members of Parents United of Oregon, a SHG for sexually abusive families. Subjects were male and female volunteers recruited from small peer-therapy subgroups within the Parents United population. These peer-therapy subgroups were selected for participation due to their characteristically interactive nature, a functioning style typical of most SHGs. For this reason, education-oriented subgroups in Parents United, such as parenting subgroups and communications skills training subgroups, were not asked to participate. All subgroups who were invited agreed to take part in the study. Parents United was paid $3.00 for each completed GPQ.

Parents United was selected to participate in the study due to several considerations. First, with a membership of nearly 200 individuals, it was one of the largest SHGs in the Portland metropolitan area. Second, several indicators suggested that it was a viable group with a stable future: it had been in existence for two and one-halt years; it was receiving increasing recognition from the community, the criminal justice system, and the mental health delivery system; its membership was growing rapidly; and the group was composed of

individuals whose membership was generally long-term (Wollert, Barron, and M., Bob, 1981).

A third consideration was the fact that Parents United is a group in which a large number of professionals are involved, typically as small group facilitators, thus providing the opportunity to obtain a perspective in addition to that of members on the group's activities. Finally, several potential obstacles to collaboration, documented in previous studies (Back and Taylor, 1976; Barish, 1971; Kleiman, Mantell, and Alexander, 1976; Levy 1976), had been overcome. This had been accomplished through the establishment of positive working relationships between Parents United and members of the research team and the adoption of a collaborative approach to SHG research (Wollert, Knight, and Levy, 1980).

Procedure

Three members of the research team distributed GPQ's to the 35 subjects, who were participants in four peer-therapy subgroups which met in separate locations in a community center and an adjoining church. The researchers were present in two of the subgroups while members completed the questionnaire. All questionnaires were collected by the researchers 90 minuters later, at the end of the subroup meetings. The GPQ was completed a second time two weeks later by 30 of the original 35 subjects, using the procedure of the first administration. Five of the original subjects were not present for the second administration.

Data Analysis

Homogeneity. The Reliability program of the Statistical Package for the Social Sciences (Hull and Nie, 1981) was used to provide three sets of coefficients relevant to homogeneity. First, while coefficient alpha was the statistic of interest in assessing homogeneity, the average inter-item correlation was calculated as an important preliminary step. An average correlation which is near zero indicates that no common attribute is being measured, and investigations of the homogeneity of correlations would therefore be pointless. In a typical situation the average correlation among items is .20 (Nunnally, 1978).

The second coefficient obtained was coefficient alpha, which was calculated for process items (Items 1-48), outcome items (Items 49-55), and for the total 55 items. Third, an item discrimination analysis was conducted, in which item scores were correlated with the total score of the remaining items. The objective was to identify items which contribute, through high item-total correlations, to the internal consistency of the questionnaire. When the goal is to increase the homogeneity of an instrument, items which have low correlations with the total score are rejected, albeit with a potential loss of criterion coverage. Item-total correlations also serve to provide a first approximation to the behavior being measured in the initial stages of test development (Anastasi, 1982).

Stability. The stability of the GPQ was assessed by calculating Pearson product moment correlations for the two sets of member ratings. Correlations, standard errors, and confidence zones were obtained for each of the 55 items. Average correlations were then calculated for

process and outcome items.

CONSTRUCT VALIDITY

Subjects

Subjects for the validity portion of the study were three groups of individuals associated with 13 SHGs drawn from the Portland, Oregon metropolitan area and one SHG in Salem, Oregon. The three groups of subjects are described as follows: 1) 155 adult SHG members of both sexes who volunteered to participate in the study; 2) six mental health professionals of both sexes, serving as small peer-therapy group facilitators in Parents United, also volunteer participants; and 3) 10 observers, two males and eight females, six of whom were members of the research team, and four who were undergraduate psychology students at Portland State University.

With the exception of the Salem group, the SHGs were selected from the total population of SHGs in the Portland community that had been identified by the Self-Help Information Service (Tuma, Barron, Wadsworth, Andrews, and Wollert, Note 2). The number of groups selected corresponded roughly to the number of groups in the Portland community which fell into each of four classifications established by the Self-Help Information Service. The four classifications were Health, Life Status, Violence, and Growth. Based on group purpose and composition, the classification system was developed from a study of the variety of SHGs in existence in communities across the U.S. A listing of groups participating in the study, their purposes and composition, the average attendance, the number of completed questionnaires, and the

Self-Help Information Service classifications are contained in Table I. Based on the average attendance, the overall proportion of members completing questionnaires was 56 percent, ranging from 28 percent for Dignity and PSURA to 100 percent for Newcomers, PWP, Recovery, Stroke Club, and WeightRight. It will be noted that two chapters of Recovery, Inc. were included in the study. With the exceptions of the convergence of perspectives analysis and the factor analysis, data from the two chapters were analyzed separately.

The Salem group, Newcomers, Inc., was selected due to the absence of a comparable Health group of sufficient size in the Portland area. Groups which participated in the study agreed to do so after having been contacted by members of the research team, who explained the purposes and nature of the project and offered to share with each group the results of the study. Two groups that were asked to participate declined. The Southwest Portland chapter of Recovery, Inc. did not wish to violate group policy prohibiting involvement in research studies. Parents Anonymous also declined participation in order to protect the confidentiality of members. Individuals in each participating group were paid $3.00 for completing the GPQ.

Procedure

With the exception of Parents United, Gay Women, and PWP, two non-participant observers attended at least four meetings of each group. Three observers attended meetings of Parents United; Gay Women, in the interest of confidentiality, asked that observers not attend group meetings; and no observers were available to attend meetings of PWP. In

TABLE I

DESCRIPTIONS AND CLASSIFICATIONS OF SELF-HELP GROUPS PARTICIPATING IN THE VALIDITY STUDY

Group	Purpose and Composition	Average Attendance	N (completed) GPQs)	Classification
Alcoholics Anonymous (AA)	For individuals suffering from alcoholism	13	8	Health
Anorexic and Bulimic Support Group	For anorexic and bulimic women	10	7	Health
Dignity, Inc.	Serve the spiritual, educational, and social needs of gay Catholics	32	9	Life Status
Gay Women	Consciousness-raising and support for gay women	30	12	Life Status
Newcomers, Inc.	Provide support and social activities for former mental patients	12	12	Health
Parents United, Inc.	Provide assistance for sexually abusive families	100	44	Violence
Parents Without Partners (PWP)	Provide support and social activities for single parents	12	12	Life Status
Portland State University Retired Associates (PSURA)	Provide social and intellectually-oriented activities for retired PSU faculty	28	10	Growth
Recovery, Inc.	Aid in the reduction of chronicity and nervousness in former mental patients	10	10	Health
Stress Control	For individuals experiencing stress	5	10	Health
Stroke Club	For victims of stroke and their families	12	12	Health
WeightRight	Provide assistance in management of overeating	4	4	Health
Women's Group	Provide consciousness-raising and social activities for women	7	5	Growth

an effort to remain as unobtrusive as possible, the observers did not take notes or make recordings; summaries of the proceedings were written after the conclusion of the meetings. The summaries were patterned after those produced by Levy and his associates (1976), and consisted of narrative descriptions of meetings and speculative analyses of SHG processes. At the fifth meetings, following the observation period, observers distributed the GPQ, which was then completed by members, professionals, and observers. Upon completion, questionnaires were returned to observers.

Data Analysis

Convergence Of Three Perspectives Of SHG Processes. Pearson product moment correlation coeffecients were calculated for the average ratings of members and observers in 12 groups, and between professionals and observers, and members and professionals in one group. Coefficients were calculated for process items only (Items 1-48). Confidence intervals for the coefficients were also specified.

Influence Of A Social Desirability Factor. A panel of judges, composed of six members of the research team, were requested to provide their judgments as to the GPQ process items which would be subject to a response set influenced by a social desirability (SD) variable. Based on a procedure suggested by Edwards (1957b), a questionnaire was constructed and completed by judges on which they indicated the vulnerable items. Judges also indicated the direction in which rating distortions were likely to occur (i.e., higher or lower than ratings reflecting actual perceptions). The questionnaire completed by judges

is contained in Appendix C. Items selected by four or more judges formed two scales: the Positive scale, comprised of positively-toned items likely to elicit relatively high member ratings; and the Negative scale, composed of negatively-toned items likely to elicit relatively low member ratings. The remaining neutrally-toned items, judged unlikely to elicit dissimilar ratings between members and observers, comprised the third scale.

Overall mean ratings of members and observers in each of 12 SHGs were obtained for each of the three item scales. Analysis of variance techniques were then used to assess the effects of 1) differences in ratings patterns of members and observers, 2) differences in ratings on the three item scales, and 3) an interaction of type of respondent (member or observer) and item scale (Positive, Negative, and Neutral).

Behaviorally-Oriented Processes In SHGs. The judgments of the panel of six judges identified in the preceding analysis were again requested in the identification of GPQ items which describe behaviorally-oriented processes. Using the rating form contained in Appendix D, judges rated each process item on a 6-point scale according to the degree to which the described activity is presumed to contribute to the control or elimination of unwanted behavior. Ratings were then tallied, and items which received an average rating of 4 or higher were labeled "behaviorally-oriented" processes. These items combined to form the Behavioral dimension. The remaining items on the questionnaire comprised the Non-behavioral dimension.

The author and the pricipal investigator of the research project, after examining observers' summaries of each group's activities, reached

a consensus as to which of the groups in the sample could be considered behavior control groups based on Levy's (1976) definition. The remaining groups were labeled support groups. It was determined that Levy's (1976) "stress coping" label was inappropriate, as some groups in the sample did not fit that definition.

Overall means of member ratings on the behavioral and non-behavioral scales were tested for significant differences. Specifically, the significance of differences was assessed between behavior control and support groups, between all of the individual 14 groups, and within individual groups.

Factor Analysis. The 48 process items of the GPQ were factor analyzed by means of the Factor Analysis program of the Statistical Package for the Social Sciences (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1970). The method used was principal factoring without iteration, with principal components extracted, which placed unities (ones) in the main diagonal of the correlation matrix. The resulting factor matrix was then rotated by the Varimax procedure (Kaiser, 1958). Although 11 orthogonal factors initally emerged with eigenvalues at least equal to 1.00, eight of the factors contained three or less variables with significant loadings, rendering the factors difficult to interpret. In addition, due to the exploratory nature of the analysis, and the small sample size (N = 155), it was determined that only the most reliably identifiable factors would be retained.

A second factor analysis, using the procedure of the first analysis, was performed in which three principal component factors were extracted with eigenvalues at least equal to 2.00. Composite factor

scores were then produced for each case from the factor score coefficient matrix, using the complete estimation method. Using this method, standardized scores were produced for the 155 subjects which included a term for each of the 48 process items rather than only those items that had substantial loadings on one of the three factors. Missing data were replaced by the mean of a variable for a maximum of 10 items (80 percent of the 48 items). Where the number of missing values exceeded 10 items, a factor score for that case was not produced. A total of 15 missing cases were encountered.

Mean standardized scores, standard deviations, and standard errors on the three factors were computed for each group. Factors were described by variables (items) with loadings of .50 or greater.

CHAPTER V

RESULTS

RELIABILITY

Homogeneity

Mean ratings for process items (1-48), outcome items (49-55), and total items (1-55) were 3.3, 3.8, and 3.3, respectively. Standard deviations were .777, .324, and .753, respectively. As indicated in Table II, the average inter-item correlations on the three item scales were strong. Correlations ranged from -.43 for Items 23 and 42, to .89 for Items 13 and 25 on the process item scale. Expressed in terms of the processes which these items reflect, the greatest negative correlation was between expressing mutual concern and extinction; the greatest positive correlation was between normalization and empathizing. Negative correlations comprised 5 percent of the total inter-item correlations on the process scale. Three items were involved in about half the negative correlations: #6 (normative reference), with correlations ranging between -.30 and .56; #22 (punishment), with correlations ranging between -.23 and .32; and #42 (extinction), with correlations between -.43 and .25. Most of the remaining negative correlations were scattered fairly evenly throughout the correlation matrix. Table II also presents standard errors for average inter-item correlations as well as 95 percent confidence zones. Thus, the

TABLE II

AVERAGE INTER-TERM CORRELATIONS, STANDARD ERRORS, AND VALUES OF ALPHA FOR PROCESS, OUTCOME, AND TOTAL ITEM SCALES

Scale	Average Inter-Item Correlation	Standard Error	95 Percent Confidence Interval	Alpha
Process	.30	.007	.29 - .32	.95
Outcome	.63	.032	.56 - .69	.92
Total Item	.31	.006	.30 - .33	.96

expectation is that 95 percent of average correlations obtained from the 55 item scale will lie between .30 and .33.

Values of coefficient alpha, computed using Cronbach's (1951) formula, are also presented in Table II. The values suggest a high degree of internal consistency among items. The significance of the values of alpha is illustrated by obtaining the square roots of the coefficients, producing estimated correlations of obtained scores with true scores (Nunnally, 1978). The estimated correlations of obtained scores with true scores are .97, .96, and .98, respectively, for process, outcome, and total item scales.

The item discrimination anaslysis, the results of which are presented in Table III, produced item-total correlations on the total item scale which ranged from -.25 to .86. The strongest positive correlations were .86 for #24 (prevention), .77 for #28 (providing reinforcement), .76 for #30 (mutual affirmation), and .76 for #47 (summarizing adjustive efforts). The only negative correlation was -.25 for #42 (extinction). Weak correlations were .06 for #6 (normative reference), .08 for #22 (punishment), and .16 for #17 (emotional control).

Stability

Correlations of scores obtained from the test-retest procedure suggest moderate stability of process items (1-48), with the estimate for outcome items (49-55) somewhat higher. Mean ratings and standard deviations for the 55 items on the two administrations are found in Appendix E. Pearson product moment correlation coefficients for the two

TABLE III

CORRECTED ITEM-TOTAL CORRELATIONS FOR PROCESS, TOTAL ITEM, AND OUTCOME SCALES

Item	Process Scale	Total Item Scale	Outcome Scale	Item	Process Scale	Total Item Scale	Outcome Scale
1	.38	.39		29	.72	.72	
2	.20	.22		30	.72	.76	
3	.59	.59		31	.51	.48	
4	.58	.59		32	.71	.73	
5	.68	.70		33	.57	.57	
6	.07	.06		34	.60	.59	
7	.72	.73		35	.47	.44	
8	.20	.19		36	.71	.68	
9	.47	.46		37	.72	.73	
10	.46	.45		38	.63	.63	
11	.55	.52		39	.43	.44	
12	.60	.62		40	.67	.66	
13	.49	.51		41	.66	.66	
14	.57	.55		42	-.20	-.25	
15	.75	.74		43	.56	.56	
16	.33	.32		44	.67	.66	
17	.18	.16		45	.68	.69	
18	.65	.64		46	.68	.69	
19	.19	.20		47	.75	.76	
20	.69	.70		48	.54	.53	
21	.62	.62		49		.70	.82
22	.10	.08		50		.44	.50
23	.69	.71		51		.66	.84
24	.84	.86		52		.64	.81
25	.63	.65		53		.62	.78
26	.51	.49		54		.63	.74
27	.50	.51		55		.67	.80
28	.78	.77					

Note: Items were correlated with scores of remaining scale items to eliminate inflated correlations due to common specific and error variance in the item and the scale.

sets of ratings were calculated for each of the items. Using Fisher's *z'* Transformation (McNemar, 1969), item *z*'s, average *z*'s, and standard errors were obtained. In addition, confidence zones were specified for item correlations. All *z*'s were then converted back to *r*'s.

The average correlation for process items was .59, with a standard error of *z'* of .03. As indicated in Table IV, process item coefficients ranged from .22 for #12, reflecting the process of underscoring problem similarity, to .82 for #17, reflecting the process of emotional control. Other processes which were found to have strong test-retest correlations were: providing reinforcement (#28, r=.81), behavioral proscription (#38, r=.79), and behavioral prescription (#1, r=.77). The weakest correlations were found for experiential group validation (#18, r=.29), punishment (#22, r=.30), and extinction (#42, r=.40).

The average correlation for outcome items was .74, with a standard error of *z'* of .07. Table IV indicates that the seven coefficients, with the exception of .40 for #52, lay between .65 and .87. Item 52 asks respondents to indicate the extent to which they have been helped by their group to learn more about themselves, their problems, and their relationships with others. The coefficient of .87 for #55 suggested that respondents were relatively consistent in their perceptions of how much the group helped them deal with difficulties addressed by the group.

Minimum values of *r* for significance at the .05 alpha level were r (25-27) = .3809, and r (28) = .3494. With the exceptions of Items 12, 18, and 22, retest correlations for individual items were significantly greater than zero. These three items represent the processes of

TABLE IV

STABILITY COEFFICIENTS: TEST-RETEST PROCEDURE

Item	Sets of Ratings	r	Standard Error	95 Percent Confidence Interval	Item	Sets of Ratings	r	Standard Error	95 Percent Confidence Interval
				Process Items					
1	28	.77	.200	.57 - .89	25	30	.59	.192	.29 - .78
2	28	.58	.200	.26 - .78	26	30	.76	.192	.55 - .88
3	30	.50	.192	.17 - .73	27	30	.45	.192	.11 - .70
4	29	.41	.196	.05 - .66	28	30	.81	.192	.64 - .91
5	30	.67	.192	.41 - .83	29	30	.60	.192	.31 - .79
6	30	.59	.192	.29 - .78	30	30	.62	.192	.34 - .80
7	30	.57	.192	.26 - .77	31	30	.71	.192	.47 - .85
8	30	.53	.192	.21 - .75	32	30	.64	.192	.36 - .81
9	30	.62	.192	.34 - .80	33	30	.49	.192	.17 - .73
10	30	.55	.192	.24 - .76	34	30	.70	.192	.45 - .85
11	30	.54	.192	.23 - .75	35	29	.58	.196	.28 - .78
12	30	.22	.192	-.15 - .54	36	29	.51	.196	.18 - .74
13	30	.52	.192	.19 - .74	37	29	.76	.196	.55 - .88
14	30	.57	.192	.26 - .77	38	27	.79	.204	.59 - .90
15	30	.73	.192	.50 - .86	39	28	.49	.200	.24 - .73
16	29	.53	.196	.21 - .75	40	28	.70	.200	.45 - .85
17	28	.82	.200	.64 - .91	41	30	.46	.192	.12 - .70
18	30	.29	.192	-.08 - .59	42	30	.40	.192	.05 - .66
19	30	.45	.192	.11 - .70	43	30	.75	.192	.54 - .87
20	30	.58	.192	.28 - .78	44	30	.58	.192	.28 - .78
21	30	.76	.192	.55 - .88	45	30	.55	.192	.25 - .77
22	30	.30	.192	-.07 - .60	46	30	.43	.192	.18 - .69
23	29	.70	.196	.45 - .85	47	30	.47	.192	.13 - .71
24	29	.68	.196	.41 - .84	48	30	.54	.192	.23 - .75
				Outcome Items					
49	30	.65	.192	.38 - .82	53	29	.86	.196	.72 - .93
50	30	.74	.192	.52 - .87	54	30	.76	.192	.55 - .88
51	30	.73	.192	.51 - .86	55	30	.87	.192	.45 - .93
52	30	.40	.192	.05 - .66					

underscoring problem similarity, experiential group validation, and punishment, respectively. Of the 55 correlations, 32 fell within intervals in which the lower confidence limits were below the critical value or *r* for significance.

CONSTRUCT VALIDITY

Averaging across groups, means and standard deviations were calculated for ratings of members and observers on each of the 55 GPQ items, and are contained in Appendix F. Appendices G-S present item mean ratings for each group.

Convergence of Three Perspectives of SHG Processes

Pearson product moment correlation coefficients for the mean ratings of members and observers, professionals and observers, and members and professionals in each of the 12 groups were calculated for process items (1-48). Using Fisher's *z'* Transformation (McNemar, 1968), a standard error (of *z'*) of .149 was obtained for the 48 pairs of mean ratings in each group. Confidence intervals were calculated for values of *z'*, and *z'*s were then converted back to *r*'s. The coefficients and 95 percent confidence zones are presented in Table V. All *r*'s were significant beyond the .05 level using a two-tailed test. Correlations for Newcomers, PSURA, and Stroke Club fell within confidence intervals in which the lower limits were below .2875, the critical value of *r* for significance. The relationship between ratings of members and observers in these three groups, then, is considered less stable than in the other nine groups. Overall, the analysis indicated that members, observers,

TABLE V

CORRELATIONS BETWEEN MEAN RATINGS OF MEMBERS, OBSERVERS, AND PROFESSIONALS

Group	*r*	95 Percent Confidence Interval
	Members and Observers	
AA	.72	.55 - .83
Anorexic Group	.76	.60 - .86
Dignity	.68	.49 - .81
Newcomers	.42	.16 - .63
Parents United	.74	.58 - .85
PSURA	.35	.07 - .58
Recovery	.79	.65 - .88
Stress Control	.54	.30 - .72
Stroke Club	.52	.27 - .70
WeightRight	.60	.38 - .76
Women's Group	.76	.60 - .86
	Professionals and Observers	
Parents United	.91	.85 - .95
	Members and Professionals	
Parents United	.64	.44 - .78

and professionals responded similarly to GPQ items. The proposition that ratings are influenced by test bias due to experiential differences was therefore not supported.

Influence of a Social Desirability Factor

The predicted discrepancies between ratings of members and observers due to a factor of social desirability were not found. The composition of the three item scales, determined by the panel of judges, were as follows: Positive scale (items likely to elicit higher member ratings than observer ratings)--Items 3, 13, 28, and 30; Negative scale (items likely to elicit lower member ratings than observer ratings)--Items 22, 31, and 42; Neutral scale (no differences in ratings expected)--the remaining process items. Overall and group ratings and standard deviations on the three scales are found in Table VI.

Results of a two-factor ANOVA (respondents x scales), with repeated measures on one factor (scales) indicated a significant main effect for scales, F (11) = 36.05, $p < .001$. No other significant main effects or interactions were found (both F's < 1.0). Results of the analysis are shown in Table VII. Inasmuch as the predicted differences between member and observer ratings on the Positive and Negative scales were not found, it was concluded that the analysis failed to show that member ratings were influenced by a social desirability response set.

Behaviorally-Oriented Processes in SHGs

In general, findings showed that members of behavioral control and support groups perceived behaviorally-oriented processes as occurring with equal frequency in the two types of groups. Those groups which

TABLE VI

MEAN RATINGS AND STANDARD DEVIATIONS ON THREE GPQ SCALES MEASURING SOCIAL DESIRABILITY

	Positive Scale				Negative Scale				Neutral Scale			
	Members		Observers		Members		Observers		Members		Observers	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
AA	3.800	.513	4.800	.283	1.625	.628	2.978	.943	2.978	.262	2.962	.336
Anorexic Group	4.257	.838	4.400	.000	1.857	.378	1.167	.236	3.268	.523	3.000	.495
Dignity	3.267	1.249	3.500	.141	2.125	.616	2.000	.943	2.625	.962	2.763	.654
Newcomers	3.267	1.042	2.600	.566	2.083	.854	2.000	.471	2.720	.848	2.063	.265
Parents United	3.714	.998	3.667	.306	2.326	.873	3.111	.694	3.220	.380	2.725	.247
PSURA	1.800	.680	1.700	.424	1.867	.592	1.500	.707	1.640	.589	1.287	.265
Recovery (Gladstone)	3.840	.358	3.700	.424	1.800	.183	1.167	.236	2.580	.384	2.512	.088
Recovery (N.E.)	3.680	1.026	4.300	.424	1.133	.298	1.333	.471	2.375	.756	2.638	.230
Stress Control	3.700	.750	2.800	.849	1.767	.589	1.500	.707	3.240	.668	2.588	.760
Stroke Club	2.867	1.042	2.000	.566	1.750	1.207	1.333	.471	2.462	.918	1.688	.230
WeightRight	3.700	.476	2.800	.566	2.250	.569	1.500	.707	3.200	.380	2.725	.247
Women's Group	3.390	.673	3.375	.495	4.080	.743	4.300	.141	2.000	1.000	2.000	.943
Across Groups	3.450	.650	3.300	.950	2.070	.680	1.990	.970	2.690	.520	2.410	.530

TABLE VII

ANALYSIS OF VARIANCE: SOCIAL DESIRABILITY

Source	SS	df	MS	F
Total	61.20	71		
Subjects	14.37	11		
Respondent	.55	1	.55	-.30
Scale	32.96	11	16.48	36.05*
Respondent x Scale	.57	2	.29	.16
$Error_r$	-2.72	22	-.25	
$Error_s$	10.06	2	.45	
$Error_{r \times s}$	38.37	22	1.74	

* $p < .001$

were labeled behavioral control groups were AA, Anorexic Group, Parents United, Recovery, and Stress Control. Support groups were Dignity, Gay Women, Newcomers, PWP, PSURA, Stroke Club, WeightRight, and Women's Group.

The GPQ process items which comprised the Behavioral dimension were those identified by the panel of judges as describing activities most likely to be employed by a SHG whose primary goal was the control or elimination of undesirable behavior. These items, reflecting behaviorally-oriented processes, were: 1, 4, 6, 9, 11, 15, 17, 20, 22, 24, 28, 31, 32, 33, 36, 38, 40, 42, 44, and 47. The remaining GPQ process items comprised the Non-behavioral dimension.

Mean ratings and standard deviations on the Behavioral and Non-behavioral dimensions were calculated for each of the 14 SHGs, for behavioral control and support groups, and for the total sample. Table VIII presents these statistics, with groups rank-ordered by means on the two dimensions. Results of the Spearman Rank-Order Correlation (*rho* = .79) indicated that the rank orders for the two dimensions were significantly related, t (12) = 5.99, $p < .001$ (two-tailed test).

Using both *t*-tests for independent samples and the Mann-Whitney U-Test, it was found that behavior control and support groups did not differ significantly on either the Behavioral or the Non-behavioral dimensions (t's < 1.0, one-tailed tests). Thus, the hypothesis that behavioral control groups employ behaviorally-oriented processes more often than support groups was not confirmed.

T-tests for independent samples were used to test for differences between individual groups on the Behavioral and Non-behavioral

TABLE VIII

MEAN RATINGS, STANDARD DEVIATIONS, AND GROUP RANKS FOR BEHAVIORAL AND NON-BEHAVIORAL PROCESS ITEMS

Group	Behavioral Scale	SD	Rank	Non-Behavioral Scale	SD	Rank
AA	2.413	.500	10	3.384	.298	6
Anorexic Group	3.079	.472	2	3.429	.577	4
Dignity	2.294	.929	11	2.897	1.026	9
Gay Women	2.729	.489	6	3.571	.364	2
Newcomers	2.517	.886	8	2.869	.829	10
Parents United	2.963	.705	3	3.396	.666	5
PWP	2.617	.621	7	3.229	.601	8
PSURA	1.715	.562	14	1.639	.586	14
Recovery (Gladstone)	2.450	.302	9	2.814	.411	11
Recovery (NE)	1.920	.770	13	2.800	.784	12
Stress Control	2.805	.690	5	3.475	.660	3
Stroke Club	2.096	1.070	12	2.720	.868	13
WeightRight	3.138	.423	1	3.232	.434	7
Women's Group	2.830	.747	4	3.764	.623	1
Behavior Control Groups	2.667	.794		3.298	.319	
Support Groups	2.492	.448		2.988	.652	
Across Groups	2.614	.794		3.137	.807	

dimensions. Figure 1 shows significant differences (two-tailed tests) between groups on the Behavioral dimension. It is noteworthy that groups tended to cluster together in terms of the between-group differences. For example, Anorexic Group, Parents United, and WeightRight showed similar patterns in rating behaviorally-oriented processes as occuring relatively frequently when compared to other groups. In contrast, Gay Women and Stress Control rated these processes as occurring more frequently than only two groups, PSURA and Recovery. AA, Newcomers, PWP, and Women's Group all rated behavioral processes as occurring more frequently than PSURA alone. Finally, Dignity, PSURA, Recovery, and Stroke Club reported the least frequent use of behaviorally-oriented processes.

Figure 2 presents differences between groups on the Non-behavioral dimension. Again, distinct patterns emerged among groups in the relative perceived frequency of these processes. Four distinct rating patterns emerged: 1) Gay Women and Women's Group both rated non-behavioral processes as occurring significantly more often than in four other groups; 2) AA, Anorexic Group, Parents United, and Stress Control all differed significantly from PSURA, Recovery, and Stroke Club; 3) Newcomers, PWP, Recovery, Stroke Club, and WeightRight, reporting these processes as quite infrequent, differed only from PSURA; and 4) Dignity and PUSRA did not rate non-behavioral processes more often than any of the groups.

Using two-tailed t-tests for related measures, it was found that with the exceptions of PSURA and WeightRight, all groups rated non-behavioral processes as occurring significantly more often than

Perceived Frequency Significantly Greater

Perceived Frequency Significantly Less

Groups	AA	Anorexic Group	Dignity	Gay Women	Newcomers	Parents United	PWP	PSURA	Recovery	Stress Control	Stroke Club	Weightright	Women's Group
AA		X				X						X	
Anorexic Group													
Dignity		X										X	
Gay Women													
Newcomers													
Parents United													
PWP													
PSURA	X	X		X	X	X	X			X		X	X
Recovery		X		X		X				X		X	
Stress Control													
Stroke Club		X				X						X	
Weightright													
Women's Group													

Figure 1. Significant differences ($p < .05$, two-tailed test) between groups on the perceived frequency of behaviorally-oriented processes.

Perceived Frequency Significantly Greater

Perceived Frequency Significantly Less

Groups	AA	Anorexic Group	Dignity	Gay Women	Newcomers	Parents United	PWP	PSURA	Recovery	Stress Control	Stroke Club	Weightright	Women's Group
AA													
Anorexic Group													
Dignity													
Gay Women													
Newcomers				x									x
Parents United													
PWP													
PSURA	x	x		x	x	x	x		x	x	x	x	x
Recovery	x	x		x		x				x			x
Stress Control													
Stroke Club	x	x		x		x				x			x
Weightright													
Women's Group													

Figure 2. Significant differences ($p < .05$, two-tailed test) between groups on the perceived frequency of non-behavioral processes.

behaviorally-oriented processes. Table IX presents values of t, degrees of freedom, and significance levels for the within-group differences.

Factor Analysis

The final factor analysis, extracting principal component factors with eigenvalues at least equal to 2.00, produced three factors which accounted for 44.9 percent of the total variance among process items. The first factor accounted for 33.1 percent of the variance, while the second and third factors accounted for 6.8 and 5.0 percent of the variance, respectively. The Varimax rotated factor matrix is found in Table X. The three factors were described by item variables with loadings greater than .50. The items and group processes used to identify each factor are indicated in Table XI. The first factor appeared to characterize a dimension of support. Five loadings were above .70, reflecting the processes of empathizing, mutual affirmation, expressing mutual concern, existential sharing, and normalization.

Factor 2, labeled interpersonal learning, contained four variables with loadings greater than .60. These items described the processes of confrontation, behavioral control, spotting inconsistency, and prioritizing.

The third factor appeared to reflect a dimension of group norms, with the highest loading, .74, on the process of emotional control.

Using the complete estimation method described in Chapter IV, standardized factor scores were produced for 140 of the 155 SHG member cases. It will be recalled that 15 cases were eliminated from the analysis, as 11 or more missing values were encountered for each case.

TABLE IX

SIGNIFICANCE OF WITHIN-GROUP DIFFERENCES IN RATINGS OF BEHAVIORALLY-ORIENTED AND NON-BEHAVIORAL PROCESS ITEMS

Group	t	df
AA	4.62**	7
Anorexic Group	2.64*	6
Dignity	4.53**	8
Gay Women	7.44***	11
Newcomers	4.37**	11
Parents United	7.20***	43
PWP	7.11***	11
PSURA	-1.02	9
Recovery (Gladstone)	3.47*	4
Recovery (N.E.)	3.78*	4
Stress Control	5.36***	9
Stroke Club	4.35**	11
WeightRight	.55	3
Women's Group	13.18***	4

Note: All significant t's reflect higher ratings on neutral items.
* $p < .05$, two-tailed test.
** $p < .01$, two-tailed test.
*** $p < .001$, two-tailed test.

TABLE X

VARIMAX ROTATED FACTOR MATRIX

Item	Factor 1	Factor 2	Factor 3	Item	Factor 1	Factor 2	Factor 3
1	.42	.36	.10	25	.79	.16	-.08
2	.13	.17	.45	26	.42	.41	.29
3	.63	-.01	.15	27	.11	.60	.31
4	.40	.35	.11	28	.41	.34	.22
5	.34	.53	.06	29	.72	.27	.04
6	-.14	.31	.62	30	.77	.19	-.04
7	.63	.12	.06	31	.19	.72	-.01
8	.23	-.29	.58	32	.51	.54	-.06
9	.11	.63	.13	33	.11	.63	.12
10	.52	.35	.01	34	.43	.35	-.19
11	.12	.50	.29	35	.46	.06	-.04
12	.49	.18	.43	36	.50	.56	.08
13	.72	.08	.13	37	.50	.58	-.17
14	.42	.45	.13	38	.21	.59	.04
15	.40	.25	.39	39	.48	.42	-.00
16	.03	.33	.57	40	.35	.54	.25
17	.05	.03	.74	41	.44	.57	.02
18	.62	.16	.29	42	-.21	-.01	.35
19	.35	.30	.08	43	.41	.45	-.21
20	.60	.35	.09	44	.56	.45	.04
21	.71	.22	.03	45	.48	.54	-.03
22	-.17	.44	.15	46	.23	.61	.29
23	.76	.04	-.03	47	.62	.43	.11
24	.56	.51	-.04	48	.56	.43	.11

TABLE XI

FACTOR DESCRIPTIONS: GPQ PROCESSES AND FACTOR LOADINGS

FACTOR DESCRIPTIONS/GPQ ITEMS	FACTOR LOADINGS
#1 - SUPPORT	
3. Reassurance	.626
7. Endorsement	.635
10. Self-disclosure	.515
13. Normalization	.717
18. Experiential group validation	.618
20. Brainstorming	.597
21. Explanation	.715
23. Expressing mutual concern	.763
24. Prevention	.556
25. Empathizing	.790
29. Existential sharing	.724
30. Mutual affirmation	.769
32. Functional analysis	.505
36. Dispositional analysis	.500
44. Behavioral responsibility	.560
47. Summarizing adjustive efforts	.616
48. Etiological review	.558
#2 - INTERPERSONAL LEARNING	
5. Offering feedback	.532
9. Spotting inconsistency	.625
11. Behavioral contracting	.503
24. Prevention	.513
27. Requesting feedback	.596
31. Confrontation	.718
32. Functional analysis	.540
33. Behavioral control	.633
36. Dispositional analysis	.562
37. Requesting elaboration	.575
38. Behavioral proscription	.592
40. Stressing behavioral responsibility	.542
41. Reflection	.567
45. Encouraging catharsis	.541
46. Prioritizing	.613
#3 - GROUP NORMS	
6. Normative reference	.624
8. Cathartic humor	.575
16. Experiential learning	.566
17. Emotional control	.743

Mean factor scores were calculated for each group, as well as standard deviations and standard errors, and are presented in Table XII. Averaging across the 13 groups, the mean scores for Factors 1, 2, and 3 were .01, .01, and .13, respectively. The highest mean factor score on Factor 1 (support) was found for AA, the lowest for PSURA. WeightRight produced the highest mean score on Factor 2 (interpersonal learning), while Recovery produced the lowest. For Factor 3 (group norms), the high score was obtained for Newcomers; the lowest was for Gay Women.

TABLE XII

MEAN STANDARDIZED FACTOR SCORES, STANDARD DEVIATIONS, AND STANDARD ERRORS

		Factor 1			Factor 2			Factor 3		
Group	N	Mean	SD	Standard Error	Mean	SD	Standard Error	Mean	SD	Standard Error
AA	7	.9530	.462	.175	-1.0182	.441	.167	-.0254	.933	.353
Anorexic Group	7	.1695	.708	.268	.6074	.405	.153	-.3101	.791	.299
Dignity	8	-.2511	.626	.221	.0913	.685	.242	-.0590	.460	.163
Gay Women	12	.4841	.355	.102	.3611	.890	.257	-1.0672	.667	.193
Newcomers	10	-.8625	.714	.226	.0207	.911	.288	.5878	1.024	.324
Parents United	36	.1608	.835	.139	.5538	.830	.138	-.2441	.830	.138
PWP	12	.2908	1.041	.301	-.4861	1.009	.291	.3133	.886	.256
PSURA	6	-2.0694	.702	.286	.5354	.286	.117	-.5188	.555	.227
Recovery	5	.5506	.354	.158	-1.3248	.554	.248	.2422	.963	.430
Stress Control	9	.2875	.667	.222	-.2142	.884	.295	.3363	.769	.256
Stroke Club	3	-.3892	.951	.549	-.4921	.983	.568	.3563	1.028	.593
WeightRight	3	.0125	.946	.546	.7719	.360	.208	-.3604	.627	.362
Women's Group	3	.8345	.431	.249	.7473	.179	.104	-1.0596	.577	.333

Note: Standardized factor scores have a mean of zero.

CHAPTER VI

DISCUSSION

The Group Process Questionnaire was developed as a research tool for investigating activities and processes occurring in SHGs. Its introduction as part of an ongoing investigation represents a significant methodological advance in a field of inquiry marked by unique barriers to empirical research. Predominant among published reports have been impressionistic discussions of the means by which SHGs function and their apparent effectiveness in meeting the needs of their members. The study of SHG processes by Wollert, Eakins, and Dixon (Note 1), in which the GPQ was used to assess the perceived frequency of group activities, is among only a handful of studies that have attemped to objectively identify the range of operational methods employed. The aim of the present study was to provide some indication of how accurately the GPQ measures these perceptions of SHG processes.

The most general question addressed by the present study concerned the extent to which the GPQ measures what it is purported to measure; that is, does the questionnaire validly measure perceptions of SHG processes? As a means of estimating the adequacy with which GPQ items define the domain of SHG processes, items were first examined to determine their functional interrelationships. To this end, items were analyzed for the degree to which they exhibit both internal and temporal consistency, or reliability. Providing a necessary but not sufficient

condition for validity, the reliability analysis was followed by several investigations of the construct validity of the instrument. The goal was to establish evidence that GPQ items behave as expected on the basis of theory about the nature of SHG processes. Finally, items were factor analyzed in an initial attempt to delineate the conceptual dimensions which comprise the internal structure of the GPQ.

RELIABILITY

Homogeneity

The prime concern in the analysis of homogeneity was the extent to which the sampling of items influenced measurement error. In terms of classical test theory, each item was viewed as a single test, with true and error components. As indicated by the average inter-item correlations, the error component of individual items is large, at least for process items. Individual items, however, do not have to intercorrelate very highly to produce a high alpha coefficient if a test is long enough. In fact, the average intercorrelation of items on the GPQ (.30 for process items) is relatively high when compared with typical inter-item correlations, which generally range between .10 and .30 (Nunnally, 1978). The power and reliability of an instrument is achieved by adding up a large number of items, wherein individual items become less important.

While coefficient alpha remained high on the seven-item outcome scale (.63), the larger standard error for estimating the average inter-item correlation reduced the precision of the estimate. Thus, it appears that there was very little error in the estimation of

reliability which can be attributed to random error in the selection of items. The weak correlations of some items with other scale items (for example, #6 and #22, reflecting the processes of normative reference and punishment, respectively) were in all likelihood not caused by random selection errors. According to Nunnally (1978), in an adequate sample of persons, these low correlations would indicate that the items are representative of different content domains. However, in the present case, they may be attributable to sampling error because of the small sample or to some systematic difference in the way they were obtained for inclusion in the questionnaire.

Stability

The numerous potential sources of random error in the stability coefficient cause it to be less easily interpretable than the estimate of internal consistency. First, however, it is necessary to evaluate the extent to which prerequisite assumptions for the computation of the coefficient were met. Perhaps most critical is the assumption that perceptions of SHG processes are stable over time. Logically, it would seem reasonable that over the long run the needs of individuals, and therefore the experiences which they require from a SHG, would undergo changes. However, as Antze's (1976) descriptions of AA, Recovery, Inc., and Synanon aptly illustrate, many SHGs are successful due in part to strong notions about the nature of dysfunction and how it is managed. Parents United in particular, with its constant interface with legal and professional institutions, its connection with a national organization, the complex organizational structure, and its system for training

volunteers and members in group facilitation (Wollert, Barron, and Bob M., 1981), would be expected to vary little in the processes it employs over short periods of time.

Invariability of group functioning, however, does not ensure invariability of perceptions of group functioning. As with any self-report inventory, responses are limited to what an individual knows or is willing to relate. Since in the present study there were no requirements regarding the length of subjects' membership in Parents United, it is conceivable that newer members responded to items with little confidence or even in a random manner. If enough subjects responded randomly, differences from test to retest may have been due primarily to randomly distributed error factors (Brown, 1970), accounting, at least in part, for the reduced (r=.59) reliability coefficient.

A second assumption made in computing the stability coefficient is that no differential practice effects exist. To the extent that the scores of some subjects are influenced to a greater degree than the scores of other subjects, the reliability coefficient will be reduced. As discussed in Chapter III, memory effects were not expected to exert a significant influence, either on a differential basis or for the sample as a whole (if most subjects had remembered their responses on the first adminstration, the coefficients would have been increased). It is possible, however, that some subjects were sensitized to some processes--based on previous group experiences--by completing the GPQ the first time. With perceptions influenced by a heightened sensitivity to these processes, responses may have been correspondingly affected on

the second administration. Thus, it cannot be stated with certainty that differential practice effects which reduced the stability coefficient did not occur.

The third assumption, that no differential learning occurred between administrations, also poses potential difficulties. Subjects were participants in four peer-therapy subgroups which met in different locations. As test administrators were not present at the interim meetings of two of the subgroups, and instructions to curtail discussion of the questionnaire were not given, it is possible that subjects in one or both of these subgroups conferred with each other about aspects of the questionnaire. Resulting changes in responses by some, but not all, subjects on the second administration may have been reflected in the lowered stability coeffecient.

The difficulties in interpreting the stability coefficient mentioned above are closely related to additional ones produced by administrative procedures. As already suggested, the absence of test administrators in two of the subgroups may have resulted in subjects discussing questionnaire material. Additional effects of the lack of control in these subgroups may have been produced by disruptions of procedures due to uncomfortable environmental conditions and/or interruptions. For example, members of one subgroup sat in small chairs designed for preschoolers; members of another subgroup met in an unventilated room despite high summer temperatures. Responses could also have been affected by disruptions such as noise from members meeting in adjoining rooms or from activity occurring on the street outside. In the event of such interruptions of administrative

procedures, the test administrator would normally determine the best way to minimize the inconvenience and distraction to subjects, and decide whether retesting is required (Brown, 1970).

Another source of error is within subjects. Although certainly one of the most difficult to evaluate, this type of error may be particularly potent for members of SHGs dealing with mental health-oriented issues. It seems highly likely that variable motivational problems, particularly for newer members of Parents United, may have influenced scores. Many members of Parents United, on any given occasion, may be facing court appearances and possible incarceration. Even more likely is the possibility that members may be severly depressed or suffering from intense emotional trauma. In addition, an individual's psychological state can change rapidly and dramatically as a result of external events or perceptions that they have begun to receive help with their difficulties. These within-subject factors may have contributed, to an unknown degree, to the large error component of the stability coefficient.

On the whole, it is difficult to point to one source as the major contributor to variable error in the coefficient; it is most likely the case that all those suggested exerted a significant influence. One factor which can be eliminated as a source of error, however, is a restriction in the range of scores, as indicated by the large standard deviations of item scores. An additional complication, however, resides in the small sample ($\underline{N}$=30). As Nunnally (1978) notes, the accuracy required in measurement theory will not permit excessive sampling error due to a small number of subjects. Some amount of error,

therefore, may be attributed to an artifact of the restricted sample size.

Subsequent evalutions of the stability of the GPQ would be greatly enhanced by increased control over the conditions of administration, with a different and larger sample of sujects. For example, a large, stable SHG with a format based on member interaction, and with no ties to formal legal or professional institutions, could be asked to participate in a reliability study. Individual subjects would be selected based on length of membership--approximately three months would seem adequate to allow subjects to respond to items with some degree of confidence. The GPQ would be administered to all subjects simultaneously, with provisions made to minimize the opportunity for interruptions (such as a sign on the door indicating that testing is in progress). Subjects would be made as comfortable as possible, and test administrators would remain in the room to answer questions and to deal with distractions. Instructions would be given to curtail all discussion of the questionnaire until the second administration is complete. Administrators would be present at meetings occurring between administrations. The second administration of the GPQ would be conducted under conditions identical to those of the first administration. In the event of major disruptions of procedure, attempts would be made to retest under improved conditions.

As a final point, reliability could probably be increased by increasing the number of steps on the rating scale from five to as many as 20 (Guilford, 1954). Although an increased number of scale steps increases error variance, it simultaneously increases true score

variance, but at a faster rate. While the increases are generally rapid at first, only small gains in reliability are achieved after about 11 steps. Seven steps may be an optimum number, since too many may increase chances of subjects becoming irritated, confused, and careless. According to Nunnally (1978), however, such findings have been rarely reported.

CONSTRUCT VALIDITY

Convergence Of Three Perspectives OF SHG Processes

While the specific purpose of the GPQ is to obtain measures of perceived SHG processes, the larger issue concerns the extent to which such measures reflect actual SHG processes. Acknowledging the desirability of validating this construct with behavioral measures, it is clear that such an effort was beyond the scope of the current research. It was deemed that a useful analysis, which could provide some indication as to whether or not such future efforts would be worth pursuing, was to assess the relevancy of the questionnaire to three sets of individuals whose experiential backgrounds vary. Such a cross-validation of perceptions would indicate, at the very least, that the GPQ measures something with some amount of accuracy, and that that something is viewed the same by individuals with differing psychological investments in SHGs.

According to Brown (1970), however, this type of analysis, which he labels "process analysis," serves to clarify the meaning of a construct by determining the extent to which different individuals utilize similar processes in responding to items. Using this reasoning,

the results of the analysis suggest that in nine of the twelve groups, members, observers, and professionals based their responses on their actual perceptions of SHG processes, and that these perceptions are in agreement. Taking this reasoning one step further, the results also suggest that these congruent perceptions reflect actual SHG processes.

The low correlations found in Newcomers, PSURA, and Stroke Club suggest that the responses of members and observers were determined by somewhat different variables. The observed differences may not, however, be due to a response bias resulting from differing experiences with SHGs. Some members of Newcomers and Stroke Club, for different reasons, maintained tenuous contact with reality, as indicated in observers' narrative summaries of group meetings. Physical difficulties resulted in many members of Stroke Club failing to respond to a significant number of items. Random responding or failure to respond by members of these groups could have produced the low member-observer correlations.

The lack of correspondence between ratings in PSURA is more difficult to interpret. Members reported low frequencies of most processes, and observers' summaries indicated that the group engaged primarily in non-interactive intellectually-oriented activities (such as lectures). Levy's (1976) definition of a SHG, however, focuses on member interactions in mental health-oriented groups. It may be that while members failed to see the relevance of GPQ processes to their group, observers focused on isolated member interactions which were of minor importance to overall group functioning. Thus, it is possible that observers may have unwittingly attemped to make the group conform

to a definition of a SHG which was inappropriate. The current findings are useful, however, in pointing up the need for further clarification regarding the parameters of the domain of SHG processes. Non-interactive processes are known to be employed in SHGs, even in those with a high degree of interaction among members. Examples would be when a stepparent group asks an attorney to speak on the legal aspects of child custody and adoption, or when a group for single adults invites a mental health professional to lecture on the psychological impact of divorce. Inclusion of these types of activites within the process domain would clarify the SHG status of groups such as PSURA that employ predominantly non-interactive processes. Moreover, an expanded defintion of SHGs, which includes growth-oriented as well as problem-focused forms of help-giving, may be justified.

Influence Of A Social Desirability Factor

The fact that no effects of social desirability (SD) were found in the ratings of members is congruent with the observation that the factor exerts the strongest influence on measures of personality traits. Most personality inventories ask individuals to make fairly complex judgments about their behavior, resulting in less confident responses regarding these "self-descriptions" (Nunnally, 1978, p. 591). Even self-report measures of attitude are thought to be less vulnerable to an SD variable than self-description inventories. It may be reasoned that if individuals are less certain about the social desirability of attitudes than of personality traits, then they should be even less certain of the social desirability of activities occurring in a SHG. In

addition, the assurance of anonymity logically should have reduced the influence of an SD variable.

The analysis might have been strengthened, however, in at least two ways. First, judgments of the social desirability of items obtained from a sample of SHG members might have been preferable to those of researchers. A rating scale could then have been used to indicate the degree of influence such a factor might actually exert on responses, with these judgments based on direct experience with specific activities. As different groups operate by different methods, it is assumed that the social desirabiltiy of activities would be differentially perceived by members of different groups. Thus, it is likely that a larger number of items would have been included on the Positive and Negative SD scales.

Second, while the ratings of observers were considered the objective anchor point from which to judge rating distortions by members, such an assumption may have been unwarranted. It is not inconceivable that after attending four or more meetings of a SHG, an observer might respond to GPQ items in a manner similar to that of members (observers were not alerted to the potential influence of an SD factor). Adequate training of observers with respect to the operation of an SD response style would have allowed more confidence to be placed in the objectivity of observer responses.

As a final consideration of the obtained results, it should be noted that both members and observers rated positive items highest, negative items lowest, and Neutral items at the mid-point, and that significant differences were found between combined ratings on the three

scales. Based on the SHG literature, which suggests a strong component of support in these groups, such a pattern could have been predicted. Negatively-toned processes, such as extinction and punishment, would seem incongruent with support-giving (except in highly cohesive groups with members of long standing), especially when the existence of SHGs is entirely dependent on the attraction of self-selected members to the groups. The correspondence of member and observer responses in a predictable pattern gives credence to the suggestion that the GPQ does measure primarily SHG processes, and not a combination of SHG processes and expressed social desirability.

Behaviorally-Oriented Processes In SHGs

This analysis provided a relatively pure form of a test of construct validity by attempting to establish a relationship between a property of GPQ scores and hypothesized differences in the processes used by different types of SHGs. Based on the findings of Wollert, Levy, and Knight (1982), it was expected that differences would be found between behavioral control groups and support groups in the use of behaviorally-oriented processes. While the expected differences were not found, certain methodological variations in the current study and that of Wollert et al. existed, and may have had an influence on the obtained results. First, the findings of Wollert et al. emerged from an exploratory analysis in which Levy's typology was applied to sample groups post hoc. Group classifications were applied in advance in the present analysis, and a hypothesis was tested, thereby increasing the explanatory power of the obtained results. Second, by replacing the

classification of "stress coping" with "support" in the current study, non-mental health groups (PSURA and Women's Group) were included in the analysis. This sample was in contrast to that of Wollert et al., in which all groups addressed mental health issues and conformed to Levy's SHG definition. The differences between the two samples may have produced the discrepant findings of the studies.

Third, while differences between the two types of groups were assessed on the basis of 12 behavioral processes in the Wollert et al. study, 20 behavioral processes were used in the present investigation. It is possible, as found in the earlier study, that a relatively small number of the least threatening and most easily utilized behavioral processes are used by SHGs. An expansion of the range of behavioral processes in the current study may have militated against significant results. Overall then, methodological differences between the two studies make comparisons of findings difficult.

Of interest in the present analysis is the finding that differences do exist between groups in the use of behaviorally-oriented processes. These differences were not predictable, however, on the basis of Levy's typology, which focuses on purpose and composition of mental health SHGs. The present representative sample, as previously mentioned, included groups which were not encompassed within Levy's classification system. In addition, AA and Recovery, mental health SHGs whose purposes and compositions met the criteria for behavioral control groups, falied to show the expected higher frequencies of behaviorally-oriented processes. The observed low frequencies of these processes is consistent with the views of Antze (1976), who stresses a

strong cognitive component in these two groups, and Yalom (1970), who views them as encouraging primarily the operation of "instillation of hope, imparting of information, universality, altruism, and some aspects of group cohesiveness" (p. 78). In addition, Caplan (1974) sees AA as employing supportive and social processes to achieve its purposes. In view of these considerations and the obtained findings, it is suggested that knowledge of the purposes and composition of a group provides an inadequate basis for predictions regarding processes employed.

Another important finding of the current study was that behaviorally-oriented processes, in general, are infrequently used by SHGs. The findings support the suggestion of Wollert et al. that the use of such techniques requires a level of skill and training which is beyond that of most SHG members. The more frequent use of behavioral techniques found in Anorexic Group, Parents United, and WeightRight may reflect direct professional training (as in Parents United), or members' more frequent contact with professionally-directed therapeutic models. In general, however, the most important component of groups appears to be the fulfilling of personal and social needs through the mutual exchange of expressions of caring, understanding, and support for change and growth.

Factor Analysis

The factor analysis was intended primarily to stimulate subsequent efforts to specify the domain of SHG processes in general and parsimonious terms. The study at hand represents a preliminary step in that direction. The three identified factors labeled support,

interpersonal learning, and group norms emerged with enough strength to suggest that they might be reproduced in future analyses. The group factor scores, while providing an incomplete picture of the range of processes employed, generally suggest the perceived role of supportive, cognitive, and normative factors in individual groups.

It is speculated that the failure of the analysis to extract factors which account for the remaining 55.1 percent of the variance is due to in part to overestimation of communalities by placing unities in the diagonal of the intercorrelation matrix. One general effect of overestimation of communalities is to increase the number of factors extracted (Cattell, 1952). Thus, the 12 items not included in the first three factors formed 12 one-variable factors. An examination of final communalities, which ranged from .17 on Item 42, to .63 on Item 30, verified the fact that communalities were overestimated. These circumstances most likely could have been avoided by using the process of iteration, i.e., repetition of the analysis using increasingly improved communalities. The overall effect of this procedure would be to reduce the number of extracted factors by including more of the total variables into each factor.

As with the estimation of communalities, sampling error probably affected the number and nature of extracted factors. One estimate for evaluating the adequacy of sample size is provided by Comrey (1973): 50-very poor; 100-poor; 200-fair; 300-good, 500-very good; 1000-excellent. According to this criteria, the current sample size ($\underline{N}$=155) is poor. The consequences of sampling error generally become most evident in the factors accounting for the smallest amount of

variance, where it becomes more difficult to determine whether factors reflect real influences or error (Cattell, 1952). Although it would be inaccurate to assume that all the chance error lay in the unextracted factors, it is safe to say that an appreciable portion would be found in the remaining variance. Since the third factor (group norms) contains four variables which account for only 5 percent of the total variance, it is speculated that some of the observed intercorrelation among these variables is also error. It is also probable that the three extracted factors were missing elements which should have come from factors that were omitted from the extraction (Cattell, 1952). The general effect of sampling error is to decrease the confidence that may be placed in the invariance of factors, especially weaker ones. The likelihood that similar factors would emerge in different samples of individuals is correspondingly reduced. Thus, although the three identified factors were subject to error due to the small sample size, effects of such error should be less serious than those associated with factors accounting for less variance. Of the three factors, the third is most likely to undergo changes in form in subsequent analyses in which sampling error is minimized.

Error was also introduced into the present analysis by correlations with missing values. A case was omitted from the computation of a given correlation coefficient if the value of either of the variables being considered was missing. While this process of "pairwise deletion" has the advantage of utilizing as much data as possible, it may have produced artificial correlations that were based on different samples. The probable overall effect in the study at hand

was, again, to increase the number of emergent factors (Cattell, 1952). The replacement of missing values by the mean of a variable in the calculation of factor scores had the effect of reducing the magnitude of the scores in relation to the number of missing values. The greatest percentages of missing values were encounted for Stroke Club, Recovery, PSURA, and Women's Group, respectively.

Subsequent factor analyses of the GPQ would be greatly enhanced by careful attention to the adequacy of sample size, by concerted efforts to reduce the amount of missing data through thorough instructions and attendance to conditions of test administration, and by improvment of communality estimates through the iterative process. If a substantial amount of variance is left unfactored despite these methodological improvements, essentially two courses of action remain: 1) additional items which presumably measure the same aspect of SHG processes may be added to those which do not correlate well with others, or 2) these items may be redefined or reconstructed in order to measure the construct differently. A third option is to abandon the assumption that the uncorrelated items measure perceived SHG processes (Nunnally, 1978). The ultimate goal of future analyses should be to construct homogenous subscales composed of enough items to accurately measure all dimensions in the domain.

LIMITATIONS OF THE STUDY

The small sample size represents a major limitation of the study, as it restricts the number and strength of generalizations that might otherwise be drawn. The analyses most affected by sampling error

were the stability analyses and factor analyses, where it was difficult to separate real and error effects from obtained results.

Due to limited time and financial resources, the factor analysis was not accorded the level of analysis required to form definitive conclusions about the internal structure of the GPQ. The present analysis may be viewed as paving the way for more exhaustive factor analytic examinations.

It is apparent that the GPQ measures only interactive processes. Yet, results indicated that some groups, such as PSURA and, to some extent, Recovery, engage in primarily non-interactive processes. Future efforts directed toward specification of education-oriented and member-leader activities, and their addition to the GPQ, would provide a more complete description of the domain of SHG processes.

Results also suggest that the GPQ may be further limited with regard to the types of groups for which it is a useful measuring device. The lack of correspondence between ratings of members and observers in Newcomers and Stroke Club suggests that a level of verbal and observational ability, and the capacity to abstract from experience, may be required to elicit accurate responses from members. Discussion of group processes prior to administering the instrument might result in some improvement in terms of reducing the frequency of random responding and falilure to respond. In addition, administrators would be advised to remain present during testing to answer questions and minimize distractions.

CONCLUSIONS

The findings of the present study suggest that the GPQ holds promise as a research tool to increase understanding of the methods by which SHGs function. It was generally indicated that the internal structure of the GPQ is characterized by at least three homogenous process dimensions dominated by a strong component of support-giving. These results are consistent with the bulk of SHG literature and with the findings of the analysis of behavioral processes. It was also found that there is agreement among individuals who relate questionnaire items to observable behaviors, suggesting that the instrument does measure SHG processes.

Inconclusive results of the stability analysis argue for continued effort directed toward establishing a basis for assertions about the ability of the GPQ to elicit consistent responses over time. At this point it is not firmly known whether individuals lack confidence in their responses or if SHG processes are unstable over short periods of time. With a sample of adequate size, increased control over the conditions of administration would greatly increase the confidence with which conclusions about the temporal consistency of the instrument are drawn.

The failure to confirm the hypothesis that behavioral control groups employ behavioral processes more often than support groups may be viewed as non-supportive of the construct validity of the GPQ. It was suggested, however, that the definition of behavioral control groups failed to discriminate between the nature of divergent activities used

in such groups. Implied is the need for a typology of SHGs based on group processes rather than on purpose and composition. Such a typology would provide for hypotheses regarding group differences which could be empirically supported. One method for establishing a process-based typology would be through analyses of the factor structure of the GPQ.

The behavioral process analysis also served to place behavioral processes in a relatively minor role in most SHGs. It may be that groups with more frequent contact with professionals utilize these processes most often. Supportive and expressive processes predominate, however, even in groups whose primary purposes are the control of problematic behavior.

It is apparent that the primary focus of the present study was on process rather than oucome variables of the GPQ. Due to the self-selected nature of SHG members, it is to be expected that those who elect to remain in these groups are also those who pereceive that they have benefitted from their membership. Future efforts designed to specify with precision the modes of operation across the diveristy of SHGs should be coupled with attempts to track dropouts and to learn the ways in which they differ from those who remain. An advantageous position would then be established for determining the effectiveness of SHGs for specific populations under specific circumstances.

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APPENDIX A

GROUP PROCESS QUESTIONNAIRE

Before answering the attached questionnaire, would you please provide the following information:

1. What is name of your self-help organization? _____

2. Where is your chapter located? _____

3. If your chapter breaks down into small groups, what is the name of the small group you participate in now? _____

4. About how many chapter meetings have you attended? _____

5. About how many meetings of your small group have you attended (see #3)? _____

Please answer the following questions from the point of view of what happens in your small group meetings (see #3 above). If your chapter meets as a whole and does not divide into small groups, please answer the questions from the standpoint of what happens in your chapter meetings (see #2 above).

GROUP PROCESS QUESTIONNAIRE

Instructions for Part One

Instructions: The following section is composed of statements concerning things which may occur in the course of a group's meeting. In order to clarify the statements, key words have been underlined where this might be helpful. Please read each item, and rate how well it describes what goes on in your group meeting, according to the following scale:

1	2	3	4	5
Not an accurate description (this process rarely occurs, is not something the group emphasizes, and is a misleading characterization of this group)		A somewhat accurate description (this process happens sometimes, and while not among the things which the group emphasizes, still gives one some idea of what this group is like)		A very accurate description (this process occurs frequently, is something which the group emphasizes, and gives one a good idea of what the group is like)

In using this scale, circle the number to the right of each statement which most nearly reflects your feelings concerning the item's accuracy. In doing so, please keep in mind the definitions above. For example, if you read the statement, "This group gives members support" and decide that this happened occasionally, but was not given great emphasis, you would probably circle the number "3" to the right of the statement. If this happened more frequently, and was given a little more emphasis by the group, then you might circle the number "4" instead, etc. Circle only one number for each statement.

	Not an accurate description		A somewhat accurate description		A very accurate description
1. When a personal problem is brought up by a group member, other group members suggest things which the person might do to overcome his or her difficulty. The group sometimes even makes very direct suggestions, such as "Do this and see what happens."	1	2	3	4	5
2. Members compare their attitudes with the attitudes of other group members. Where differences exist, members change their beliefs so that most members gradually come to share and express similar attitudes.	1	2	3	4	5

	Not an accurate description		A somewhat accurate description		A very accurate description
3. Group members reassure other members that their problems will eventually be worked out positively.	1	2	3	4	5
4. The group emphasizes accepting personal responsibility for interpersonal difficulties.	1	2	3	4	5
5. Group members let individual members know how they feel about them and their behavior. This information is shared face to face.	1	2	3	4	5
6. The group has rules concerning how members should feel and think and act. Group members refer to these rules.	1	2	3	4	5
7. Group members give personal testimony to the way the group helped them deal with their problems.	1	2	3	4	5
8. Group members joke with one another and "laugh instead of cry" at a problem.	1	2	3	4	5
9. Group members point out when a member's behavior conflicts with his or her values.	1	2	3	4	5
10. Group members tell other members experiences, fantasies, thoughts or emotions which are very personal and which they normally wouldn't tell other people.	1	2	3	4	5
11. Group members make contracts with one another to perform specific behaviors between meetings, and these contracts are reviewed at subsequent meetings.	1	2	3	4	5
12. When a member says his or her problems are different from the problems of other members, the other members emphasize how similar the person's problems are to their own.	1	2	3	4	5

		Not an accurate description		A somewhat accurate description		A very accurate description
13.	When a member tells other members that his or her emotional reactions to a problem are strange and abnormal, other members point out that such reactions are experienced by most persons facing this problem. In otherwords, the group suggests that the person is reacting normally to a stressful situation.	1	2	3	4	5
14.	Group members explain how they would handle a problem brought up by another member, and then go on to demonstrate just how they would react if they were faced with this person's problem.	1	2	3	4	5
15.	A group member sets his or her goals and checks the progress made toward these goals.	1	2	3	4	5
16.	Group members use physical movement or structured exercises to deal with or learn more about their concerns.	1	2	3	4	5
17.	The group encourages control over the expression of emotions by members.	1	2	3	4	5
18.	When new members ask how the group can help with their problems, older members state they can help because they have had experience with the same problems.	1	2	3	4	5
19.	The group emphasizes how societal values and others' reactions make it difficult for members to deal with their problems.	1	2	3	4	5
20.	When a group member presents a problem, other members try to think of as many different ways as possible for dealing with it.	1	2	3	4	5
21.	Members provide explanations which help other group members to better understand themselves or their reaction to a situation.	1	2	3	4	5

	Not an accurate description		A somewhat accurate description		A very accurate description
22. When a member does something which the group disapproves, the group criticizes this behavior or in some way punishes the person for acting in this way.	1	2	3	4	5
23. Members let one another know that they care for and will help each other.	1	2	3	4	5
24. When a member threatens some drastic action, other group members suggest that the person contact them before carrying the action out.	1	2	3	4	5
25. When a person expresses his or her emotions in the group, other group members let that other person know that they share and understand the person's feelings.	1	2	3	4	5
26. When a group member describes a situation happening at the present time as similar to situations which happened in the past, other group members point out in what ways these situations are different.	1	2	3	4	5
27. A group member asks other group members how they feel about him or her.	1	2	3	4	5
28. When a member does something which the group approves, the group applauds this behavior or in some way rewards the member for acting in this way.	1	2	3	4	5
29. Group members tell each other how attempting to deal with their problem has added new meaning to life and has made them aware of issues that they would not otherwise have noticed.	1	2	3	4	5
30. Members assure one another that they are worthwhile, valuable people.	1	2	3	4	5
31. Group members challenge one another to explain themselves or account for their behavior.	1	2	3	4	5

	Not an accurate description		A somewhat accurate description		A very accurate description
32. Group members try to understand a problem by breaking it down and determining such things as what went on before the problem situation arose, how the person reacted to the problem, and what happened after the difficulty arose.	1	2	3	4	5
33. When a personal problem is brought up by a member, other group members suggest how the person might act to handle the problem, and then ask the person to practice these behaviors in the presence of the group.	1	2	3	4	5
34. Group members share every day experiences with one another, and generally let each other know what's going on in their lives.	1	2	3	4	5
35. Members assure one another that they are capable of handling their own problems.	1	2	3	4	5
36. When a group member discusses a problem, other members point out attitudes or actions of the member which possibly produced or prolonged the problem.	1	2	3	4	5
37. When a group member brings up a personal problem, other members ask the person for additional information about the problem, but do so in a way which is not challenging.	1	2	3	4	5
38. When a personal problem is brought up by a group member, other group members identify actions which they believe are things he or she should not do. The group may even make the direct suggestion, "Don't do this."	1	2	3	4	5
39. Members let other members know that they were justified in feeling or acting as they did in response to some situation.	1	2	3	4	5
40. When a member talks about behavior in a present situation, other members point out how the behavior is similar to what occurred in past situations.	1	2	3	4	5

	Not an accurate description		A somewhat accurate description		A very accurate description
41. After listening to a member discuss his or her concerns, members state in other words what they believe the person has said; they may also make some statements concerning how they believe he or she is feeling emotionally.	1	2	3	4	5
42. When a member says or does something which the group disapproves, the group members ignore the person's behavior.	1	2	3	4	5
43. Group members physically touch each other in a positive way.	1	2	3	4	5
44. When a member considers several different solutions to a problem, other members emphasize that he or she must take responsibility for deciding on what to do and for the consequences following this choice.	1	2	3	4	5
45. The group emphasizes and encourages the release of emotions.	1	2	3	4	5
46. When a member brings up several concerns at once, other members point out which concerns are most important.	1	2	3	4	5
47. Members tell the group what they have done to deal with their problems.	1	2	3	4	5
48. Members let the group know how and why their problems arose.	1	2	3	4	5

Instructions for Part Two

Please rate how your group has helped you personally in each of the following areas. Read each statement and record your rating by circling one number from the five point scale on the right.

	Not at All	Very Little	Some	A Good Deal	A Great Deal
49. How much has the group helped you to feel good about yourself?	1	2	3	4	5

	Not at All	Very Little	Some	A Good Deal	A Great Deal
50. How much has the group helped you to change behaviors that produced personal problems, prolonged them, or made them worse?	1	2	3	4	5
51. How much has the group helped you to accept responsibility for taking some action or making some decision to help yourself?	1	2	3	4	5
52. How much has the group helped you find out more about yourself, your problems, your relationships with other people?	1	2	3	4	5
53. How much has the group made you feel that you "belong" and that the other members are your friends?	1	2	3	4	5
54. How much has the group made you feel that you can trust everyone in the group?	1	2	3	4	5
55. Overall, how much has the group helped you deal with whatever difficulties brought you to the group?	1	2	3	4	5

INSTRUCTIONS FOR PART THREE

It is very important that we know something about the people who have completed the attached questionnaire, such as their sex and age. Would you please answer the following questions about yourself, even though you may have completed this questionnaire before?

1. Sex: _____ 2. Date of birth: Month _____ Date _____ Year _____

3. Number of years of education (or highest grade completed) _____

4. Race (circle one): White Black Oriental Hispanic
American Indian Other (please specify) _____

5. Approximate yearly income for your household (circle one):
$0-$4,999 $15,000-$19,000
$5,000-$9,999 $20,000-$24,999
$10,000-$14,999 Over $25,000

6. Marital status (circle one): Single (never married) Separated Divorced Married

APPENDIX B

GPQ PROCESSES

Item	Process
1	Behavioral prescription
2	Consensual validation
3	Reassurance
4	Emphasizing interpersonal responsibility
5	Offering feedback
6	Normative reference
7	Endorsement
8	Cathartic humor
9	Spotting inconsistency
10	Self-disclosure
11	Behavioral contracting
12	Underscoring problem similarity
13	Normalization
14	Modeling
15	Personal goal-setting
16	Experiential learning
17	Emotional control
18	Experiential group validation
19	Consciousness-raising
20	Brainstorming
21	Explanation
22	Punishment
23	Expressing mutual concern
24	Prevention
25	Empathizing
26	Discrimination
27	Requesting feedback
28	Providing reinforcement
29	Existential sharing
30	Mutual affirmation
31	Confrontation
32	Functional analysis
33	Behavioral control
34	Checking in
35	Instilling confidence
36	Dispositional analysis
37	Requesting elaboration
38	Behavioral proscription
39	Justification
40	Stressing behavioral stability
41	Reflection
42	Extinction
43	Physical affirmation
44	Behavioral responsibility
45	Encouraging catharsis
46	Prioritizing
47	Summarizing adjustive efforts
48	Etiological review

APPENDIX C

JUDGES' QUESTIONNAIRE: INFLUENCE OF A SOCIAL DESIRABILITY FACTOR ON GPQ RATINGS

Imagine yourself to be a member of a self-help group. You feel that you have benefitted significantly from your participation in the group, and you have attended meetings long enough to consider yourself a solid member. You have developed friendships within the group, and it is your intention to remain a member for an indefinite period of time.

Two individuals from a federally-funded research project have been observing your group for four meetings, and they have now asked you and the other members of your group to complete the Group Process Questionnaire. As the group has helped you greatly in dealing with your concerns, you would like it viewed by the researchers in a favorable and positive light. In filling out the questionnaire, you realize that if you were to rate certain activities according to your <u>actual</u> perceptions of their frequency of occurrence, you might cause the group to be viewed unfavorably. You therefore rate these activities as occurring either more or less often than is actually the case in order to help the group look good.

DIRECTIONS: Please circle the items which, if you were the person described above, you would not rate according to your true perceptions. Place a plus sign (+) beside circled items if the activity would receive a higher rating than one reflecting your true perceptions. Place a negative (-) sign beside circled items if the activity would receive a rating lower than one reflecting your true perceptions.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48

APPENDIX D

JUDGES' RATING FORM: IDENTIFICATION OF GPQ ITEMS REFLECTING BEHAVIORALLY-ORIENTED PROCESSES

One aim of the GPQ analysis is to examine ratings for differential patterning across groups. Specifically, we wish to determine the extent to which "Behavior Control" SHGs identify behaviorally-oriented processes as occurring more frequently than in other types of groups. As a first step in conducting such an analysis, we must identify the activities in the GPQ which correspond to "behaviorally-oriented processes."

In completing this questionnaire, we request that you evaluate activities primarily on the basis of the extent to which they reflect behaviorally oriented group goals, needs, and values. This focus may be distinguished from that which would evaluate activities on the basis of the effects that they have on group members.

As a group goal, "Behavior Control" may be defined as follows:

> Group activities are directed toward developing rewarding or prosocial behaviors and eliminating self-defeating or antisocial behaviors. Members therefore consider how they could change what they do and how they act in order to increase the effectiveness of their interpersonal and psychological functioning.

DIRECTIONS:

For each activity, please circle one number which indicates the amount of emphasis which would be placed on the activity by a group primarily concerned with achieving the goal of "Behavior Control."

To clarify rating uncertainties, consider the question, "Would a small group deliberately or spontaneously adopt this activity to specifically and deliberately pursue this goal?" If the answer is yes, 4, 5, or 6 would be appropriate selections.

	none	very little emphasis	little emphasis	moderate emphasis	major emphasis	great emphasis
1. When a personal problem is brought up by a group member, other group members suggest things which the person might do to overcome his or her difficulty. The group sometimes even makes very direct suggestions, such as "Do this and see what happens."	1	2	3	4	5	6
2. Members compare their attitudes with the attitudes of other group members. Where differences exist, members change their beliefs so that most members gradually come to share and express similar attitudes.	1	2	3	4	5	6
3. Group members reassure other members that their problems will eventually be worked out positively.	1	2	3	4	5	6
4. The group emphasizes accepting personal responsibility for interpersonal difficulties.	1	2	3	4	5	6
5. Group members let individual members know how they feel about them and their behavior. This information is shared face to face.	1	2	3	4	5	6
6. The group has rules concerning how members should feel and think and act. Group members refer to these rules.	1	2	3	4	5	6

	none	very little emphasis	little emphasis	moderate emphasis	major emphasis	great emphasis
7. Group members give personal testimony to the way the group helped them deal with their problems.	1	2	3	4	5	6
8. Group members joke with one another and "laugh instead of cry" at a problem.	1	2	3	4	5	6
9. Group members point out when a member's behavior conflicts with his or her values.	1	2	3	4	5	6
10. Group members tell other members experiences, fantasies, thoughts or emotions which are very personal and which they normally wouldn't tell other people.	1	2	3	4	5	6
11. Group members make contracts with one another to perform specific behaviors between meetings, and these contracts are reviewed at subsequent meetings.	1	2	3	4	5	6
12. When a members says his or her problems are different from the problems of other members, the other members emphasize how similar the person's problems are to their own.	1	2	3	4	5	6

	none	very little emphasis	little emphasis	moderate emphasis	major emphasis	great emphasis
13. When a member tells other members that his or her emotional reactions to a problem are strange and abnormal, other members point out that such reactions are experienced by most persons facing this problem. In other words, the group suggests that the person is reacting normally to a stressful situation.	1	2	3	4	5	6
14. Group members explain how they would handle a problem brought up by another member, and then go on to demonstrate just how they would react if they were faced with this person's problem.	1	2	3	4	5	6
15. A group member sets his or her goals and checks the progress made toward these goals.	1	2	3	4	5	6
16. Group members use physical movement or structural exercises to deal with or learn more about their concerns.	1	2	3	4	5	6
17. The group encourages control over the expression of emotions by members.	1	2	3	4	5	6
18. When new members ask how the group can help with their problems, older members state they can help because they have had experience with the same problems.	1	2	3	4	5	6

	none	very little emphasis	little emphasis	moderate emphasis	major emphasis	great emphasis
19. The group emphasizes how societal values and others' reactions make it difficult for members to deal with their problems.	1	2	3	4	5	6
20. When a group member presents a problem, other members try to think of as many different ways as possible for dealing with it.	1	2	3	4	5	6
21. Members provide explanations which help other group members to better understand themselves or their reaction to a situation.	1	2	3	4	5	6
22. When a member does something which the group disapproves, the group criticizes this behavior or in some way punishes the person for acting in this way.	1	2	3	4	5	6
23. Members let one another know that they care for and will help each other.	1	2	3	4	5	6
24. When a member threatens some drastic action, other group members suggest that the person contact them before carrying the action out.	1	2	3	4	5	6
25. When a person expresses his or her emotions in the group, other group members let that other person know that they share and understand the person's feelings.	1	2	3	4	5	6

	none	very little emphasis	little emphasis	moderate emphasis	major emphasis	great emphasis
26. When a group member describes a situation happening at the present time as similar to situations which happened in the past, other group members point out in what ways these situations are different.	1	2	3	4	5	6
27. A group member asks other group members how they feel about him or her.	1	2	3	4	5	6
28. When a member does something which the group approves, the group applauds this behavior or in some way rewards the member for acting in this way.	1	2	3	4	5	6
29. Group members tell each other how attempting to deal with their problem has added new meaning to life and has made them aware of issues that they would not otherwise have noticed.	1	2	3	4	5	6
30. Members assure one another that they are worthwhile, valuable people.	1	2	3	4	5	6
31. Group members challenge one another to explain themselves or account for their behavior.	1	2	3	4	5	6

	none	very little emphasis	little emphasis	moderate emphasis	major emphasis	great emphasis
32. Group members try to understand a problem by breaking it down and determining such things as what went on before the problem situation arose, how the person reacted to the problem, and what happened after the difficulty arose.	1	2	3	4	5	6
33. When a personal problem is brought up by a member, other group members suggest how the person might act to handle the problem, and then ask the person to practice these behaviors in the presence of the group.	1	2	3	4	5	6
34. Group members share every day experiences with one another, and generally let each other know what's going on in their lives.	1	2	3	4	5	6
35. Members assure one another that they are capable of handling their own problems.	1	2	3	4	5	6
36. When a group member discusses a problem, other members point out attitudes or actions of the member which possibly produced or prolonged the problem.	1	2	3	4	5	6
37. When a group member brings up a personal problem, other members ask the person for additional information about the problem, but do so in a way which is not challenging.	1	2	3	4	5	6

	none	very little emphasis	little emphasis	moderate emphasis	major emphasis	great emphasis
38. When a personal problem is brought up by a group member, other group members identify actions which they believe are things he or she should not do. The group may even make the direct suggestion, "Don't do this."	1	2	3	4	5	6
39. Members let other members know that they were justified in feeling or acting as they did in response to some situation.	1	2	3	4	5	6
40. When a member talks about behavior in a present situation, other members point out how the behavior is similar to what occurred in past situations.	1	2	3	4	5	6
41. After listening to a member discuss his or her concerns, members state in other words what they believe the person has said; they may also make some statements concerning how they believe he or she is feeling emotionally.	1	2	3	4	5	6
42. When a member says or does something which the group disapproves, the group members ignore the person's behavior.	1	2	3	4	5	6
43. Group members physically touch each other in a positive way.	1	2	3	4	5	6

	none	very little emphasis	little emphasis	moderate emphasis	major emphasis	great emphasis
44. When a member considers several different solutions to a problem, other members emphasize that he or she must take responsibility for deciding on what to do and for the consequences following this choice.	1	2	3	4	5	6
45. The group emphasizes and encourages the release of emotions.	1	2	3	4	5	6
46. When a member brings up several concerns at once, other members point out which concerns are most important.	1	2	3	4	5	6
47. Members tell the group what they have done to deal with their problems.	1	2	3	4	5	6
48. Members let the group know how and why their problems arose.	1	2	3	4	5	6

APPENDIX E

MEAN RATINGS AND STANDARD DEVIATIONS:
TEST-RETEST PROCEDURE (N = 30)

	First Administration			Second Administration				First Administration			Second Administration		
Item	N	Mean	SD	N	Mean	SD	Item	N	Mean	SD	N	Mean	SD
							Process Items						
1	29	3.89	1.29	30	3.57	1.26	25	30	4.20	.96	30	4.27	.94
2	29	2.82	1.22	30	3.07	1.30	26	30	2.80	1.29	30	3.03	1.13
3	30	3.80	1.06	30	3.77	1.01	27	30	2.03	1.35	30	2.33	1.30
4	29	3.51	1.27	30	4.07	.99	28	30	3.06	1.33	30	3.10	1.40
5	30	2.86	1.35	30	3.17	1.32	29	30	4.16	.94	30	4.20	1.03
6	30	1.73	1.04	30	2.00	1.11	30	30	4.16	1.11	30	4.27	.98
7	30	3.63	1.12	30	3.87	.97	31	30	3.33	1.47	30	3.14	1.53
8	30	2.63	1.09	30	2.87	1.33	32	30	3.20	1.34	30	3.27	1.34
9	30	2.90	1.32	30	3.13	1.30	33	30	2.53	1.38	30	3.00	1.31
10	30	3.40	1.47	30	3.70	1.26	34	30	3.76	1.43	30	3.73	1.29
11	30	2.00	1.34	30	2.00	1.15	35	30	2.83	1.17	29	2.86	1.33
12	30	3.53	1.13	30	2.83	.79	36	30	3.35	1.16	29	3.45	1.30
13	30	3.96	.99	30	3.90	1.00	37	30	3.36	1.24	29	3.41	1.40
14	30	2.83	1.17	30	3.27	1.26	38	28	2.60	1.54	29	3.07	1.31
15	30	2.60	1.27	30	2.77	1.41	39	29	3.50	1.27	29	3.48	1.02
16	29	1.62	.97	30	1.80	1.03	40	30	3.20	1.29	28	3.54	1.07
17	29	1.65	1.14	29	1.83	1.14	41	30	3.40	1.24	30	3.43	1.38
18	30	4.06	1.08	30	4.00	.87	42	30	3.10	1.58	30	1.63	.96
19	30	2.75	1.37	30	3.10	1.19	43	30	3.10	1.58	30	2.90	1.47
20	30	3.73	1.01	30	3.73	1.11	44	30	3.46	1.40	30	3.47	1.38
21	30	3.66	1.12	30	3.93	.94	45	30	4.26	.94	30	3.90	1.24
22	30	1.96	1.29	30	1.77	1.94	46	30	3.23	1.13	30	3.67	1.16
23	29	4.17	1.19	30	4.17	1.18	47	30	4.36	.85	30	4.20	.93
24	29	3.93	1.19	30	3.97	1.30	48	30	3.50	1.38	30	3.40	1.07
							Outcome Items						
49	30	4.26	.94	30	4.30	.79	53	29	4.16	1.34	30	4.37	.93
50	30	3.93	1.14	30	3.80	1.00	54	30	3.90	1.24	30	3.87	.90
51	30	4.23	1.10	30	4.33	.92	55	30	4.30	1.11	30	4.13	1.17
52	30	4.16	.91	30	4.03	.93							

APPENDIX F

GPQ MEAN RATINGS AND STANDARD DEVIATIONS ACROSS GROUPS (N=13)

Item	Members		Observers		Item	Members		Observers	
	Mean	SD	Mean	SD		Mean	SD	Mean	SD
1	3.228	.684	2.920	1.352	29	3.729	.649	3.360	1.524
2	2.433	.396	2.440	1.325	30	4.136	.753	3.760	1.268
3	3.698	.674	3.480	1.159	31	2.434	.873	1.800	1.291
4	3.110	.501	2.960	1.513	32	3.024	.890	2.920	1.754
5	2.786	.693	2.640	1.578	33	1.978	.770	1.440	1.044
6	1.699	.322	2.320	1.314	34	3.697	.840	3.800	1.323
7	3.359	.708	3.360	1.287	35	3.354	.628	3.280	1.339
8	3.115	.798	3.280	1.339	36	2.834	.631	2.640	1.350
9	2.413	.511	1.960	1.020	37	3.143	.921	2.960	1.274
10	3.348	.767	3.120	1.453	38	2.160	.438	2.200	1.384
11	1.959	1.027	1.520	1.046	39	3.236	.797	3.040	1.338
12	3.280	.617	2.920	1.382	40	2.886	.628	1.840	.850
13	3.662	.734	3.560	1.294	41	2.878	.672	2.560	1.325
14	2.544	.568	2.080	.997	42	1.860	.469	1.960	1.207
15	2.665	.722	2.160	1.434	43	2.959	1.248	2.800	1.323
16	1.794	.626	1.600	.866	44	3.002	.700	2.360	1.497
17	1.902	.700	1.600	1.080	45	3.314	.945	2.500	1.532
18	3.273	.814	3.080	1.552	46	2.545	.716	1.760	1.012
19	2.922	.720	2.920	1.579	47	3.739	.740	3.680	1.282
20	3.474	.600	2.520	1.262	48	3.225	.705	3.120	1.509
21	3.565	.671	2.960	1.513	49	4.085	.389		
22	1.532	.420	1.480	.823	50	3.330	.627		
23	4.139	.845	3.840	1.405	51	3.580	.741		
24	3.179	1.064	2.667	1.685	52	3.746	.528		
25	4.021	.820	3.600	1.354	53	4.303	.328		
26	2.700	.554	1.917	.974	54	3.727	.425		
27	1.745	.500	1.560	.870	55	3.850	.603		
28	3.359	.589							

APPENDIX G

ALCOHOLICS ANONYMOUS: GPQ MEAN RATINGS

Item	Members	Observers	Item	Members	Observers
1	2.5	2.0	29	4.1	5.0
2	2.3	3.0	30	4.3	5.0
3	4.5	5.0	31	1.8	1.0
4	2.9	5.0	32	2.5	1.5
5	2.3	4.0	33	1.4	1.0
6	1.4	5.0	34	4.6	5.0
7	4.6	5.0	35	3.5	3.0
8	4.0	4.5	36	3.0	1.0
9	1.5	1.0	37	2.9	1.5
10	4.1	4.5	38	1.9	1.0
11	1.0	2.5	39	2.5	2.0
12	4.3	3.5	40	2.6	1.0
13	3.5	4.0	41	2.3	3.0
14	1.9	2.0	42	2.1	3.0
15	3.3	4.5	43	3.8	2.5
16	1.3	1.0	44	3.5	3.0
17	1.5	1.0	45	3.9	2.0
18	4.5	5.0	46	2.1	1.5
19	2.3	2.5	47	4.3	5.0
20	2.3	2.5	48	3.8	4.5
21	4.3	4.5	49	4.9	
22	1.0	1.0	50	4.1	
23	5.0	4.5	51	4.6	
24	4.6	5.0	52	4.8	
25	4.9	5.0	53	5.0	
26	3.1	3.0	54	3.6	
27	1.0	1.0	55	4.5	
28	2.4	5.0			

APPENDIX H

ANOREXIC AND BULIMIC SUPPORT GROUP: GPQ MEAN RATINGS

Item	Members	Observers	Item	Members	Observers
1	3.6	3.0	29	4.1	4.0
2	2.6	1.0	30	4.4	4.5
3	3.9	3.5	31	2.7	1.0
4	3.6	5.0	32	3.7	4.5
5	3.6	3.5	33	4.1	4.5
6	1.7	1.0	34	4.0	4.0
7	3.0	3.5	35	3.3	3.5
8	2.3	3.0	36	3.1	3.5
9	2.1	2.0	37	3.9	3.5
10	4.1	4.5	38	2.6	3.0
11	4.3	3.5	39	3.4	4.5
12	3.6	3.5	40	3.0	1.5
13	4.4	4.5	41	2.7	4.0
14	3.1	2.0	42	1.6	1.5
15	2.9	3.0	43	3.1	3.5
16	1.4	1.0	44	3.3	3.5
17	1.3	1.0	45	4.0	4.5
18	3.7	3.0	46	3.0	3.0
19	3.4	3.5	47	4.4	3.5
20	3.7	1.5	48	3.0	1.5
21	4.1	1.5	49	3.7	
22	1.3	1.0	50	3.3	
23	4.7	5.0	51	3.8	
24	4.0	4.5	52	3.3	
25	4.1	4.5	53	4.0	
26	2.6	1.0	54	3.6	
27	2.3	1.5	55	3.7	
28	4.6	5.0			

APPENDIX I

DIGNITY, INC.: GPQ MEAN RATINGS

Item	Members	Observers	Item	Members	Observers
1	2.5	2.0	29	3.9	4.0
2	2.8	2.0	30	4.4	5.0
3	3.8	2.5	31	2.5	2.0
4	3.0	2.0	32	2.6	2.0
5	2.6	3.5	33	1.9	1.5
6	1.8	2.5	34	3.9	4.5
7	3.3	3.0	35	3.5	3.0
8	3.4	4.5	36	2.5	2.0
9	2.9	3.0	37	3.4	3.5
10	2.9	3.0	38	2.0	2.5
11	2.3	1.5	39	3.0	3.5
12	3.0	3.0	40	2.4	2.0
13	3.5	3.5	41	3.6	1.5
14	2.4	1.5	42	2.0	2.5
15	2.5	2.0	43	4.4	5.0
16	1.5	2.5	44	3.4	3.0
17	2.3	2.0	45	3.1	3.0
18	3.1	3.0	46	3.0	1.5
19	3.3	5.0	47	3.0	2.5
20	3.3	2.5	48	2.8	2.5
21	3.1	2.5	49	4.2	
22	1.9	1.5	50	3.6	
23	3.8	5.0	51	3.8	
24	3.5	3.0	52	3.9	
25	3.2	3.0	53	4.3	
26	2.1	1.5	54	3.6	
27	2.1	2.5	55	3.9	
28	2.9	3.5			

APPENDIX J

GAY WOMEN: GPQ MEAN RATINGS

Item	Members	Item	Members
1	4.1	29	4.0
2	1.8	30	4.8
3	3.8	31	3.1
4	3.1	32	3.3
5	2.8	33	1.8
6	1.3	34	4.4
7	4.0	35	4.0
8	2.2	36	3.3
9	2.6	37	4.5
10	3.9	38	2.8
11	1.4	39	4.3
12	3.4	40	3.0
13	4.3	41	3.5
14	3.4	42	1.4
15	1.7	43	4.6
16	1.8	44	3.7
17	1.3	45	4.2
18	2.9	46	2.7
19	3.3	47	4.1
20	4.1	48	3.3
21	3.8	49	4.3
22	1.7	50	3.3
23	4.7	51	3.3
24	3.8	52	3.6
25	4.8	53	4.5
26	2.9	54	3.3
27	2.0	55	4.0
28	3.4		

APPENDIX K

NEWCOMERS, INC.: GPQ MEAN RATINGS

Item	Members	Observers	Item	Members	Observers
1	2.7	3.0	29	3.1	1.0
2	2.5	1.5	30	3.8	3.5
3	3.2	3.0	31	2.2	1.0
4	2.8	2.0	32	2.6	1.0
5	2.3	1.5	33	2.2	1.0
6	2.0	2.0	34	3.9	4.5
7	2.5	3.5	35	3.4	3.0
8	3.5	4.0	36	2.4	2.5
9	1.8	1.5	37	2.8	2.0
10	2.3	2.5	38	1.8	3.0
11	2.2	1.0	39	2.8	2.0
12	2.9	1.0	40	2.9	1.0
13	3.2	2.0	41	2.3	1.5
14	2.4	2.0	42	2.7	3.5
15	3.1	2.5	43	2.0	3.0
16	2.7	2.5	44	2.5	1.5
17	2.7	2.5	45	3.3	1.0
18	3.0	2.5	46	3.4	1.0
19	2.4	1.5	47	3.1	2.0
20	3.3	1.5	48	2.5	1.5
21	2.8	2.5	49	4.2	
22	1.4	1.5	50	3.7	
23	3.8	4.5	51	3.8	
24	2.6	1.5	52	3.8	
25	3.8	2.5	53	4.2	
26	2.6	1.0	54	3.4	
27	2.5	1.0	55	3.8	
28	3.6	3.0			

APPENDIX L

PARENTS UNITED: GPQ MEAN RATINGS

Item	Members	Observers	Professionals	Item	Members	Observers	Professionals
1	3.8	3.7	3.7	29	4.2	4.7	4.3
2	2.9	4.3	3.6	30	4.2	4.0	4.2
3	3.6	3.7	3.6	31	3.4	4.7	4.2
4	4.0	5.0	3.9	32	3.3	4.0	3.8
5	2.9	4.0	3.2	33	2.5	2.3	2.2
6	1.8	2.3	2.0	34	3.8	4.3	3.8
7	3.7	4.7	4.0	35	3.0	4.0	3.6
8	2.7	4.0	2.8	36	3.4	4.0	4.0
9	2.9	3.7	3.2	37	3.7	3.7	3.6
10	3.6	4.7	4.1	38	3.0	3.0	3.1
11	2.0	1.0	1.7	39	2.6	2.7	3.3
12	3.6	4.0	3.4	40	3.4	3.3	3.3
13	4.0	4.7	4.0	41	3.3	3.7	3.7
14	3.0	3.0	2.2	42	1.7	1.7	1.8
15	2.7	2.0	1.9	43	3.1	3.7	3.3
16	1.8	1.0	1.0	44	3.5	4.7	3.8
17	1.7	1.0	1.1	45	4.2	4.7	4.2
18	4.0	4.7	4.3	46	3.4	3.3	2.9
19	3.1	2.3	2.1	47	4.3	5.0	4.5
20	3.7	3.0	3.1	48	3.6	5.0	3.6
21	3.8	4.3	3.4	49	4.1		
22	2.0	3.0	2.6	50	3.3		
23	4.3	4.3	4.1	51	4.0		
24	4.0	2.0	2.8	52	4.0		
25	4.4	4.0	4.2	53	4.2		
26	2.9	2.7	2.7	54	3.6		
27	2.0	2.3	2.0	55	4.1		
28	3.1	4.0	4.1				

APPENDIX M

PARENTS WITHOUT PARTNERS: GPQ MEAN RATINGS

Item	Members	Item	Members
1	3.5	29	3.5
2	2.5	30	4.3
3	4.7	31	1.3
4	3.3	32	2.8
5	2.1	33	1.5
6	2.0	34	2.8
7	3.7	35	3.5
8	3.6	36	2.8
9	2.6	37	3.0
10	3.2	38	2.4
11	1.8	39	3.4
12	3.9	40	3.0
13	4.1	41	2.5
14	2.7	42	1.8
15	2.5	43	3.3
16	1.6	44	3.0
17	2.0	45	2.9
18	3.8	46	2.2
19	3.0	47	3.3
20	3.6	48	3.3
21	3.9	49	4.2
22	2.3	50	2.9
23	4.0	51	3.2
24	3.8	52	3.6
25	4.5	53	4.2
26	2.8	54	3.1
27	1.9	55	3.8
28	3.1		

APPENDIX N

PSURA: GPQ MEAN RATINGS

Item	Members	Observers	Item	Members	Observers
1	2.1	1.0	29	2.1	1.0
2	2.0	2.0	30	2.0	2.5
3	2.1	1.0	31	1.8	1.5
4	2.0	1.5	32	2.0	1.0
5	2.0	1.5	33	1.2	1.0
6	2.1	2.5	34	2.4	2.0
7	1.8	1.0	35	2.1	1.0
8	2.3	1.5	36	1.4	1.0
9	2.4	1.5	37	1.6	1.5
10	1.8	1.0	38	1.6	1.0
11	1.0	1.0	39	1.6	1.0
12	1.9	1.0	40	1.8	1.0
13	1.6	1.0	41	1.7	1.5
14	1.5	1.0	42	2.4	1.5
15	1.4	1.0	43	1.1	1.5
16	1.1	2.0	44	1.3	1.0
17	1.3	1.0	45	1.3	1.0
18	1.5	1.0	46	1.2	1.5
19	1.8	1.5	47	2.1	1.5
20	2.2	1.0	48	1.8	1.0
21	2.1	1.5	49	3.8	
22	1.8	1.5	50	2.2	
23	1.7	2.0	51	1.8	
24	1.0	2.0	52	2.6	
25	2.0	1.5	53	3.7	
26	1.7	1.0	54	3.5	
27	1.1	1.0	55	2.4	
28	2.9	3.0			

APPENDIX O

RECOVERY, INC.: GPQ MEAN RATINGS

Item	Members	Observers	Item	Members	Observers
1	2.4	1.8	29	3.6	3.8
2	1.8	3.0	30	4.4	4.0
3	4.2	4.3	31	1.1	1.0
4	3.0	3.3	32	2.7	5.0
5	2.1	1.8	33	1.1	1.3
6	1.8	3.0	34	2.7	2.5
7	3.7	4.3	35	2.7	3.3
8	3.9	3.5	36	2.8	3.3
9	2.2	1.5	37	1.8	2.5
10	3.0	3.0	38	1.6	1.0
11	1.0	1.3	39	3.6	3.0
12	3.4	4.0	40	2.4	1.8
13	4.4	4.5	41	2.5	2.0
14	2.2	1.8	42	2.2	1.3
15	2.5	1.5	43	1.0	2.0
16	1.1	1.0	44	2.3	1.8
17	3.1	3.3	45	2.0	1.3
18	3.2	3.5	46	1.4	1.0
19	2.4	1.3	47	3.3	4.3
20	2.5	2.8	48	2.9	3.5
21	3.0	2.8	49	4.5	
22	1.1	1.5	50	4.6	
23	4.3	4.8	51	4.7	
24	2.4	4.7	52	4.5	
25	4.3	3.8	53	4.8	
26	2.8	2.5	54	4.6	
27	1.0	1.0	55	4.8	
28	3.4	3.8			

APPENDIX P

STRESS CONTROL: GPQ MEAN RATINGS

Item	Members	Observers	Item	Members	Observers
1	3.7	2.5	29	4.2	3.5
2	3.0	3.0	30	4.5	4.0
3	4.1	3.5	31	2.9	1.0
4	3.8	2.5	32	3.5	5.0
5	3.2	1.5	33	2.2	1.0
6	1.9	2.5	34	3.3	2.5
7	3.7	2.5	35	3.2	4.0
8	4.1	4.0	36	3.4	4.0
9	2.2	2.0	37	3.5	1.5
10	3.2	2.5	38	2.2	1.0
11	1.5	1.0	39	3.7	3.5
12	3.2	4.0	40	3.2	1.5
13	3.7	5.0	41	3.5	1.5
14	2.8	1.5	42	1.3	1.5
15	3.2	1.5	43	2.8	2.0
16	3.0	1.0	44	3.4	1.5
17	2.4	3.5	45	3.6	1.0
18	3.7	2.5	46	3.3	1.0
19	3.3	1.5	47	4.3	4.0
20	3.9	1.5	48	3.9	4.0
21	4.1	2.5	49	4.2	
22	1.2	1.0	50	3.1	
23	4.2	5.0	51	3.4	
24	2.6	2.5	52	3.8	
25	4.4	3.0	53	4.3	
26	2.8	3.0	54	3.8	
27	1.9	1.0	55	3.8	
28	3.6	3.5	56		

APPENDIX Q

STROKE CLUB: GPQ MEAN RATINGS

Item	Members	Observers	Item	Members	Observers
1	3.8	4.0	29	3.1	3.5
2	2.9	1.0	30	3.4	1.0
3	3.2	4.0	31	1.8	1.0
4	2.7	1.0	32	1.4	1.0
5	2.6	1.0	33	1.7	1.0
6	2.0	1.0	34	2.8	2.0
7	3.6	3.0	35	3.4	2.5
8	3.9	2.0	36	1.9	1.0
9	1.9	1.0	37	2.3	2.5
10	3.0	1.0	38	2.3	2.5
11	2.0	1.0	39	2.5	2.5
12	3.2	3.0	40	2.1	1.0
13	3.8	3.0	41	2.5	1.0
14	2.5	1.0	42	2.2	2.0
15	2.2	1.0	43	1.5	1.0
16	2.7	1.0	44	2.2	1.0
17	2.9	1.0	45	2.5	1.0
18	4.1	3.5	46	2.7	1.0
19	1.9	2.5	47	3.5	3.0
20	3.2	1.5	48	2.9	3.5
21	3.2	1.0	49	3.5	
22	1.4	1.0	50	2.5	
23	4.2	1.0	51	2.9	
24	1.7	1.0	52	3.4	
25	3.7	2.0	53	4.2	
26	2.2	1.0	54	3.9	
27	1.3	1.0	55	3.2	
28	2.8	1.0			

APPENDIX R

WEIGHTRIGHT: GPQ MEAN RATINGS

Item	Members	Observers	Item	Members	Observers
1	3.8	3.5	29	4.5	3.0
2	2.3	3.5	30	4.3	3.0
3	3.3	3.5	31	4.0	1.5
4	3.3	2.5	32	4.5	2.5
5	3.3	2.5	33	2.0	1.0
6	1.3	2.0	34	4.5	4.5
7	3.0	2.5	35	3.3	3.5
8	3.0	2.5	36	3.3	2.5
9	3.3	2.5	37	3.3	3.5
10	4.0	3.5	38	2.0	2.5
11	3.8	2.5	39	3.0	4.0
12	2.5	1.5	40	3.8	2.0
13	3.5	3.0	41	3.0	3.0
14	2.0	2.0	42	1.8	2.0
15	4.3	4.0	43	3.3	2.5
16	1.8	2.0	44	3.5	2.0
17	1.3	1.0	45	4.3	2.5
18	2.3	2.0	46	2.0	1.5
19	4.3	5.0	47	4.5	4.0
20	4.3	3.5	48	4.0	1.5
21	4.0	3.5	49	3.5	
22	1.0	1.0	50	3.5	
23	4.3	2.5	51	3.8	
24	3.3	1.0	52	3.8	
25	4.5	4.5	53	4.3	
26	2.8	2.0	54	4.5	
27	1.5	1.0	55	3.5	
28	4.3	3.5			

APPENDIX S

WOMEN'S GROUP: GPQ MEAN RATINGS

Item	Members	Observers	Item	Members	Observers
1	3.6	5.0	29	4.0	3.0
2	2.4	2.5	30	5.0	5.0
3	4.0	4.0	31	3.2	3.0
4	3.0	2.0	32	4.4	3.5
5	4.4	5.0	33	2.2	2.0
6	1.2	1.5	34	5.0	5.0
7	3.2	2.0	35	4.8	5.0
8	1.8	4.0	36	3.6	3.5
9	3.0	2.5	37	4.6	4.5
10	4.4	4.5	38	2.0	4.0
11	1.2	1.0	39	4.6	4.5
12	3.8	3.0	40	4.0	2.5
13	3.6	4.0	41	4.0	4.0
14	3.2	3.0	42	1.0	2.0
15	2.6	1.0	43	4.6	5.0
16	1.6	1.5	44	3.4	2.0
17	1.0	1.0	45	4.4	4.5
18	2.8	2.5	46	2.8	2.0
19	3.6	5.0	47	4.4	4.0
20	4.0	5.0	48	4.4	4.0
21	4.2	5.0	49	4.0	
22	1.8	1.0	50	3.2	
23	5.0	5.0	51	3.5	
24	4.2	4.0	52	3.8	
25	4.4	5.0	53	4.4	
26	4.0	2.0	54	4.0	
27	2.0	3.0	55	4.5	
28	3.6	4.5			