

**The Efficacy of Support Groups For
Mexican American Widows**

Working Paper No. 25

1990
ISSN 0276-9638

Maria Eugenia Fernandez Esquer is a Research Assistant II in the Department of Psychology. She is presently working on creating and translating questionnaires to be used with Central American children.

Jill Guernsey de Zapien is a program coordinator for the Southwest Institute for Research on Women and the Rural Health Office of the University of Arizona. Her research interests include health issues of the Hispanic population with special emphasis on border health issues.

Margarita Kay, Principal Investigator for the project, is a nurse and anthropologist. She has conducted ethnographic research with Mexican American women through the life span: on childbirth, menstruation, menopause, grandmothering, and mourning. She is particularly interested in the ways that the women take care of health and their language of domestic medicine.

Sandra Gonzalez Marshall is a doctoral student at the College of Nursing. She has conducted research with pregnant Mexican American adolescents living in border regions. Current research interests include development of instruments for cross-cultural research and fertility practices of Mexican Americans.

Merle Mishel is Professor of Nursing, and Head, Division of Mental Health Nursing. Her research interests include implementing experimental studies in communities, and study of psychosocial responses to catastrophic and chronic illnesses.

Carmen J. Portillo was a research assistant for the Widowhood Support Project. She has recently completed her doctorate in Nursing and a minor in Psychology at the University of Arizona.

Carmen Altamirano Wilson is a graduate of the University of California in San Francisco in nursing. She is also a teaching associate who serves as the Coordinator and Counselor for Minority Student Retention in the College of Nursing at the University of Arizona.

Marianne E. Yoder, Ph.D., data manager for the project, is a nurse and computer specialist. She has conducted research into the medicinal uses of plants by white Anglos. Current research interests include the interface of users with the computer, and the development and testing of computer assisted interactive video.

The SIROW Working Paper series is designed to provide rapid dissemination of research on women in the Southwest or by Southwestern scholars of women. The authors would appreciate commentary on their work.

ABSTRACT

The papers in this collection contribute to an on-going program at the Southwest Institute for Research on Women that focuses on cross-cultural analysis of the problems of widowhood and aging. They report the work-in-progress of a project entitled "The Efficacy of Support Groups for Mexican American Widows" that is being conducted under grant MH41978-02 from the National Institute of Mental Health. The views presented here represent those of the research team.



TABLE OF CONTENTS

	Page
Mexican American Widows and Support Groups Jill Guernsey de Zapien	1
Recruiting Mexican American Widows for Support Groups Research Carmen Altamirano Wilson	19
Reliability of Standardized English, Original Spanish and Translated Instruments Sandra Gonzalez Marshall	29
Cultural Issues Relevant to Instrument Development and Administration for Mexican American Widows Maria Eugenia Fernandez Esquer	37
Depression and Grief in Mexican American Widows Margarita Kay	51
A Structured Social Support Treatment Program for Mexican American Widows Carmen J. Portillo	63
Testing the Efficacy of the Support Group Intervention Merle H. Mishel	71
Considerations in the Management of Qualitative and Quantitative Data Sets Marianne E. Yoder	91



Mexican American Widows and Support Groups

Jill Guernsey de Zapien

While conducting a longitudinal study of coping and health among low income Anglo American and Mexican American widows in the Tucson metropolitan area, researchers at SIROW became aware that Mexican American widows face problems that reflect their ethnicity. Widows participating in that project expressed a desire for extra-familial support and, since appropriate local services were not available, two members of the research team volunteered their time to organize a support group. This effort generated a culturally specific model, but because of the small size of the group and the self selection of participants, the model's validity could not be assessed. To extend the pilot work and test the validity of the model, some members of the original research group in collaboration with other colleagues designed a larger scale study.

The collection of papers presented here reports preliminary results of that research which evaluates the effectiveness of support groups in aiding low income Mexican American women to resolve their bereavement and adjust to widowhood during the fifteen month period following the death of their husbands. The research compares the women participating in a support group program designed for this ethnic group with their peers who rely on naturally occurring support systems. It addresses the following questions:

1. How effective is a support group in assisting low income Mexican American women to resolve problems of bereavement and adapt to life as widows following the death of their husbands?

2. How efficient is the support group treatment if we define efficacy as the rapidity with which treatment effects are achieved?
3. What is the durability of therapeutic change?
4. Do demographic and psychosocial characteristics predict which widows benefit most from a support group?

The Need for Support Groups

No previous research has addressed the efficacy of support groups for low income Mexican American widows, but the literature provides evidence that such programs are needed. Mexican Americans are one of the largest minority groups in the United States and the largest ethnic minority in the Southwest (U.S. Bureau of the Census, 1978, 1981). In addition to facing stressors known to affect mental health adversely, such as low income, low educational levels, and unemployment (Dohrenwend & Dohrenwend, 1974; President's Commission on Mental Health, 1978, Vol. II), the Mexican American widows also have to deal with discrimination and barriers created by linguistic and cultural misunderstanding. Numerous works suggest that they tend to under utilize mental health services (e.g. Keefe, 1978) even though their needs are no less than other segments of the population and in some instances may be greater (Burnam, et al. 1983; Freiche et al. 1981; Griffith 1985; Roberts, 1980, 1981).

Mexican American women are a particularly high risk group for developing emotional problems (President's Commission on Mental Health, 1978, Vol. II) both because of their situation at the bottom of the socio-economic scale (U.S. Bureau of the Census, 1979) and because of the contrasts they must deal with between the traditional roles of women in Mexican culture (Mirande and Enriquez, 1976) and changes in American women's roles in general. Women's lack of assertiveness in

Mexican American culture, for example, has been noted as a factor exacerbating psychological distress (Boulette, 1976). Not surprisingly, higher levels of depressive symptoms have been reported for unemployed Mexican American women than men (Roberts and Roberts, 1982; Mirowsky and Ross, 1984, Vega et al. 1984), and unemployed Mexican American women have higher diagnosed depression than other women in this ethnic group (Vega, 1986). Further, inequalities based on ethnicity and gender have a cumulative effect as people age, and older minority females face the greatest risk of economic dependency with its stressful consequences (Blau et al. 1979).

The older Mexican American woman who is widowed is particularly vulnerable to mental health problems. Like other widows she experiences loss of status, decreased income, discrimination, and related problems (Lopata, 1971) and exhibits poorer life functioning than the non-widow (Bottar, 1981). Nationally this group is of increasing numerical significance, growing more rapidly than older Anglo widows, reflecting not only the increased longevity within the minority group but also the earlier deaths of minority males (Cuellar, 1978).

It has been assumed that the dense extended family networks characteristic of Mexican American culture provide adequate support in crisis situations such as bereavement (Jaco, 1960), an assumption that may lead to inadequate provision of services (Maldonado, 1975). In the Tucson metropolitan area, the original widowhood study found that when comparing Anglo and Mexican American social support networks that the Mexican American networks were smaller and the perceived availability of network members was low. Anglo networks were comprised mainly of friends and Mexican American networks were comprised mainly of kin (Kay, 1988).

Although Mexican Americans have a tendency to turn to family members as their only source of support (Keefe, 1979; Padilla and Keefe, 1984), have relatively large kin

networks, and visit one another frequently, there is no reason to assume these networks provide the kind of support needed in all instances. Acosta (1984) comments that the family support system's actual ability to aid in solving serious emotional problems has gone unexamined and its value vis-a-vis other support systems is not clear. Keefe found that although both Anglos and Mexican Americans value kin highly, both groups recognize disadvantages to maintaining strong ties with kin. In particular, the role of the adult children in the widow's network remains unclear. Balkwell (1982) found that interaction with adult children positively affected Mexican American widows' morale, but Gibson (1983) noted that the widows experienced problems with overly protective children. This view was supported by our pilot study.

To design research that compares the efficacy of intervention programs for recently bereaved widows with naturally occurring support systems, be they family or friendship networks, it is necessary to examine the bereavement process as well as the nature of the support systems. Scholars have argued that adjustment in acute grief goes through distinct phases (Williams and Polak, 1974). Walker (1977) suggests that dense, homogeneous networks, such as those characteristic of Mexican American kin networks, are most helpful during the initial intense stage of grief when empathy and strong emotional support are needed. He comments, however, that dependence on kin networks will increase the likelihood of social isolation, particularly for lower class widows. Thus, at a later stage when the women require bridging ties to the community at large to help them reorganize social roles, perhaps find a job, make new friends, and obtain an alternative perspective on widowhood, dependence on kin networks will not be helpful. For low income widows, the postulated second stage of bereavement, which deals with such practical concerns as financial problems, may of necessity overlap with

the initial period of intense grieving. We may suppose that outside intervention offered not long after the spouse's death would be particularly helpful to a low income widow.

The initial original research conducted at the Southwest Institute for Research on Women (SIROW) on coping and health among older urban widows suggested that Mexican American women would welcome appropriate outside intervention. Some of the Mexican American widows asked about the availability of support groups, but staff inquiry into existing groups in the community showed that none was suitable for persons who spoke little or no English, did not drive a car, felt uncomfortable meeting in places far from the barrios where they lived, or simply had no one to share their expressions of grief in what they considered a culturally appropriate manner. In an attempt to meet the widows' needs, two members of the research team volunteered their time and organized a support group for a period of fourteen months in a neighborhood center located in a Mexican American barrio. They systematically recorded the themes discussed at each meeting and also followed individual cases throughout the fourteen months of group meetings. Because of the small numbers of women involved and the lack of systematic comparison with widows not participating in the group, these data were inadequate to evaluate the efficacy of the pilot support group. Our current research is therefore designed to assess whether a culturally specific support group can assist with resolving bereavement.

Designing an Evaluation Study

The research design includes two components. One is an experimental analysis of the efficacy, efficiency and durability of the support group treatment, and the second, a multivariate analysis of exploratory variables that influence outcomes in the support group. The experimental analysis employs a randomized block design with two levels

of treatment and time of entry into the study as the blocked variable. The treatment levels consist of the experimental treatment of the widows support group and the control condition of the naturally occurring treatment in the community such as family and friends. The experimental variable is a structured social support treatment designed to address the bereavement concerns of Mexican American widows.

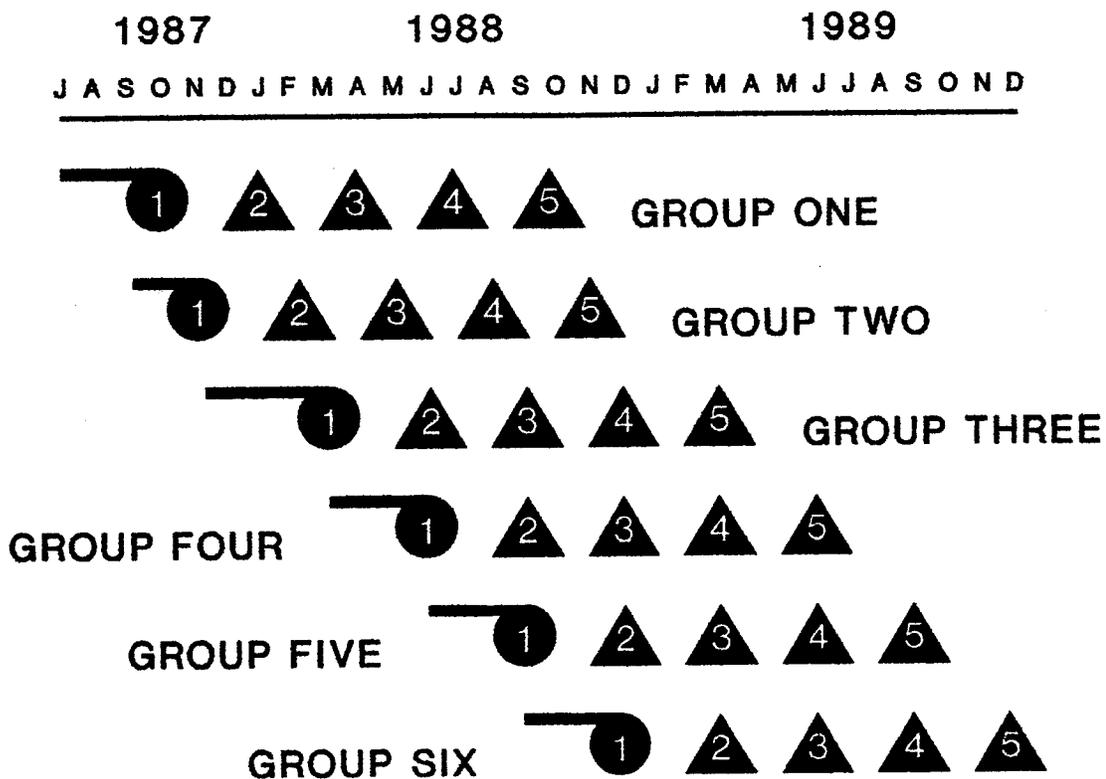
Support group sessions were held weekly for six months and then every other week for three months. They were facilitated by a bilingual, bicultural social worker who conducted sessions in a combination of Spanish and English, though Spanish dominated the sessions. The group facilitator used a modified client-centered nondirective approach, following a specially designed treatment manual that specified the group focus for each session.

We recruited 151 recently widowed Mexican American women for the study in waves of 25 each at six difference offerings, assigning the women to the experimental or control condition. We repeated the treatment six times. Figure 1 shows the recruitment and interview schedule by year of study.

We designed this data collection system to insure a maximum number of subjects for the study, compiling a list of potential participants from churches, mortuaries, social service agencies, etc. When the project was initiated, this list drew on a pool of women who had been widowed during the previous six months. As each wave of 25 was recruited, the pool decreased, thus we enrolled women who had been widowed as little as one month. At several points during the recruitment process, the recruiter had to let several weeks go by to build up a pool of potential participants. At the time of recruitment we assigned women to the experimental or control group. All women, both experimental and control were interviewed five times, or every three months, during a fifteen month period.

Figure 1

Recruitment/Interview Schedule



- Recruitment and first interview
- Subsequent interviews

To facilitate attendance at the meetings, we arranged for bilingual-bicultural chauffeurs driving university vans to pick up the sixty percent of the women who lacked transportation and take them home after the meeting. We also arranged child care for those who had such commitments to their children or grandchildren, paying for babysitters in the home setting or making child care available at the center for women who preferred to bring their children to the center.

Characteristics of Participants

The 151 widows participating in the experimental and control groups ranged in age from 29 to 84 years of age. Twenty-one percent were under fifty and 79 percent were over 50. The mean age of the widows was 59.8; the median age was 61. (See Figure 2).

Length of widowhood is a key variable in describing the participants and is displayed in Figure 3. Ninety-three percent were widowed six months or less at the time of the first interview. The mean length of widowhood was 3.26 months and the median length of widowhood was 3 months. Sixty-one percent of the participants had been widowed 3 months or less and 21 percent one month or less.

The income levels of the women ranged from less than \$300.00 per month to \$2000.00 per month, as shown in Figure 4. The mean and median incomes fell between \$500.00 and \$850.00 with 73 percent of the women having monthly incomes of under \$850.00. Seventy eight percent had worked outside the home.

The educational levels were also diverse, ranging from no formal schooling to graduate education, though 55 percent of the women had an eighth grade education or less and 34 percent had a sixth grade education or less. (See Figure 5).

Age of Participants

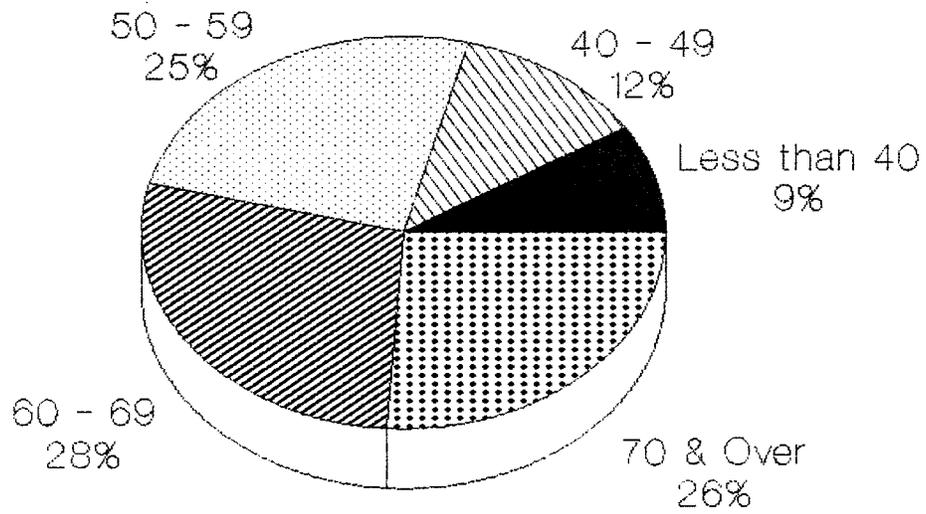


Figure 2

Length of Widowhood

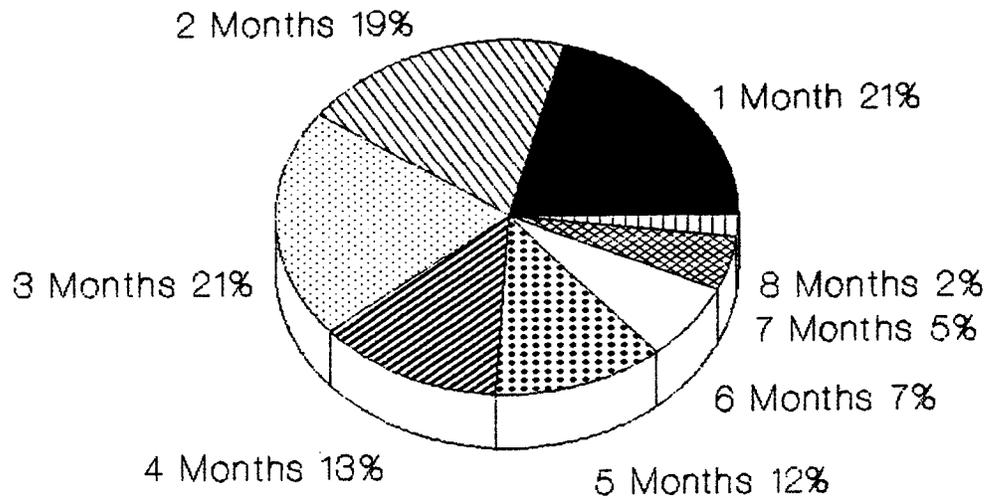


Figure 3

Average Monthly Income

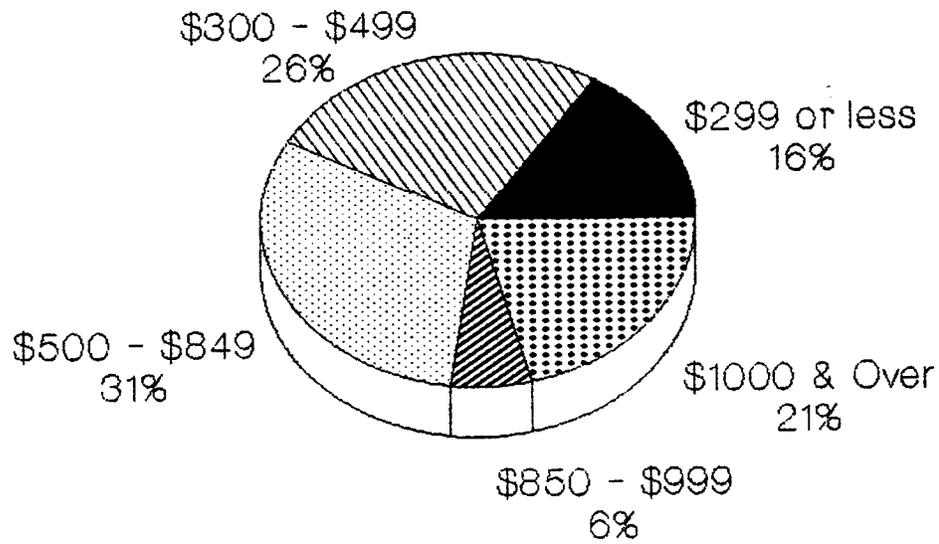


Figure 4

Educational Level

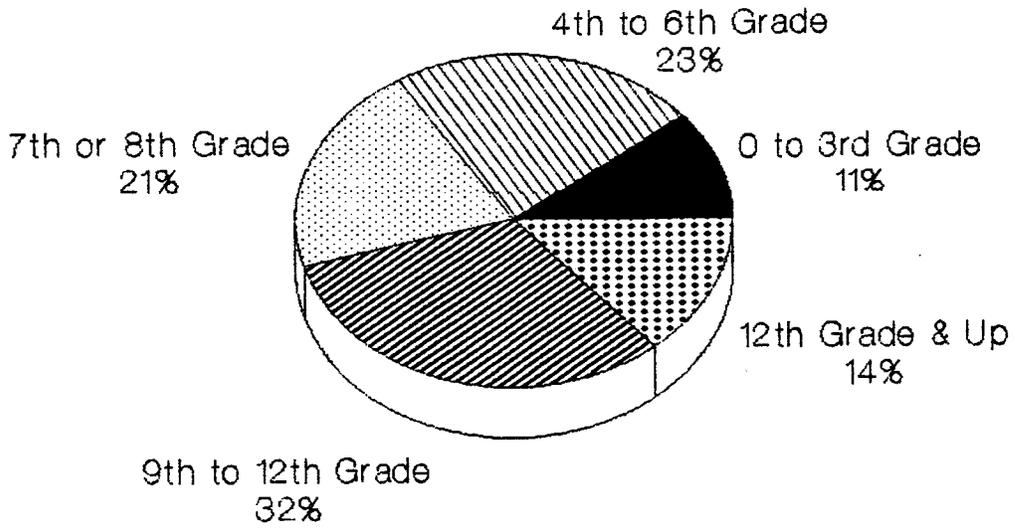


Figure 5

The number of children in the womens' families, as shown in Figure 6, ranged from 1 to 15, with the mean number of children being 3.8 and the median 3. It is, however, important to point out that 40 percent of the participants had families of 5 or more children.

Living arrangements are also a key to understanding the participants' experience of widowhood. Sixty-six percent were not living alone. Of those sharing the household with the widow, 55 percent were children and 20 percent were grandchildren, with parents, other relatives, and non-family members making up the remainder.

Though 62 percent of the women were born in the United States compared with 36 percent in Mexico (Figure 7) their language preferences indicated continuing ties to Mexican Culture. As shown in Figure 8, 41 percent preferred Spanish only or mostly Spanish, while 47 percent classified themselves as bilingual. In addition 61 percent practiced the traditional mourning custom of luto that is wearing dark clothing.

To measure acculturation levels of the women more systematically we applied the Acculturation Rating Scale for Mexican Americans. Cuellar has classified five levels of acculturation including: Very Mexican, Mexican Bicultural, Bicultural, Anglo Bicultural, and Very Anglo. Twenty-six per cent of the women scored as Very Mexican, 44 percent scored as Mexican Bicultural, and 30 percent scored as Bicultural. None scored in either of the categories of Anglo Bicultural or very Anglo.

In summary, the participants in this study consist of Mexican American widows, predominantly in their late fifties, or early sixties who were widowed less than 6 months. Most commonly they had low income and low educational levels, and lived with other family members. Acculturation classifications included only highly Mexican, mostly Mexican and Mexican bicultural.

Number of Children

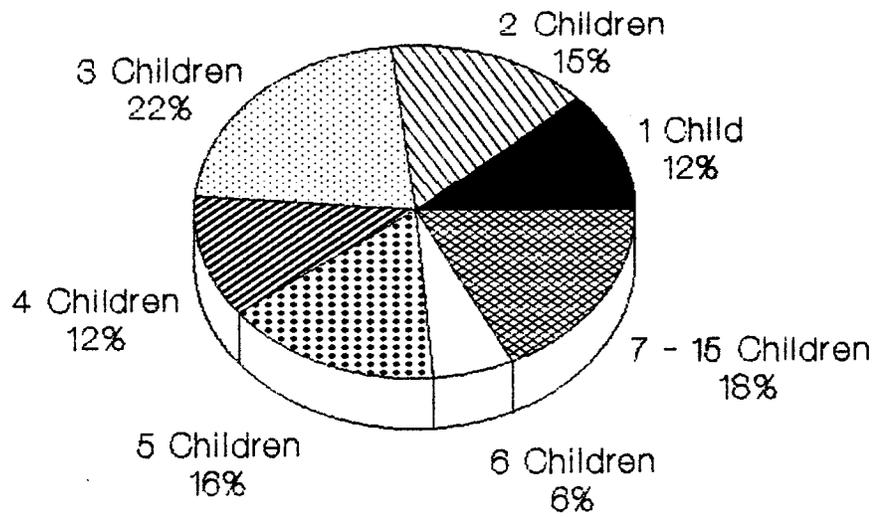


Figure 6

Place of Birth

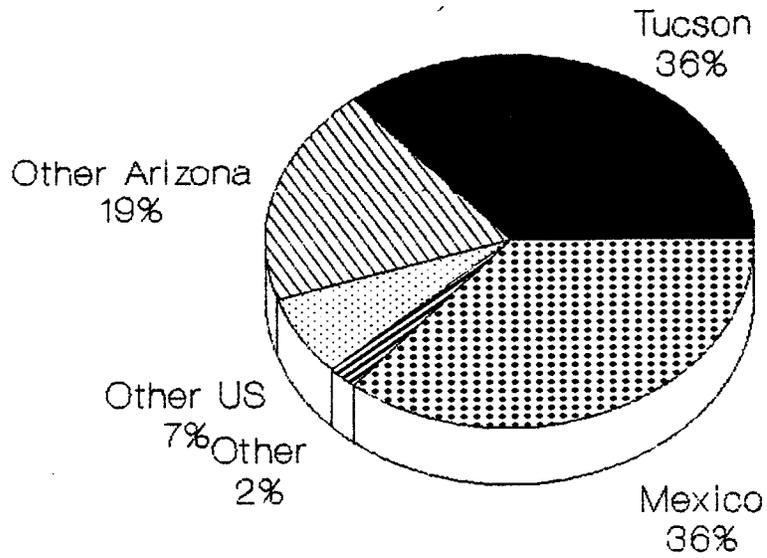


Figure 7

Language Preference

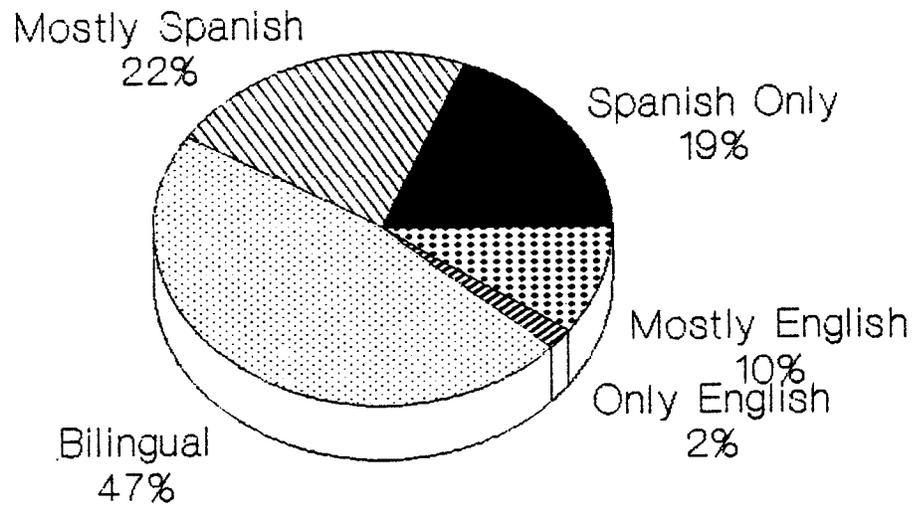


Figure 8

References Cited

- Acosta, F.X. (1984). Psychotherapy with Mexican Americans: Clinical and empirical gains. In J.L. Martinez and R.H. Mendoza, (Eds.), Chicano Psychology: Second Edition (pp. 163-89). Orlando: Academic Press.
- Balkwell, C.A. (1982). Widowhood: Its impact on morals and optimism among older persons of three ethnic groups. Dissertation Abstracts International, Ann Arbor, Michigan, 42(8-B), 3213.
- Blau, Z.S., Oser, G.T., and Stephens, R.C. (1979). Aging, social class, and ethnicity: A comparison of Anglo, Black, and Mexican American Texans. Pacific Sociological Review, 22, 501-25.
- Bottar, K.R. (1981). The economic well-being and social adjustment of midlife widows. Dissertation Abstracts International, Ann Arbor, Michigan, 43 (10-A), 4605.
- Boulette, T.R. (1976). Assertive training with low income Mexican American women. In M. Miranda, (Ed.), Psychotherapy with the Spanish-speaking. Los Angeles: Spanish Speaking Mental Health Research Center.
- Burnam, M.A., Karno, M., Hough, R.L., Escobar, J.I. and Forsythe, A.B. (1983). The Spanish diagnostic interview schedule: Reliability and comparison with clinical diagnoses. Archives of General Psychiatry, 40, 1189-96.
- Commonwealth Fund, (1989). Poverty and Poor Health Among Elderly Hispanic Americans, Commonwealth Fund Commission.
- Cuellar, J. (1978). El Senior Citizens Club: The older Mexican-American in the voluntary association. In B.G. Myerhoff and A. Smic (Eds.), Life's career -- aging: Cultural variations on growing old (pp. 207-29). Beverly Hills: Sage.
- Dohrenwend, B.P., & Dorenwend, B.S. (1974). Social and cultural influences on psychopathology. Annual Review of Psychology, 25, 417-52.
- Freiche, R. R., Aneshesl, C. S., and Clark, V. A. (1981). Prevalence of depression in Los Angeles County. American Journal of Epidemiology, 113, 691-99.
- Griffith, J. (1985). A community survey of psychological impairment among Anglo and Mexican Americans and its relationships to service utilization. Community Mental Health Journal, 21, 28-41.
- Jaco, E.G. (1960). The social epidemiology of mental disorders. New York: Russell Sage Foundation.
- Kay, Margarita, Tobias, Cynthia, Ide, Bette, Guernsey de Zapien, Jill, Monk, Janice, Bluestein, Marlene, and Fernandez, Maria Eugenia, (1988). "The Health and Symptom Care of Widows," Journal of Cross Cultural Gerontology, 3, 197-208.

- Keefe, S.E. (1984). Real and ideal extended familism among Mexican Americans and Anglo Americans: On the meaning of 'close' family ties. Human Organization, 43, 65-70.
- Keefe, S.E. (1982). Help-seeking behavior among foreign-born and native-born Mexican Americans. Social Science and Medicine, 16, 1467-72.
- Keefe, S.E. (1980). Personal communities in the city: support networks among Mexican Americans and Anglo-Americans. Urban Anthropology, 9 (1), 51-74.
- Keefe, S.E. (1978). Why Mexican Americans underutilize mental health clinics: Fact and fallacy. Spanish Speaking Mental Health Research Center Monograph Series, No. 7, 91-108.
- Keefe, S.E., Padilla, A.M., and Carlos, U.L. (1979). The Mexican American extended family as an emotional support system. Human Organization, 38, 144-52.
- Lopata, H.Z. (1971). Widows as a minority group. Gerontologist, 2 (1), 67-77.
- Maldonado, D., Jr. (1975). The Chicano aged. Social Work, 20 (3), 213-16.
- Mirande, A., and Enriquez, E. (1976). Chicanas: Their triple oppression as colonized women. Sociological Symposium, 17 (Fall), 91-102.
- Mirowsky, J. and Ross, C.E. (1984). Mexican culture and its emotional contradictions, Journal of Health and Social Behavior, 25 (March), 2-13.
- Padilla, A.M. and Keefe, S.E. (1984). The search for help: Mental health resources for Mexican Americans and Anglo Americans in a plural society. In S. Sue and T. Moore, (Eds.), The pluralistic society: A community mental health perspective (pp. 77-115). New York: Human Sciences Press.
- President's Commission on Mental Health. (1978). Task Panel Reports, (Vol. 3, Appendix). Washington, D.C.: U.S. Government Printing Office.
- Roberts, R.E. (1981). Prevalence of depressive symptoms among Mexican Americans. Journal of Nervous and Mental Disease, 169, 213-19.
- Roberts, R.E. (1980). Prevalence of psychological distress among Mexican Americans. Journal of Health and Social Behavior, 21 (June), 134-145.
- U.S. Bureau of the Census Current Population Reports (1979) Series P-20, No. 354. Persons of Spanish origin in the United States: March 1979. Washington, D.C.: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1981) Age, sex, race and Spanish origin of the population by regions, divisions and states: 1980 (Supplementary Reports). Washington, D.C.: U.S. Government Printing Office.

Recruiting Mexican-American Widows for Support Group Research

Carmen Altamirano Wilson

The slow and time-consuming process of locating and recruiting 150 low-income Mexican American widows to participate in the support group study had to begin with little guidance from previous research. Available literature produces few studies on Mexican American women and they include little or no information on the difficulties encountered in subject recruitment. As the study on the efficacy of support groups for Mexican American widows developed, we uncovered a number of critical issues in recruitment procedures that center upon awareness and sensitivity to the population and its culture. This paper reports on the recruitment procedures we developed and their effectiveness.

We began by compiling a master list of widow's names and comprehensive demographic information from obituaries published in two local newspapers in Tucson and added information obtained from four area funeral homes known to serve the Mexican American community. A staff member assigned to the recruitment effort then cross-referenced these names with death registers from one of approximately fifteen churches of various denominations that cooperated with the project. We adopted this strategy because it was important to this population that any person coming to see them have received their name from a credible source, a person whom they trust. The priest/pastor from the church provided this all-important link for the project staff.

These procedures yielded a master list containing 421 names of deceased Mexican American males and their widows; 406 of these names were gathered from public records, obituaries, funeral homes and churches, the remaining 15 names were self

referrals or community agency referrals. Of these 421 names, 66 percent were eliminated to arrive at the final 150 women for the project. Table 1 identifies the criteria for elimination.

Table 1. Reasons Names Eliminated from Recruitment Pool

	Percent
Ineligible	
Man widowed/not married/divorced	28.6
Unusual circumstances, e.g. names repeated on master list, Native Americans, too young or frail, pregnancy, name of deceased female not male, widow died shortly after husband, etc.	13.7
Not Mexican American	7.7
Length of widowhood greater than six months	3.8
Not Located	
Could not cross-reference	11.6
Moved out of town	11.6
Not found	10.4
Refusals	
Refused to be control	3.3
Refused to be experimental	2.2
Refused at children's request	2.7
Refused participation altogether	4.4
	100.0

We spent numerous hours to determine whether the deceased man was Widowed/ Never Married or Divorced, in which case we eliminated his name from the study since there was no widow to recruit. Dealing with separation and divorce among Mexican American populations is not straightforward, however. Often a woman, although separated and/or divorced from her husband, will be the primary caregiver for him during a final illness. Adult children or other relatives often are caregivers and responsible for day-to-day monitoring of this man even though he lives away from his wife/ex-wife. It is not uncommon to find the ex-wife continually "keeping track" of the "goings on" of this husband. It is almost expected by the woman and her family members that she is the appropriate caregiver when this man becomes ill. Even though a separation or divorce has existed, a bond remains and the widow feels the loss of her ex-husband.

After cross-referencing the widows' names, the recruitment staff then planned home visits in order to talk face to face with each Mexican American widow. This procedure was implemented, rather than attempting telephone or letter contacts, because these methods typically accepted for recruiting other populations do not work well with Mexican American people. We based this approach on experience with a previous cross-cultural study in Tucson, (Tobias, Ide, and Kay, 1987), which showed that, although Mexican American widows did not react negatively to receiving letters describing the research project, they did not follow-up on this letter because they thought a personal contact would be made. Letter and telephone recruitment methods proved totally unsuccessful among this population, though one-third of the Anglo-American counterparts were recruited by these very methods. Prior to a recruiter attempting any home visit, numerous staff hours were spent planning a protocol appropriate for successful recruitment. We selected recruiters who were bilingual,

bicultural women, knowledgeable of the Tucson, Arizona community and of the Mexican American culture from a personal perspective. Beyond this, consideration was given to an appropriate dress code to be used by all recruiters, the approach to be used to gain entry into a widow's home, and the appropriate length of time after the death that a recruiter should allow before making that initial visit.

If a widow was not found at home, the protocol instructed the recruiter to talk with family members, explain the project and pave the road for future recruitment. Often neighbors would help with information about the widow, indicating her work hours, when she might home, or if she had moved, where she might be living and also where her relatives could be located. In the Mexican American community, people are usually willing to share information about their neighbors if the person inquiring is someone they feel they can trust, someone who poses no threat to them or their families. This trust is given on the basis of how the recruiter looks, how this recruiter approaches them and whether this recruiter is fluent in Spanish or bilingual and bicultural.

After finding a time when a widow might be home, another home visit was made to speak with her regarding participation in the project. Fifty percent of all widows contacted required at least three visits to her home or to family or friends before the first conversation with her. Often this circumstance was associated with her having moved to stay with children after the funeral, or her leaving town for a time to stay with relatives or friends. Information received from the widows showed the recruitment staff that many of them leave home on a daily basis to simply leave the surroundings reminding them of their deceased spouse. Recruiting on the schedule of an 8 to 5 working day is thus difficult. To overcome the initial obstacles in locating widows to tell them about the project, the project staff recruiter used non-traditional hours in the early

morning, evening, and weekend. Frequently she returned to the original church and spoke with persons there who might know the whereabouts of a widow.

When a widow was eventually located, approximately one hour was required to explain the project and answer her questions. During this hour, a beginning trust was formed with the widow by listening to her story and hearing the details of her husband's death. Commonly in this population, especially during a time of grief, a widow's immediate family, especially her adult children, become very protective of her. Thus, additional home contacts, plus several telephone calls during evening and weekend hours were required to explain the project involvement to all concerned children and other family members, individually or in groups. Recognition of the need for this additional communication and suitable description of the research goal to all interested members as often as required was a critical link in the final outcome of recruitment.

Following the initial recruitment phase and obtaining of the widow's agreement to participate, a follow-up home visit was scheduled to complete the first of the five interviews required for the study. It is important to note that the process of locating and recruiting widows to the first meeting required a minimum of 18 - 20 hours per subject. To continue strengthening the initial trust established by the recruiter with a widow, and allow her to build a sense of confidence that she could truthfully share her feelings, the same person who recruited the participant completed the first interview in either English or Spanish. The time needed to complete this first interview varied from two to six hours, the average time being two and a half hours. Many widows required two home visits to finish the first interview, as they needed emotional support to release feelings they were having to an objective and non-threatening person.

On completion of the first interview, the widows who had been assigned to the experimental research group were given simple and exact information regarding the

time, location, and the process of the particular group they would be attending. At this time, transportation and/or child care needs were discussed, noted, and planned with each widow, since a large percentage of these women do not drive, and many care for their adult children's children on a daily basis. Participants assigned to control groups were given information regarding their involvement in the research study in simple terms. They were told to expect five future home interviews within a time period of fifteen months. We told experimental subjects to expect a telephone call approximately one week before their scheduled group would begin. The call was made by the same person who recruited and interviewed the subject. Again, completion of this telephone call required several attempts at different times of the day and evening because the widows were frequently not at home. During this brief telephone call, each widow was reminded of the time and location of the group. If transportation was required, exact information was given as to the time of pick-up at her home. At this time each widow was reassured that one of the recruiters would be riding in the transportation van with the driver because many of these women and their families are apprehensive about any new experience. Recognizing the protective nature of all related to the widow, all questions regarding the overall study were again answered in detail with the widow and her family.

The first evening that a group met, one of the three primary recruiters for the study rode in the van with the bilingual/bicultural driver collecting all the widows, introducing each of them to the driver, and assuring them of the team effort and the good intention of the project. The group meeting was held at a well-known and well-accepted neighborhood center in a Mexican American area of the city. At the first meeting all recruiters were present and again explained the study. To reinforce acceptance of the project, we thought it was important for the Mexican American

widows to see the connection between the trusted recruiter and the facilitator, the person who would help them during their time of grief. The recruiters quietly reassured the widows and helped them integrate with the other women by smiling, extending a hand to welcome them and showing them where to sit.

A very specific greeting code was developed and used by all the recruiters at this meeting. This meant only a minimum of talking with widows by the team member who had recruited her and a very directed effort to move these women from the one-to-one relationship and trust they felt from their past home interview with a particular recruiter to their new role as part of the support group. All the widows were continually reassured that this was the first time any of these widows had attended. After approximately 10 minutes the recruiters exited, leaving the widows with the bilingual/bicultural facilitator.

Along with consideration of the recruiting process, it is important to focus on the characteristics of a recruiter. An initial visit to the home of a Mexican American widow requires that the recruiter be sensitive to the cultural ways of the widow and be familiar with the beliefs and values that surface during time of loss. She needs to understand the diversity of cultural patterns within the community, but we suggest that in making the initial approach the best strategy is to assume that the women will follow traditional practices. The recruiter can subsequently adapt her style as she learns more about the widow, but at all times she must deal respectfully with her and show a genuine interest and attitude of caring.

One important tradition to attend to is the appropriate dress code for the mourning period known as luto. This requires knowing that wearing bright reds or yellows is inappropriate and that low key, soft tones in clothing, such as blues or browns are preferable. Appropriate clothing will communicate respect for her deceased

husband and the widow during her time of grief. Other important characteristics are bilingualism and biculturalism, or at least fluency and cultural knowledge and the ability to understand cultural expectations, as viewed by these widows and their families. The recruiter needs to be familiar with traditions such as unique language use, church involvement and the necessity for a respectful attitude. She needs knowledge of the quiet, almost passive nature of a Mexican American widow and her life-long commitment to her family and to her religious beliefs and a clear understanding that this widow is a very private, but proud person, many times homebound by choice.

A research team needs also to acknowledge that generally, the Mexican American widow has obstacles to overcome before she can commit even her time to a research project. Aside from often being unfamiliar with the concept of research (Tobias, Ide, & Kay, 1987), common obstacles include transportation and child care. Another obstacle is convincing her adult children that this commitment of time is beneficial for her and that participation is not risky or potentially dangerous. A recruiter must acknowledge these constraints and realize that although a widow may be very committed, she has other commitments to fulfill, especially to family and the church.

In a practical sense, this means the researcher needs to realize that a widow may unexpectedly have to babysit for her children and this is sufficient cause to miss a session. When widows were frequently absent from group sessions, it reflected circumstances such as staying with a daughter who was having a baby, staying with a sick or dying relative, or simply filling in as the emergency day care person for her adult working children. Providing transportation and child care, when needed, helps a widow to be at peace with herself about meeting her family obligations. Only then can she begin to focus her energies on the resolution of her loss.

Another aspect of commitment to take into account is that a widow may have intense feelings about any commitment she makes. Thus, if she perceives that she is falling short of the expectations of the researcher or professional involved, she may feel obligated to stop coming to a support group. One widow, for example, after being in a car accident that required hospitalization and missing a few sessions, required a home visit by the original recruiter and several telephone calls to convince her that she was still welcome to the group, and had not failed the original recruiter or the group facilitator.

Researchers must keep in mind that the Mexican American widow may have a life-long experience of being unrecognized and oppressed, with no insight about her personal needs or abilities. Every aspect of becoming involved in a support group is a major step, a new experience and accomplishment. To avoid attrition in participation, the researchers must positively reinforce the widows by consistent, positive interest, helping them to understand that they are contributing simply by staying involved. This interest can be conveyed by weekly or more frequent telephone calls. In this study, weekly telephone reminders were provided for two to three months after the group had started. As the widows bonded within the group, they required less of this contact from the research team.

In conclusion, the recruitment of Mexican American widows to a support group is a slow and cautious process. It requires continual self-awareness on the part of any recruiter as to how she is affecting a Mexican American widow, and consistent sensitivity to many of the unique cultural aspects of this woman.

Reference Cited

Tobias, C., Ide, B., & Kay, M. (1987). Identifying Anglo, Mexican American and American Indian respondents for a study of recent widows: Suggestions for future researchers. SIROW Working Paper number 23. Tucson: Southwest Institute for Research on Women, University of Arizona.

Reliability of Standardized English, Original Spanish and Translated Instruments

Sandra Gonzalez Marshall

To measure the effectiveness of support groups in aiding low income Mexican American widows to resolve their bereavement and adjust to widowhood following the death of their husbands we used nine instruments available in both English and Spanish. An important question in such research is the cross-cultural validity of scales, since altering them to reflect cultural nuances may affect their psychometric properties. This paper will describe the nine instruments we used in terms of the concepts measured, instrument structure, and previous use of each instrument with Mexican Americans. I will discuss three sets of reliabilities for each scale where data are available: the original scale's English version reliability, the reliability when the scale was originally translated into Spanish and the reliability found in this sample. In addition I will discuss each scale in terms of average item-total correlations and item deletions.

The variables we wished to measure in this study include depression, anxiety, social support, life satisfaction, mastery, assertion and acculturation. We also needed a scale to measure the efficacy of the support group intervention. I will discuss each scale individually. Although the subjects were measured five times, we used the initial baseline measure with the experimental and control groups to determine reliability. Those items which did not meet the item correlation of .30 or greater were deleted from the scales.

To measure depression we used two scales, the Center for Epidemiologic Studies Scale (CESD) and the Beck Depression Inventory (BDI). The CESD is a 20-item nondiagnostic screening scale which measures the current level of depressive symptoms

in a community population. The instrument identifies a range of symptoms including mood, feelings, and perceptions associated with depression. The instrument asks the subjects to indicate how frequently a symptom has occurred during the past week. Response choices range from none (less than 1 day) to a lot (5-7 days). The instrument requires a very short time to administer and questions are simply worded; it is therefore appropriate for use with people who have relatively low levels of education. It has been used in community studies as well as cross-ethnically with Hispanics of Mexican heritage. The reported reliability of the English version is .85, and the reported reliability for the Spanish version ranges from .85 to .90. The initial reliability obtained in our study was .89. We dropped three items from the scale because of low item correlations thereby increasing the alpha coefficient from .89 to .91. These items were "hopeful," "unfriendly," and "disliked;" their correlations ranged from -.04 to .29.

The Beck Depression Inventory is a 13 item nondiagnostic checklist that indicates depressive symptoms and roughly approximates a clinical diagnosis. The instrument asks the subjects to choose from among four statements which best describe how they felt during the past week. Answers are scored on a scale ranging from 0 to 3. The reliability reported for the short version of the English Beck Depression Inventory is .81. The reliability coefficient obtained in our study is .88, thus indicating that the instrument has good internal consistency.

To measure anxiety we used the State-Trait Anxiety Inventory (State portion). It consists of 20 statements that allow people to describe how they feel at a particular moment. Responses are made using a four point scale that ranges from "none" to "a lot/very much." Spielberger et al. (1971) developed a Spanish edition for use in cross-cultural research. They examined the reliability of the scale by giving it to bilingual subjects in Texas and Puerto Rico, obtaining high item-total correlations and alpha

coefficients ranging from .82 to .95. They thus established internal consistency for the Spanish anxiety trait and anxiety state scales. Spielberger reports equivalence of the English and the Spanish version scales based upon correlations of .83 to .94. In our work with the scale we dropped one item, "self-confident," because of a low item correlation of .29. The alpha coefficient in our population was .88, similar to that reported when the scale has been used with other Hispanic populations.

To measure social support we selected the Arizona Social Support Interview Schedule (ASSIS) originally developed by Barrera (1981). This scale includes six support functions: (1) material aid (providing material aid in the form of money or objects); (2) physical assistance (sharing of tasks); (3) interaction (interacting in a nondirective manner such that feelings and personal concerns are expressed); (4) guidance (offering advice and guidance); (5) feedback (providing individuals with information about themselves); and (6) social participation (engaging in social interactions for fun, relaxation, and diversion from demanding conditions). Respondents are asked about individuals whom they typically regard as providers of each category of social support. They are also asked to indicate which of the individuals actually supplied that type of support in the past month. The number of individuals perceived as available to provide at least one of the support functions is summed to produce a measure of the size of total available network. The number of individuals who actually provided at least one month of social support during the preceding months is also summed to provide a measure of the total size of the network utilized. In our study we employed the Spanish version of Barrera's scale with modifications. Barrera (1980) assessed the reliability of the instrument by calculating test-retest correlations among the six support functions. Test-retest reliabilities ranged from .18 to .87. When applying the instrument over a 3-day interval he obtained a test-retest correlation of total network

size of .88. Over a one month interval, he found the test-retest correlation of the network size to be .70. To determine the test-retest reliabilities of the six support functions we measured 15 women in our study on all available and utilized support functions at baseline and two weeks later. Correlations obtained for twelve of these items were below .70, indicating instability over time. These functions included scores for "intimate interaction availability," "intimate interaction utilized," "material aid utilized," "advice availability," "advice utilized," "positive feedback availability," "positive feedback utilized," "physical assistance availability," "physical assistance utilized," "social participation availability," "social participation utilized," and "negative interactions utilized." The correlations for the other four functions "total available network," "total utilized network," "material aid availability," and "negative interactions availability" demonstrated adequate stability.

To measure mastery, we relied on the Mastery Scale developed by Pearlin and Schooler (1978) which defines mastery as the extent to which one's life chances are viewed as under one's own control rather than being fatalistically controlled. The scale contains seven items with responses ranging from "strongly agree" to "strongly disagree." The research team translated the instrument into Spanish. Its application yielded a reliability coefficient of .75.

We used two measures to assess the variable of life satisfaction. The first was the Life Satisfaction Index Z, a version of the Life Satisfaction Index proposed by Neugarten (1961). The scale has thirteen items, with possible responses ranging from "agree" to "uncertain" to "disagree." The internal consistency of the English version of the instrument has been reported to be an alpha of .79. The research team translated the scale into Spanish. The initial reliability of this version of the scale when used in our study was .64. We then dropped three items--"thinkback," "breaks," and "plans" which

had poor item correlations ranging from $-.01$ to $.22$. After the items were deleted, the reliability coefficient rose to $.69$ indicating that the reliability of the scale remains barely adequate.

The second measure of life satisfaction we used is the Self-Anchoring Ladder developed by Cantril (1965). It asks subjects to rate their current level of life satisfaction on a ladder with steps ranging from 0 to 10. Palmore and Kivett (1977) report a two year test-retest reliability of $.65$ for this scale. The research team translated the item into Spanish. Its use yielded a test-retest reliability of $.77$.

To measure effectiveness of support group intervention the research team developed the Efficacy of Intervention Scale. This instrument consisted of three subscales; the health and financial assistance checklist consisting of 16 items, the family assertion subscale consisting of 13 items, and the social assertion subscale consisting of 10 items. We obtained a reliability coefficient of $.58$ for internal consistency of the family subscale and of $.77$ for the social subscale.

To measure the acculturation level of the Mexican American widows we used the Acculturation Rating Scale developed by Cuellar et al. (1980). It has 20 items presented in a 5-point Likert-type format. The subject responds to questions about language preference and usage, cultural heritage, and food and media preferences relevant to the Mexican American culture. The scale recognizes five types of Mexican Americans according to their acculturation level: 1) very Mexican; 2) Mexican-oriented bicultural; 3) true bicultural; 4) Anglo-oriented bicultural; 5) very Anglicized. The subject's acculturation level is determined according to the mean score the subject obtains on the scale. Cuellar tested the instrument for internal consistency with a student/staff sample of 134 subjects and a hospitalized psychiatric sample of 88 Mexican American subjects. He obtained an alpha coefficient of $.88$ for the student/staff sample and $.81$ for the

hospitalized sample. He found a test-retest reliability of .72 on two separate occasions 5 weeks apart. The initial internal consistency in our study was .92; after dropping one item we obtained the alpha coefficient of .93.

In summary seven of the scales showed acceptable levels of reliability ranging from .75 to .91. We found questionable reliability levels of .58 and .69 for two instruments (see Table 1), the Life Satisfaction Index and the Family subscale. We have no particular basis for explaining the low reliability of the former, but comments by Fernandez Esquer (see p. 42) suggest why there may be problems with the latter. Lacking alternatives of greater or known reliability, however, we employed these two scales in the research as well as those with acceptable reliabilities.

TABLE 1
Efficacy of Support Groups for Mexican American Widows
Reliabilities of Instruments Used in the Study

	Reliabilities For Previous Studies		Reliabilities For Our Study
	English	Spanish	Combined English & Spanish Languages
<u>Instruments</u>			
Center for Epidemiologic Studies Scale (CESD)	.85	.85 to .90	.89
Beck Depression Inventory (BDI)	.81		.88
State-Trait Anxiety Inventory (A-State)		.82 to .95	.88
Life Satisfaction Index Z	.79		.64
Mastery Scale	.73		.75
Social Subscale			.77
Family Subscale			.58
Acculturation Scale for Mexican Americans (ARSMA)	.88		.92
<u>Test-Retest</u>			
Self-Anchoring Ladder	.65		.77
Arizona Social Support Functions	(.18 to .87)		(.07 to .93)

References Cited

- Barrera, M. (1980). A Method for Assessment of Social Support Networks in Community Survey Research. Connections, 3 (3), 8-13.
- Barrera, M. (1981). Social Support in the Adjustment of Pregnant Adolescents: Assessment Issues. In B.H. Gottlieb (Ed.) Social Networks and Social Support. Beverly Hills: Sage.
- Cantril, H. (1965). The Pattern of Human Concerns. New Brunswick, NJ: Rutgers University Press.
- Cuellar, I., Harris, L., and Jasso, R. (1980). An Acculturation Scale for Mexican American Normal and Clinical Populations. Hispanic Journal of Behavioral Sciences, 2 (3), 199-217.
- Neugarten, B., Havighurst, R., and Tobin, S. (1961). The Measurement of Life Satisfaction. Journal of Gerontology, 16, 134-43.
- Palmore, E., and Kivett, V. (1977). Change in Life Satisfaction: A Longitudinal Study of Persons Aged 46-70. Journal of Gerontology, 32, 311-16.
- Pearlin, L.I., and Schooler, C. (1978). The Structure of Coping. Journal of Health and Social Behavior, 19, 2-21.
- Spielberger, C., Gonzalez-Reigosa, F., and Martinex-Urrutia, A. (1971). Development of the Spanish Edition of the State-Trait Anxiety Inventory. Interamerican Journal of Psychology, 5 (3-4), 145-58.

Cultural Issues Relevant to Instrument Development and Administration for Mexican American Widows

Maria Eugenia Fernandez Esquer

One of the main goals of the project on the efficacy of support groups for Mexican American widows is to understand the process of bereavement among widows and how it is influenced by their culture. We created and modified scales to capture their concerns and struggles and, as we learned of their needs, we modified the interviewing process. This paper will deal with the cultural issues in instrument development and administration and the environment of the interview.

Interview Development and Administration

Preparing the questionnaires to be used in Spanish and English was a massive task. Altogether we used 16 scales. Of the eight tools developed by other investigators, the Spanish versions of three (Acculturation Rating Scale for Mexican Americans, CES-D and Life Satisfaction Index) proved after pilot testing to be useable without change and one more (A-state) required only adjustment to local colloquial speech. One scale (Arizona Social Support Interview Schedule) required extensive revisions to reflect the circumstances of the widows and another (Beck Inventory of Depression) required combining various translations, including one used with a previous pilot support group. Two (Mastery Scale and Self Anchoring Ladder) were translated from scratch. Finally, we created six entirely new instruments.

The translation process involved at least four persons. The translations were made by two native speakers of Spanish, one who was a professional translator, the other not. Back translations were made by two other native speakers, one Mexican American, the

other, Mexican from Sonora. Extensive consultation on vocabulary items came from a bilingual-bicultural psychiatric social worker. Health vocabulary consultation came from an anthropologist who authored a medical dictionary in Southwestern Spanish. In addition, other local colloquial dictionaries were consulted during the session we held to reconcile differing versions. We then piloted the instruments with a group of 12 women from a previous widowhood study, providing us with feedback about what they found adequate or inadequate in the instruments. Finally, the entire team evaluated and determined the most appropriate or accurate translation of each scale to be used in the questionnaire.

Questionnaires are often based on colloquial terms, generally understood by the majority of the Anglo middle-class population. When used with a different cultural or sub-cultural group, the meaning is often lost because a direct translation is not possible in to the second group's language. In this study, it was important not only to find the correct meaning in Spanish, but most of all, in the "correct" Mexican American Spanish used along the Arizona-Sonora border region. These issues were confronted when we confronted translation of the Life Satisfaction Index (Neugarten, Havighurst and Tobin, 1961) and the Mastery Scale (Pearlin and Schooler, 1978). The language employed in the Life Satisfaction Index was in use in 1961 and written in standard English. The research team decided that words such as "dreary," and expressions such as "breaks in life" when translated to Spanish lost the intended meaning. These words and expressions were replaced with similar terms in colloquial Spanish that resemble the original items in English. The term "dreariest" was translated as "heaviest" and "breaks in life" as "opportunities," roughly approximating the intended meaning in English.

The instruments that were selected to measure the effect of the support group intervention have been widely used with different populations. However, their extended

use has not guaranteed their always being understood by the respondents. In some cases, the basic conceptualization of an instrument is not adequately understood, as with the Mastery Scale. "Mastery" translates into Spanish as domination and superiority, but the intended meaning of controlling one's own destiny is not easily recognized. For an elderly Mexican American widow who has confronted the death of her husband and does not view herself as having a separate identity aside from that provided by the marriage relationship, the concept of mastery is indeed foreign.

Regional language was incorporated into instruments previously translated to Spanish such as the State Trait Anxiety Inventory (Spielberger, Gonzales-Reigosa, Martinez-Urrutia, 1971) and the Acculturation Rating Scale for Mexican Americans (Cuellar, Harris and Hasso, 1980). Every language has regional variations in word usage that may lead to unintended meanings. When those words are used by an outsider, they may offend those who know its local use. For example in the State Trait Anxiety Inventory, the word "relaxed" is translated quite literally as "relajada" and is thus commonly used in Mexico; but local Mexican Americans use it to mean "to scold someone." We opted to write both English and Spanish words in the Spanish questionnaire to avoid misunderstandings. In the Acculturation Rating Scale for Mexican Americans, the concept of ethnic pride was misunderstood as superficial vanity. A few of the respondents were offended when asked to rate their ethnic pride. One respondent replied: "Yo no soy orgullosa" (I am not proud). We opted for deleting from statistical analysis the few cases where this item was not understood since they were discovered ex post facto.

Translation of questionnaire rating scales created the problem of altering the semantic distance among preference categories. Rating scales are created with the intention of conveying degrees of preference that are perceived similarly by English

speakers, but are not necessarily perceived in the same manner by Spanish speakers. By using everyday language that roughly represents the semantic distance of the rating scale in English, rather than the literal translation of the terms, we were able not only to avoid the misrepresentation of the respondent's preferences but also to reduce their confusion since they were already having difficulty with subjective ratings. After interviewing several pilot respondents, the research team discussed the terms to be replaced and adopted those that roughly preserved the same rating distance as those used in English. As Figure 1 indicates "moderately" does not correspond in meaning to "bastante" (enough), but in the context of our rating scale, it provided an equidistant interval between "muy poco" and "muchisimo." Instead of using the terms of "nada" and "mucho," we used "nada en absoluto" (nothing at all) and "muchisimo" (a lot) making the endpoints more extreme to correspond to those in English.

The respondents also had the tendency to express their preferences dichotomously: they either liked something or they did not; they either experienced something or they did not. Sometimes it took extensive rehearsal and several explanations to convey the use of five-point Likert-type scales to a population not accustomed to unfamiliar concepts of rating or the language distinctions involved in this kind of discrimination in judgement.

In the Arizona Social Support Index Scale (Barrera, 1980), the issue of rating subjective versus concrete events became apparent. During the pilot interviewing, the respondents had great difficulty rating "satisfaction with network support functions." They seemed unaccustomed to giving abstract ratings of perceived social interaction and often had difficulty in providing us with any answer to the different help items, such as the "help received during intimate interaction." The satisfaction scale was ultimately excluded from the questionnaire.

Likert Type Scale

ADJUSTED TRANSLATION

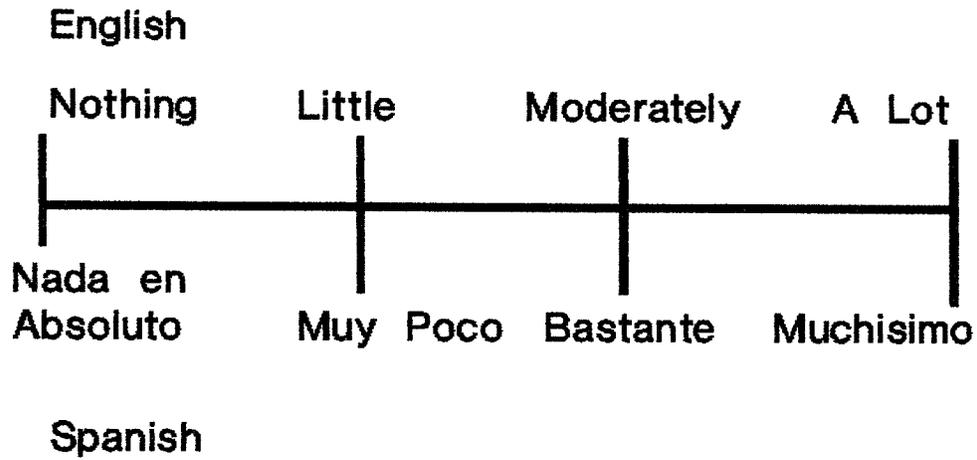


Figure 1

New Instruments

To capture interpersonal issues especially relevant to Mexican American widows, we constructed an independent scale to measure influence of support group intervention on the development of assertiveness skills. It is important to note that the word "assert" does not have a direct translation into Spanish; there is no word for assertiveness. The closest equivalent terms are "to affirm," "to defend" and "to sustain," which do not convey the concept of being able to stand on one's own ground in the face of disapproval or opposition. The concept is particularly difficult to convey to Mexican American widows, who expect and are expected to accept their lives rather than change them, and to accept the authority of the husband and later her children.

Mexican American widows are not expected to speak up for themselves in order to fulfill their own needs. We developed a scale entitled "Efficacy of Intervention" in order to measure behavioral changes that would indicate the widows' progress in terms of expressing their needs and engaging in concrete actions to fulfill them. In unstructured discussions held by the facilitator of the widows' support group from our pilot project, the widows raised issues related to the lack of fulfillment in their lives. They expressed these issues in terms of ways they wished to improve their lives. We based the assertion scale on such expressions of the widows' wishes and concerns. It is divided into three areas of assertiveness development that correspond to the sequence of therapy intervention. These areas are health and financial assistance, family assertion and social assertion. The first subscale is a checklist that measures ability to handle common aspects of daily life, such as getting a retirement check from social security, getting medical insurance, or getting house repairs done, all chores formerly done by the deceased husband (see Figure 2). Learning to deal with such immediate problems

alleviates the emergency needs precipitated by the husband's death and allows the widow to overcome concerns about her basic welfare.

Family relationships are another very important reason for the widow to develop assertiveness skills. After the husband's death her children tend to take over duties and responsibilities to protect the widow during her grief. But gradually she may lose her privacy and the ability to make autonomous decisions about the former husband's affairs and even her own affairs. However difficult the conflicts with children may become, the widow is often unwilling to voice criticism against her own children, particularly to those outside her family circle. We developed the family assertion scale in order to assess whether the support group intervention would help her deal with these conflict areas.

It often takes extensive social exchange before the respondent is able to consider the interviewer as "de confianza" (trustworthy) and is able to disclose painful information about the children. While this "confianza" or trust is being developed, the widow tends to respond in a socially desirable way. This pattern is reflected in the limited variability in the responses given to the family relationships scale. As Figure 3 indicates, questions that elicit highly homogeneous responses relate to whether children or friends provide emotional/financial support, whether the first try to control her life, whether she can express anger toward them, whether she tells them she can make her own decisions or conversely, whether she feels that it is her "obligacion" (duty) to take care of her adult children.

The social assertion scale attempts to measure ability to deal with interpersonal situations outside the immediate family circle. Responses to this scale varied more. The women were more willing to discuss whether they would ask someone for a favor, whether they would hide their feelings from others or from relatives, or whether they could express opinions (see Figure 4).

Efficacy of Intervention

Health and Financial Assistance

Social Security/
pension

Veterans' Admin.

Medical Insurance,
Medicare, AHCCS

ASKED FOR	HAS DONE

Figure 2

Family Assertion Scale

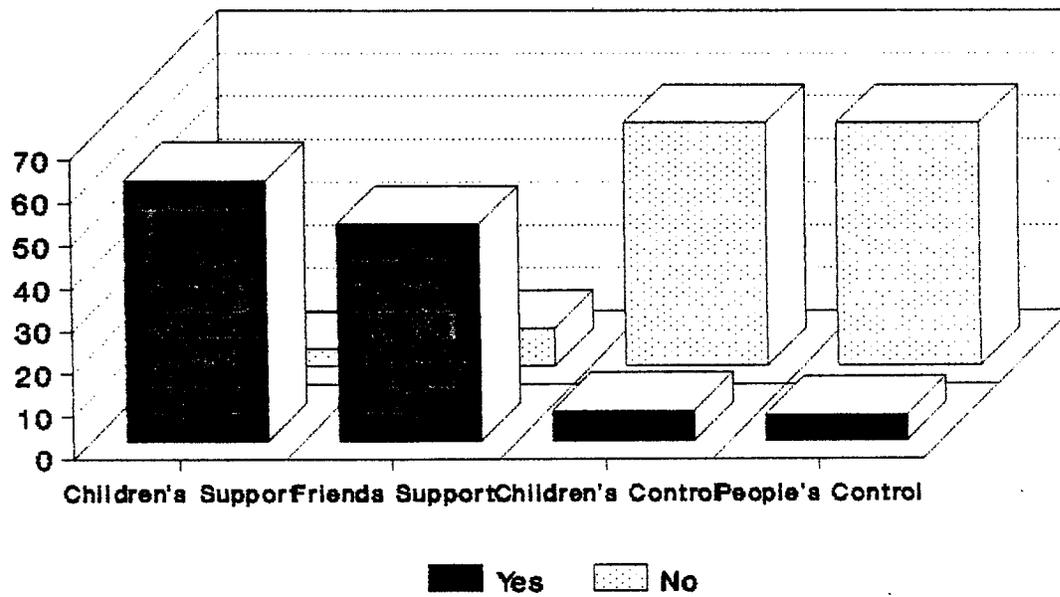


Figure 3

Social Assertion Scale

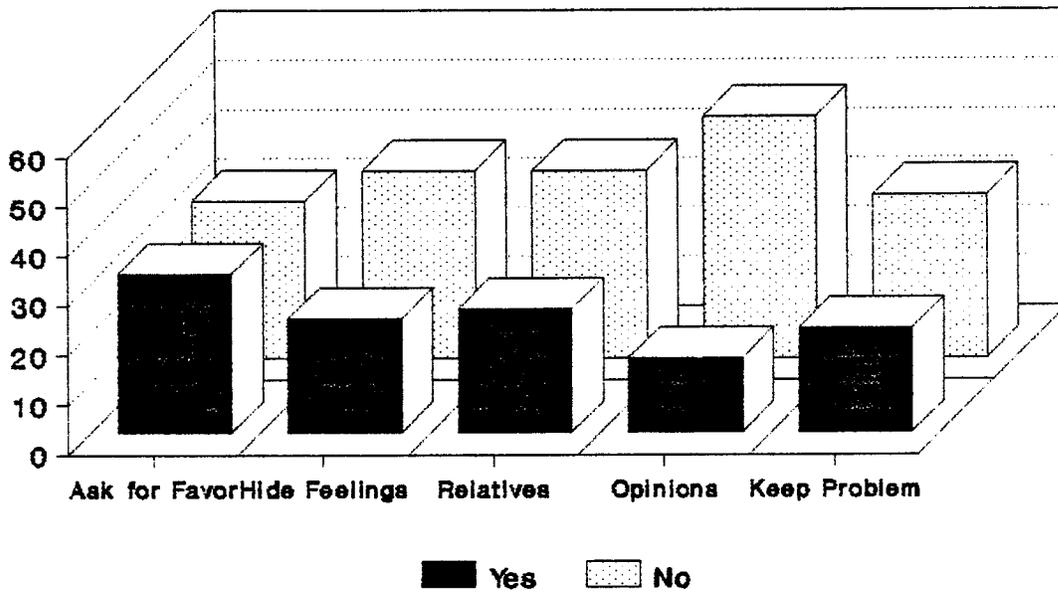


Figure 4

The extent to which the individual instruments reflected socially desirable attitudes and behavior varied and also shaped responses. For example, the symptom list we developed asks the widow to describe whether she has experienced headaches, backaches or restlessness, and it allows her to talk about feelings and physical sensations in a nonthreatening context. It drew expansive responses, providing us with information rich in detail about the woman's health and psychological status. Such responses were possible because somatization is considered an accepted way to vent grief. Alternatively, the family assertion scale provided us with little information since it is not socially acceptable to criticize family members or relatives.

Environment of the Interview

In designing this study, we also considered how cultural issues should influence the administration of the interview. We postponed giving the family and social relationship scales from the first to the second interview in order to enhance the widows' comfort level before exposing them to potentially painful questioning. We had to make a trade-off between getting a "baseline record" of their immediate interpersonal needs and the risk of losing the participant from the study. We decided not to explore family issues until the second interview, once "confianza" or trust had been established.

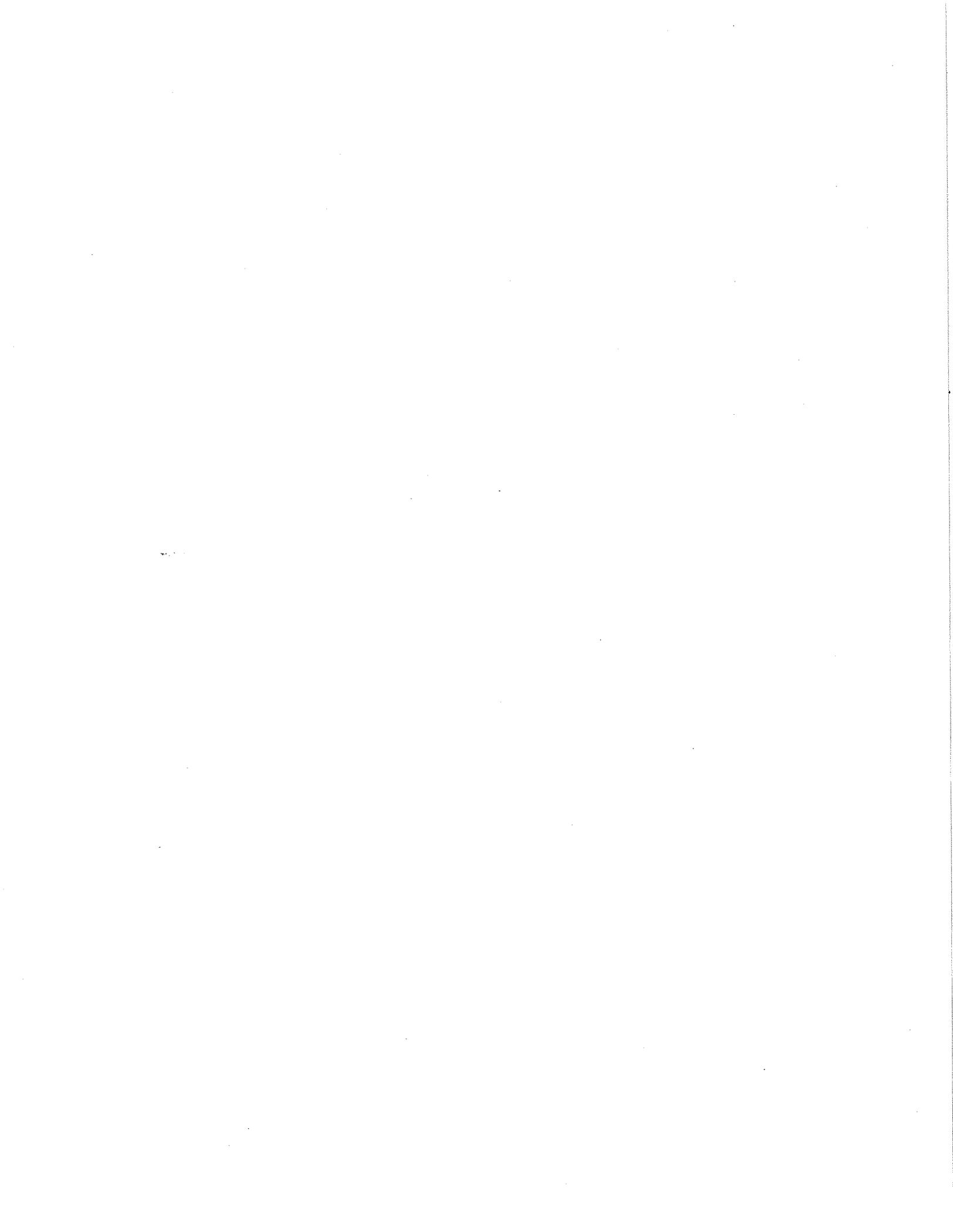
The widow's family has a very important role in her life and we had to tailor the interview process as well as the support group intervention to accommodate it. Sometimes at the arranged time of the interview, a family member would be present to monitor the initial set of questions. In addition, the widow would have to attend to family needs, such as caring for children, while the interview was in progress. Seldom was the interviewing done without interruptions and we trained the interviewers to deal with them. The research project could not have been done by studying the widow

independently of her family context. The family needs and dynamics are at the center of the widow's life and the research needs to work with the family unit, not only in order to make the research valid, but also to insure that the widow can collaborate with the study on a long term basis.

Mexican American culture creates a set of expectations and behaviors for widows that must be considered in conducting research. Sometimes these considerations require modifying standardized instruments, thus calling for a tradeoff between validity and generalizability. For intervention research to be relevant, it needs to speak the cultural and behavioral language of the population it seeks to understand. Creating or modifying predictions and instruments instead of relying on research tools based on other populations is part of the challenge of understanding people unlike ourselves.

References Cited

- Barrera, M. (1980). A Method for the Assessment of Social Support Networks in Community Survey Research. Connections, 3 (3), 8-13.
- Cuellar, I., Harris, L. and Jasso, R. (1980). An Acculturation Scale for Mexican American Normal and Clinical Populations. Hispanic Journal of Behavioral Sciences, 2 (3), 199-217.
- Neugarten, B., Havighurst, R. and Tobin, S. (1961). The Measurement of Life Satisfaction. Journal of Gerontology, 32, 311-16.
- Pearlin, L.I. and Schooler, C. (1978). The Structure of Coping. Journal of Health and Social Behavior, 19, 2-21.
- Spielberger, C., Gonzales-Reigosa, F., and Martinez-Urrutia, A. (1971). Development of the Spanish Edition of the State-Trait Anxiety Inventory. Interamerican Journal of Psychology, 5 (3-4), 145-58.



Depression and Grief in Mexican American Widows

Margarita Kay

The project, Efficacy of Support Groups for Mexican American Widows, was developed in response to a call from the National Institute of Mental Health for research on innovative approaches to the prevention of depression and suicide among minority groups. Thus we needed to learn about depression among our participants and to use measurement tools that are culturally specific. NIMH also had a methodological goal for the various studies that it was funding, and that was to find ways to measure depression that were cross-culturally valid. This paper reports on our efforts to understand the widows' grief and depression using not only their linguistic and culturally specific expressions but also their responses to questionnaires used cross-culturally in other research.

"The prototype for adult depression is grief, the almost universal depressive response to the loss of a loved one through death" (Klerman 1987, p 11). Kleinman and Good (1985, p. 2) ask, "is unresolved grief over the loss of spouse...the same disease as depression of a more fundamentally troubled person?" Is the grief of widows a feeling that passes with time or is it a clinical kind of depression? Clues to answering this question come from language, from the network of words and meanings (Good and Good 1982) that Mexican Americans use to describe how they feel.

Ethnosemantics, the study of words and their distinguishing features (Frake 1961, Kay 1979), is one method for learning how a specific people label emotions, their *emic* concepts. The meanings of words that they use are interpreted in the context of that culture. The widows participating in our project are not homogeneous in their language

use, but present different degrees of linguistic acculturation of Spanish and English. Many speak norteño Spanish, a lexicon used in northwestern Mexico, and the southwestern USA. Therefore, in order to measure emotional and somatic reactions to bereavement **emically**, we developed symptom scales in norteño. In addition, we needed to relate cultural symptoms to an **etic**, biomedical category, depression. We looked for tools used in other studies which appeared to have cultural sensitivity. This paper presents summaries of responses to the symptom scales we developed and administered at each of the five measurement times that occurred over the course of fifteen months and compares these with results from tools standardized to measure depression.

The Widows

As discussed in the paper by Zapien, the widows range from women who are five generations removed from Mexico to those who are Mexican-born. The women may be monolingual in Spanish or English or bilingual. Typically they are working class with an income and educational level below their Anglo counterparts (Kay 1977, 1980, 1988). Three of the five acculturation levels distinguished by Cuellar et al. were represented; mostly Mexican, Mexican bicultural, and bicultural. No bicultural Anglo or Anglo acculturated were in the study group.

Most literature about the Mexican American widow describes a stereotype and we had no basis, at the beginning of our study, for assessing the way in which widows would match this view or deviate from it. According to the stereotype, the woman's role is culturally prescribed throughout her life, with activities limited to those of wife and mother. She rarely relates to the outside world. She marries at a young age, often to a man some years older than herself. Man and wife spend their lives segregated by gender roles. Sometimes their lives are quite separate, living apart, even when not

formally divorced. In any case, the women live in matrifocal households, maintaining responsibility for cooking, laundry, and domestic decisions for husband and children. The man might be a womanizer, alcoholic, violent, but the woman continues with her duty. Even if divorced, she may care for him when he is ill. After the man dies, his widow loses the role of wife, but her ritual obligación to her husband continues for up to a year. When she is widowed, her life continues to be centered on her family, with her own needs subordinated. In return, she is now supposed to be accorded respect and care. It is expected that she would be assisted in her grief by her natural support system. This is her family, conjugal, affinal and ritual kin. However, the family is not always able to give this support. Thus it can be the new role of widow that contributes to her sadness.

Traditional mourning practices (luto) keep her in her home, almost secluded except for church and necessary errands. Other culturally specific actions include wearing black dress from three months to a year; having a rosary (rosario) recited and a wake (velorio) at the mortuary on the evening preceding the burial; having a rosary conducted in the home on the nine consecutive evenings that follow the funeral (novenario), and, or instead, requesting weekly masses; and visiting the grave on a daily or a weekly basis or on anniversaries, when the grave is swept and decorated with flowers, typically marigolds.

Measuring Symptoms of Depression

In order to evaluate the support group intervention designed to help the widows resolve bereavement, we looked at the various tools that have been used to measure mood, stress, anxiety, mastery, and depression. Since bereavement is known to have effects on health, we needed a symptom health list. As discussed earlier in the papers

by Marshall and Fernandez, few of the existing instruments had ever been used, fewer yet validated with Mexican American women, let alone widows. The Spanish of Mexican Americans differs in subtle but significant ways from the Spanish of other American Hispanic groups. Thus instruments validated for Puerto Ricans or Cubans were not always useable. In order to separate depression and grief, we needed to develop an instrument in norteño to measure the effects of grief. We had no list of symptoms that we were confident had been well translated into the language of our participants. We needed words that Mexican American widows used for somatic and emotional symptoms. Further, we were dealing with women of different degrees of linguistic acculturation. We also found generational differences in illness concepts and their labels. Such factors had to be considered when constructing a list of symptoms associated with grief, a condition that is labeled 'dysphoria' in medical literature.

We constructed three symptom scales. The first listed chronic diseases that the widows had suffered before widowhood. The most common health problems of the women were arthritis (55 percent), hypertension (34 percent), and diabetes (23 percent). The purpose of the chronic disease inventory was to separate pre-existing conditions from somatic and emotional symptoms that followed bereavement. Some of the chronic diseases were exacerbated immediately after widowhood, but gradually improved during the study year.

The second kinds of symptoms we enquired about are somatic. Much literature suggests that women somatize their feelings (Rosen, Kleinman & Katon 1982), especially Mexican American women (Vega et al. 1984). We selected somatic items identified in our previous study of widows (Coping and Health Among Urban Low Income Widows) to create a somatic symptom scale. (See Figure 1, Somatic Symptom Scale.)

Figure 1. Somatic Symptom Scale

<u>English</u>	<u>Spanish</u>
heart trouble	dolor del corazón
<u>aire en el corazón</u>	aire en el corazón
heartburn	agruras, acedías
dizziness	ararantamiento ó atarantada
nausea	mareos
shortness of breath	falta de aliento
problemas de la piel	rash
cough	tos
weakness	debilidad
<u>decaimiento</u>	decaimiento
headache	dolor de cabeza
tiredness	cansancio
constipation	estreñimiento
backache	dolor de espalda ó cintura
stiff neck	dolor de cerebro ó del cuello
gas pains	gases
no energy	sin energía
exhaustion	agotamiento
feel cold	siente frío
feel hot	siente calor
feel hot flashes	le dan calores
tremors	temblores

Reliability of the somatic symptom scale was calculated on the basis of 15 interviews yielding an alpha of .78, considered satisfactory for a new instrument. The mean of the 21 somatic symptoms at the first testing time was 8.7; item was redundant. Forty-seven percent of the widows complained of tiredness, 40 percent of exhaustion. Backache, stiff neck and gastrointestinal symptoms were common. The count for somatic symptoms decreased fairly steadily from time 1 to time 5, but slowly, with a marked (usually downward) change at the interview which occurred a year past the death. At the final measurement time, which occurred at approximately fifteen months after the husband's death, the mean score decreased to 5.5. Other research has suggested that the somatic effects of bereavement are over by six months; data from our participants show that the strongest impact is within the first six months but the symptoms do not disappear even in a full year.

The next scale that we constructed was a list of emotional symptoms or words used by this population to express their grief. To accommodate the different degrees of bilingualism, we offered the symptom lists in both Spanish and English to the subjects. (See Figure 2). Note that a few Spanish terms appear in the English list. A different semantic space is occupied by at least some of the English and Spanish terms. Furthermore, some of the English terms were not understood by a few of the widows who were interviewed in English. We simply could not gloss satisfactorily tirisia, although the components of meaning are similar to the English 'separation sorrow.' Arrimada ('beholden') is a concept that the widows understood better in Spanish than its English translation. Trastornada translates as 'disturbed,' desequilibrada as 'unbalanced,' but the Spanish words have connotations different from the English.

Some words, particularly the cognates, were tricky. One Spanish word for 'worry' is mortificación. It does not translate as 'embarrassment,' as one might be tempted to

Figure 2. Emotional Symptom Scale

<u>English</u>	<u>Spanish</u>
fear	miedo
fright	susto
worry	mortificación
	preocupación
anguish	congoja
anger/rage	coraje
acute nervousness	nervios
separation sorrow/ <u>tirisia</u>	tirisia
nightmares	pesadillas
loneliness	soledad
depression	depresión
sadness	tristeza
remorse	remordimiento
disoriented	desorientada
feel like you don't want to do anything	sin ganas de hacer nada
without energy	sin ánimo
feeling empty	se siente vacía
confused	confundida
<u>trastornada</u>	trastornada
<u>desequilibrada</u>	desequilibrada
bad mood	de mal humor

being in the way of other people
 siente que es un estorbo

siente que está arrimada siente que está arrimada

guess from the English cognate. Preocupación can be glossed as 'preoccupation' but the widows used the word to signify a less severe form of worry than mortificación. For that reason we offered both words. However nervios did not convey the same meaning as the gloss that we chose for the term, 'acute nervousness,' to the Mexican American widows who were interviewed in English. The emotional symptom scale yielded a reliability coefficient alpha of .81, and the item correlation value of each item was almost that high. Thus we feel that both the emotional scale and the somatic scale discussed above have potential use for this population, although we have established no norms.

At the first interview, the participants' mean identification of emotional symptoms was 9. This dropped to 6.6 at the final interview. Emotional symptoms varied, with personal circumstances accounting for different counts. For example, widows who suffered new losses (e.g. a grandson killed, a daughter divorcing) would explain their reasons for agreeing with 'worry' or 'anguish.' The pattern for the emotional symptoms tended to be a small decrease from time 1 to time 2, and a dramatic decrease at time 5, the interview that followed the anniversary of the husband's death.

As discussed earlier in these papers, we are using instruments that have been employed with some degree of success with Mexican Americans. These include a Spanish version of the Beck Depression Inventory (Lopez and Serrano 1975) that we adapted further and the Center for Epidemiologic Studies Depression Scale, the CES-D (Radloff 1977). For this report, we compare results from our symptom scales with

norms established for these standardized tests. For the Beck Depression Inventory, a score over 16 is considered to be diagnostic of a case of depression. However, there are no norms for Mexican American widows for the Beck. Eleven percent of the sample scored at seventeen or above when first measured. (Subjects whose scores gave concern were tested further, with 3 referred for treatment, followed but dropped from the study). The mean for the Beck Inventory of Depression at Time 1 was 6.8; at Time 2, 5.5; at Time 3, 5.2; Time 4, 4.4 and Time 5, 3.8.

Several studies using the CES-D have reported that the highest age-specific rates of psychological symptoms are found in middle life Hispanic women (Vega, Valle, Kolody and Hough 1987). Vega et al. (1984) found the prevalence of depressive symptoms for Mexican American English-speaking samples to be much lower than that reported by Spanish-speaking Mexican Americans and suggested that differences in educational levels appear to be accounting for many of the variations in depressive symptoms. With the CES-D, Vega (personal communication) recommended that a score above 23 be considered diagnostic of depression in widows, one standard deviation above the usual, since there are no established norms. Mean scores for the CES-D at Time 1 was 19.8, T2, 15.5, T3, 14.5, and T4, 13.5, and Time 5, 12.7.

The Beck correlated only moderately well (.33, $p < .00$) with both the somatic and emotional symptom scales. The correlation of the CES-D with these scales increased from .47 at the first measurement to .70 at the fourth time (all with $p < .00$). This returns one to the question posed at the beginning of the paper. Is the grief of the widow of the same magnitude as clinical depression? We think not. Was it necessary to devise a linguistically specific scale? We are convinced that the answer is yes. The statistical treatment satisfies us that we are measuring factors not captured by the standard scales. It is clear from reading the statements that the women made after identifying a symptom

that the symptom scales really tapped their feelings. In the final analysis to determine the efficacy of the support groups for resolving bereavement, we found no significant differences between the Beck Depression Inventory and CES-D scores of the widows who participated in the support groups and the ones who did not. However, there were significant differences in responses to the culturally specific symptom scales that we developed. We are not sure how meaningful are responses to scales developed for Anglo-American populations whose language may label concepts foreign to the women of our study.

REFERENCES

- Berkanovic, E. (1980). The Effect of Inadequate Language Translation of Hispanics' Responses to Health Surveys. American Journal of Public Health, 70 (12), 1273-76.
- Brislin, R.W. (1980). Analysis of oral and written materials. In H.C. Triandis and J. Berry (Eds.), Handbook of cross-cultural psychology. Boston: Allyn & Bacon.
- Cuellar, I., Harris, L.C. and Jasso R. (1980). An acculturation scale for Mexican-American normal and clinical populations. Hispanic Journal of Behavioral Science 2, 199.
- Frake, C.O. (1961). The Diagnosis of Disease Among the Subanun of Mindanao. American Anthropologist 63, 112-32.
- Golding J.M., and Karno M. (1988). Gender differences in depressive symptoms among Mexican Americans and non-hispanic whites. Hispanic Journal of Behavioral Sciences 10, 1-19.
- Good, B.J. and Good, M-J. (1982). Toward a Meaning-Centered Analysis of Popular Illness Categories: "Fright-Illness" and "Heart Distress" in Iran. In A.J. Marsella and G. White (Eds). Cultural Conceptions of Mental Health and Therapy. Boston: Reidel.
- Good, F.J., Good, M-J. Del/Vecchio, and Moradi, R. (1985). The interpretation of Iranian depressive illness and dysphoric affect. In A. Kleinman and B. Good (Eds.). Culture and Depression. Berkeley: University of California Press.
- Jenkins, Janis H. (1988). Conceptions of schizophrenia as a problem of nerves: A cross-cultural comparison of Mexican Americans and Anglo Americans. Soc. Sci. Med. 26 (12), 1233-43.
- Kay, M. (1977). Health and Illness in a Mexican American Barrio. In E.H. Spicer (Ed.) Ethnic Medicine in the Southwest. Tucson: University of Arizona Press.
- Kay, M. (1979). Lexemic Change and Semantic Shift in Disease Names. Culture, Medicine and Psychiatry 3, 73-94.
- Kay, M. (1980). Mexican, Mexican American and Chicana Birth. In M. Melville (Ed.). Twice a Minority: Mexican American Women. St. Louis: C.V. Mosby Co.
- Kay, M., Tobias, C., Ide, B., Zapien, J., Monk, J., Bluestein, M. & Fernandez, M.E. (1988). The Health and Symptom Care of Widows. Journal of Cross Cultural Gerontology 3, 197-208.
- Kleinman, A., and Good, B. (1985). Introduction. In A. Kleinman and B. Good (Eds). Culture and Depression. Berkeley: University of California Press.

- Klerman, Gerald L. (1987). The nature of depression. Mood, symptom, disorder. In A.J. Marsella, R.M.A. Hirschfeld and M.M. Katz (Eds.). The Measurement of Depression. New York: The Guilford Press.
- Lopez, V.C. and Serrano, E.U. (1975). Adaptación Castellana de la escala de evaluación conductual para la depresión de Beck. [Spanish translation of the Beck Depression Inventory]. Rev. de Psiquiatría y Psicología Med. de Europa y América Latina. (Barcelona). 12 (4), 217-36.
- Lutz, C., and White, G.M. (1986). The Anthropology of Emotions. Ann. Rev. Anthropol 15, 405-36.
- Nations, M.K., Camino L.A., and Walker, F.B. (1988). Nerves: Folk Idiom for Anxiety and Depression? Soc Sci Med 26, 1245-59.
- Nichter, M. (1981). Idioms of distress. Cult. Med. & Psychiatry 5, 379-408.
- Radloff L.S. (1977) The CES-D scale: a self-report depression scale for research in the general population. Appl Psychol Measurement 1, 385-401.
- Rosen G., Kleinman A., and Katon W. (1982). Somatization in Family Practice: A Biopsychosocial Approach. Journal of Family Practice 14, 493-502.
- Shweder, R.A. (1985). Menstrual Pollution, Soul Loss, and the Comparative Study of Emotions. In A. Kleinman and B. Good (Eds.), Culture and Depression. Berkeley: University of California Press.
- Vega, W.A., Kolody, B., and Valle J.R. (1986). The relationship of marital status, confidant support and depression among Mexican immigrant women. Journal of Marriage and the Family 48, 597-605.
- Vega, W., Warheit, G., Buhl-Auth, and Meinhardt, K. (1984). The prevalence of depressive symptoms among Mexican Americans and Anglos. A. J. Epidemiology 120 (4), 592-607.
- Vega, W.A., Valle, R., Kolody, B., and Hough R. (1987). The Hispanic network preventive intervention study: A community based randomized trial. In R. Muñoz (Ed.). The Prevention of Depression: Research Foundations. New York: Hemisphere.
- Wikan, U. (1989). Bereavement and loss in two muslim communities: Egypt and Bali compared. Soc. Sci. Med. 27, (5), 451-46.

A Structured Social Support Treatment Program for Mexican American Widows

Carmen J. Portillo

Though research has addressed distinctions in effective treatment modalities for men and women across different Hispanic groups, research specific to Mexican Americans is limited, so that it has been difficult to reach any definite conclusions regarding therapeutic modalities and interventions that are effective with Mexican American women. The research project therefore has required that we design the treatment program as well as evaluate the efficacy of the support group strategy. This paper describes the support treatment program that formed the intervention.

Our objective in designing a structured social support treatment program was to respond to the specific patterns of mourning and bereavement of Mexican American widows. The nine month support group sessions were held weekly for six months and then every other week for three months. Since widows were recruited approximately three months after the death of their husbands, it was important that they were connected to the support group as the first anniversary of their deceased husbands approached, a time which is a significant marker within the cultural group. Moreover, the issue of trust and cohesion is critical in a social support treatment program. We felt that it was necessary that the widows meet weekly for the first six months in order to provide some semblance of support and structure during the early period of bereavement. This is particularly critical because the widows were not accustomed to discussing sensitive and personal issues in the presence of strangers and the concept of a social support treatment program was foreign to most of them. At the end of the six month period the widows have coalesced and learned to be supportive of one another;

this facilitated the transition of meeting weekly to every other week and the termination of the group. Jill de Zapien discusses the strategy and implementation of six support groups that were initiated at six different points.

The structured social support program is not to be confused with a mutual support design. Each group was led by a facilitator who also acted as a resource person. Examples of the functions of a resource person were directing the widows to social service agencies or offering suggestions for economic opportunities. Facilitators were selected primarily for their clinical experience with an Hispanic population, and not on the basis of academic credentials. As a result, two of six facilitators had not completed their bachelor's degree, one had a bachelor's in psychology, and the other three a master's degree in social work. The facilitators were trained to use a treatment manual which focused on specific techniques and a modified client-centered nondirective approach. In addition, a bilingual-bicultural facilitator who had participated in the pilot study modeled appropriate behavior for the facilitators in each of the first sessions, providing an opportunity for them to observe and engage in the process under experienced guidance. To ensure the integrity of the treatment, a debriefing procedure was developed and implemented following selected sessions. This process was extremely helpful since it allowed us to refine the treatment plan accordingly and address unanticipated problems. Moreover, the same session for each group was audiotaped to compare the actions of the facilitator.

Although the sessions were conducted primarily in Spanish, code-switching in English occurred frequently. Spanish terms were used to discuss culturally relevant themes that have no counterpart in English, for example when the widows talked about luto which not only denotes mourning practices, but also as one widow stated, "the luto is what I feel in my heart." This particular widow did not follow some of the traditional

practices, such as wearing dark clothing, commonly associated with mourning, and refused to attend social gatherings or events that included food. Her feeling was that partaking in a significant event would deny her memory of her husband whom she described as a vivacious man who loved to cook large meals. The implication is that the widows refrained from attending an event that was significant to their deceased husbands or any social gathering arranged during the period of bereavement.

The goal of the support group was to effect change at three levels: behavioral, intrapersonal, and interpersonal. The behavioral goal was to increase the participant's assertiveness, assisting her to become less dependent on her children and gain greater independence and self-reliance, for example, helping the client to acquire a new skill such as driving which would enhance her independent mobility. The intrapersonal goal is to improve client self-esteem and to decrease depressive symptomatology. The interpersonal goal is to assist the client to develop a sense of choice in social relationships that will result in the expansion of her social network.

To actualize these goals, we developed a treatment manual that is divided into three modules, each to be implemented over a two month period of time. In the first session, the facilitator asked each widow to introduce herself and talk about the nature of her husband's death. Since this is a very emotional time for the widows, invariably they would revert to their primary language. A critical objective in this module is to foster trust between group members and the facilitator. If the group is to develop a sense of trust, confidentiality must be stressed throughout. It is particularly important to Mexican Americans because the culture may preclude sharing intimacies with people outside of the immediate family. Not only is it important to be aware of the cultural rules, but also the size and integration of the community. In the Tucson metropolitan area which has a population of approximately 685,000 (1989), the percentage of

"Spanish" descent is estimated as 20.5 percent, though some neighborhoods have relatively high concentrations of Mexican Americans. One may think that the community is large enough to avoid familiarity but repeatedly widows have stated, "Oh your husband made our kitchen cabinets" or "you're the sister-in-law of so and so." This certainly emphasizes the issue of confidentiality and trust among group members. Fortunately, by the fourth session, groups have been able to develop a strong sense of cohesion and a "family-like" ambiance. Perhaps what contributed to this was the facilitator's emotive actions and allowing the widows to bring refreshments and traditional foods. It is important to point out that in the Mexican American culture, physical contact such as a hug\ abrazo is a sign that conveys warmth and caring.

The issues that emerge in the first module include feelings of loss, mood changes, and particularly difficulties in dealing with daily rituals, special occasions, and finances. The first three weeks of treatment are particularly emotional and difficult for the widows. They have often commented how much worse they feel following the initial sessions and that task of returning the subsequent week is arduous. Since the introductory period is a critical point at which a group will coalesce, staff will often make a home visit to those widows having difficulty returning. Once the widows have created a sense of security among themselves, they begin to share some of their financial and economic concerns. Education is critical in helping them learn how to obtain social security, veteran's benefits, emergency or general assistance, meet burial expenses, and handle tax changes, health insurance, and housing problems. Culturally, some of these women have been excluded from financial concerns of the family. Thus, the Mexican American widow is at a disadvantage in handling these problematic areas because of language differences and experiential barriers in dealing with bureaucracies.

During the second module, presented in the third and fourth months of treatment, the focus changes to problems of intrapersonal behavior. The objective is to distinguish between normal and abnormal behavior and address the difficulties encountered in social interaction. Frequently, depression among this population is exhibited in the form of somatic complaints, such as the loss of appetite, feeling agitated or nervous, and changes in sleep patterns. When the widows are asked what they do for themselves during this period, more often than not they will indicate the value of their religion and faith as a coping strategy. Statements, such as, "God took him," or "it was God's will" reflect the widows' religious belief system.

Widows across cultures frequently experience the sense of presence and dreams about their husbands. One widow shared a dream that occurred one week before her invalid husband passed away. In the dream she saw her husband walk and lean against a Christ-like figure with a dark colored robe and she said, "you will never fall again." After her husband died, she continued to think about the dream and became concerned about its meaning since she was unsure against whom he was leaning. Did her husband go to heaven, she would ask herself? Soon after the burial, she received a mass card with the exact picture of the Christ-like figure as it was in her dream, and knew instinctively that her husband was with the Lord. Spiritual experiences, dreams, and sensations may be stronger or more vivid than those occurring in Anglo culture. The facilitator at this time attempts to alleviate the widows' anxieties by interpreting their experiences within a religious framework and accepting them as normal occurrences.

The group also discusses anger and guilt as it relates to the socialization of these women to be the perfect mother and wife. The widows begin to explore their feelings of anger and guilt particularly toward their husband because of his perceived neglect, alcoholism, or lack of participation in raising the children. In the domain of social

interaction, the widows articulate their feelings of becoming a "third wheel" with friends and family members and their profound sense of rejection by other women. They are encouraged to discuss issues which center on changing family roles, and how to cope with children who begin to behave like parents. Many of the Mexican American women who participated in this study were conditioned from an early age to believe that to become a "real woman" means to be fertile and bear children. Woman's ascribed role is to meet the needs of the family and to nurture the children throughout her life. For her to feel and express anger is unacceptable because the mother is supposed to be all giving and all forgiving.

The third module, presented in the fifth and sixth months of treatment, turns attention to the interpersonal needs of the widow and to facilitating acquisition of new behavioral skills. The widow is encouraged to concentrate on meeting her own needs, rather than those of her children. Concerns of being single, living alone, employment, volunteer work, and learning to drive, are areas which emerge at this time. The women participate in a series of assertiveness exercises which deal with children, handling the sense of obligation, the concept of rights and erroneous beliefs, learning to say no, making one's own needs known, and being able to express them. They are also encouraged to try new experiences, new roles, and to form relationships outside the family. Assertiveness training with this population is a long and intense process because of the cultural expectations about female roles. Widows who have emerged as natural group leaders frequently intervene at this time, sharing personal experiences and alternative solutions.

In the last three months, devoted to a reinforcement module, the main themes become acceptance and resolution. The widows continue to systematically review and reinforce previous learned skills. Treatment terminates as the women begin to accept

their new life, confront the first anniversary of their husband's death, and discuss where they have been and where they would like to be in the future. A catharsis effect begins to occur. For example, approximately 90 percent of the widows let go of luto at this time because they now believe their mourning obligations have been fulfilled. They change their mode of dressing and resume outside social activities. The majority of the women also begin to socialize with one another, calling each other on the phone, getting together for lunch or family functions, thus expanding their network. Moreover, even though the groups have technically terminated, they continue to meet on a weekly or biweekly basis to gain emotional support.

Termination of the support group for these widows is only in the most formal sense. The group setting has allowed a set of Mexican American widows who share the same value system and belief structure to grieve and attempt to resolve their loss. On numerous occasions we have heard the widows say, "I can really talk about the way I feel here, because they understand me - they've been through it. Not even my family knows how I feel." In the nine months of treatment, they have cried, they have shared, they have laughed, but most of all they have grown together and learned to survive a painful experience - the death of a spouse.

Testing the Efficacy of the Support Group Intervention

Merle H. Mishel

This paper reports the results of the social support intervention for three experimental and three control groups (N=67). It is important to recognize that the data reported here represent half of the experimental and the control participants in the study and cover the first three of six sets of experimental and control groups who will complete the measurement frame. These data are representative of the entire sample, however, since we found the groups in the total data set to be equivalent at baseline on the majority of variables. Also it is important to be aware that here we are drawing only on the quantitative portion of the data.

DESIGN

This study employs a randomized block design with two levels of treatment, the intervention and the naturally occurring social support system. Time of entry into the study is the blocked variable. The treatment program has been offered six times, each offering consisting of a new treatment group and a new control group. The treatment intervention is given weekly over a six month period and bi-weekly for three months. All of the widows entered the study at one of the six offerings and were randomly assigned to either the experimental treatment group or to the control condition. We collected data on their mental health at five points, interviewing experimental and control subjects from a particular treatment offering within the same time. Interview 1 occurred at baseline, interview 2 after three months, interview 3 after six months, interview 4 after nine months and interview 5 after twelve months, one year from the time the widows entered the study. At interview 2, those in the treatment group have completed half of

the structured treatment program. At interview 3 they are completing the final half of the structured treatment program, and at interview 4, the reinforcement portion of the treatment package. At interview 5, the widows are three months post-treatment.

FINDINGS

This paper presents data on 38 widows from the control group and 29 from the experimental group. Although we recruited 25 widows per offering of the program and assigned 12-13 to the experimental group with the remainder as controls, we are including here only complete data on widows who remained with the program throughout all measurement phases. Eight widows dropped out of the experimental groups, with attrition evenly dispersed among the three experimental groups.

The initial question we asked in the data analysis was: How effective is the intervention in reducing the symptoms of bereavement? Specifically this question addressed differences in the experimental and control groups over five measurement phases on the dependent variables of anxiety, social support, two measures of depression (BDI, CES-D), two measures of life satisfaction (Life Satisfaction Index and Cantrils' self-anchoring ladder), mastery, family assertion and social assertion.

Prior to the analysis, we determined the baseline equivalency of the groups. They differed on two variables, age and length of widowhood. In the analysis of the research question we treated these two variables as co-variates.

A series of repeated measures ANOVA's were run. Results indicated no treatment effect and only a main effect for time. The variables of anxiety, depression as measured by the BDI and CES-D, life satisfaction on the self anchoring measure, and family assertion changed over time. Anxiety and depression decreased over time and life satisfaction increased in a manner consistent with bereavement theory. Thus the

measures were sensitive to the expected changes in bereavement, but the treatment showed no effect when all participants were considered together. We were interested, however, in learning if the groups would show some trends toward a treatment effect if we divided them on variables relevant to the culture and to the experience of bereavement.

According to the principles of experimental studies that are theoretically driven, we should be able to specify the dependent variables upon which change is most strongly theoretically predicted and the characteristics of sub-groups likely to exhibit the change. In this study, the outcome variables we expected to be most sensitive to the intervention were anxiety, depression and life satisfaction. We expected that there would be an interaction of subgroup characteristics with treatment effectiveness. We expected specific subgroups to differ in treatment-outcome relationships.

The questions addressed in this portion of the analysis are:

Which demographic and socio-cultural variables describe treatment benefit?

Is the treatment benefit more durable and/or more efficient depending upon specific demographic and socio-cultural variables?

To address these two questions, we divided the widows into subgroups on selected variables and ran a series of one-way ANOVA's for each interview phase using the Bonferroni correction. Following this analysis, and based upon the limited significant findings, we examined the data for trends by plotting the mean scores for each group at each interview on the variables of anxiety, depression and life satisfaction and visually examining the plots.

We created subgroups on the basis of variables identified in the literature as culturally important to the lives of the participants and likely to be significant during the phase of bereavement. These variables were: living arrangements (alone or with

children); sudden death of husband; income level; existence of problems-financial, personal, interpersonal; work history (inside or outside home); length of widowhood; age; education; level of acculturation.

We expected that the intervention would be beneficial in reducing anxiety. The variables showing differences between experimental and control widows on anxiety across interviews were: length of widowhood, income level, education, sudden death, and acculturation. All the trends followed the same pattern. Initially the level of anxiety was higher in the experimental than in the control group, yet the experimental group evidenced a consistent decline in anxiety while the control group showed either a gradual decline until interview 4 and then a gradual increase in anxiety or a decline from interview 1 to 2, and then a stabilization of anxiety level.

In the analysis of anxiety, experimental participants widowed 5 or more months had higher levels of anxiety than their comparable control group at baseline, dropped significantly by interview 2, and continued to reduce their anxiety levels through to interview 5. Their control group gradually reduced anxiety levels till interview 3, then began to climb up again toward their initial level (see Figure 1).

This pattern was parallel for the two variables of income level of \$500-\$849/month and education level of 7-12 years (see Figures 2 & 3). The widows in the experimental groups exhibited more anxiety than those in the control groups at baseline and gradually reduced their anxiety from interview 1 through 5, with a concomitant decrease in anxiety levels among control groups through interview 3 and then a rising trend in interviews 4 and 5. At interview 5, widows in the control groups who had the designated income level demonstrated higher levels of anxiety than those in the experimental groups. The pattern with respect to education level of 7-12 years and anxiety showed a similar trend except that anxiety in the control groups did not begin to rise until interview 5.

Widowhood Length and Anxiety 5 or more months

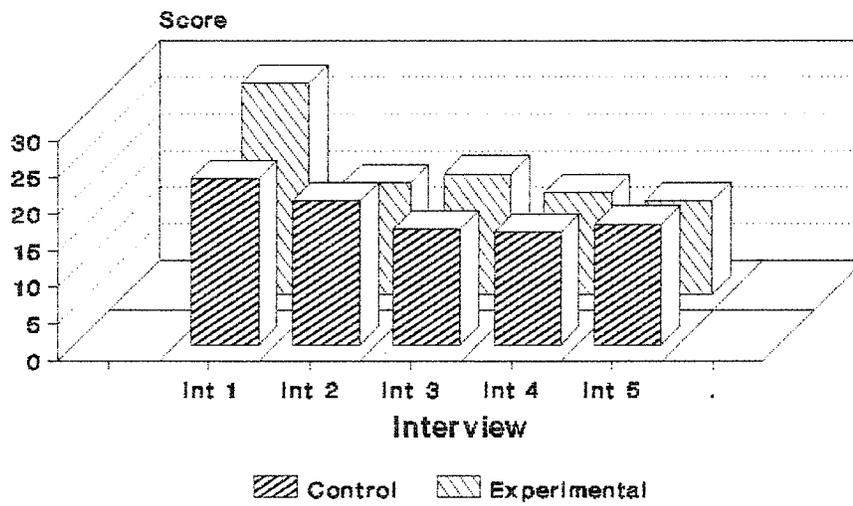


Figure 1

Income Level and Anxiety \$500 - \$849 per Month

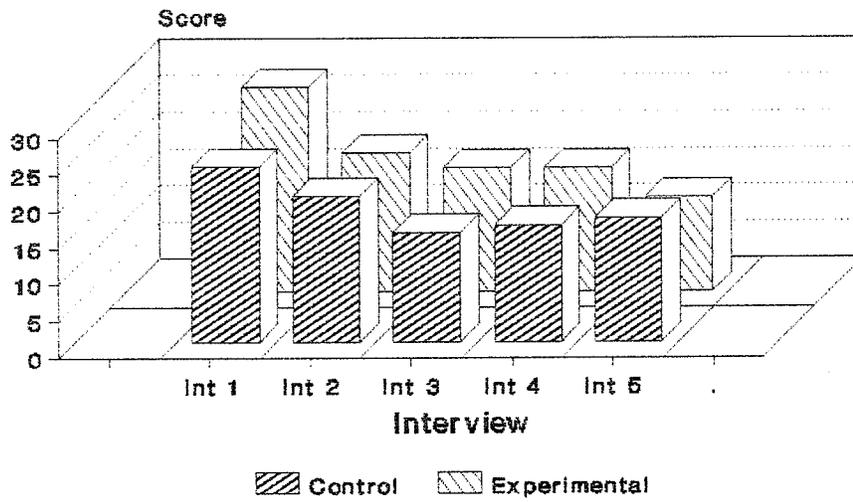


Figure 2

Educational Level and Anxiety 7 to 12 Years

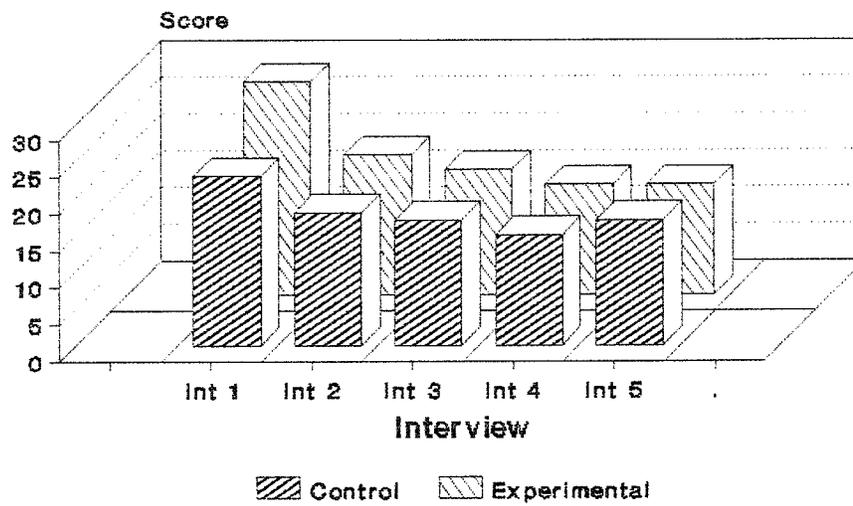


Figure 3

In the sub-group characterized by sudden loss of spouse (Figure 4), the pattern was somewhat different. Widows in both experimental and control dropped in anxiety levels from interview 1 to 2. The control group level of anxiety rose slightly at time 3 and generally stabilized for interviews 4 and 5. Meanwhile the treatment group continued to show progressively lower levels of anxiety.

Since trends in the data were found for only four of nine grouping variables, the effect of the treatment on reduction of anxiety was not a general phenomena. It was identified in these sub-sets of the sample just presented, and the decline in anxiety only began to differ from the natural time effect at about the conclusion of the structured treatment program, interview three, and into the reinforcement portion of the program, interview four.

This same pattern was evident in the sub-group trends in depression. Again among women widowed 5 months or more (Figure 5), those in the experimental groups gradually reduced their levels of depression, while the widows in the control groups fluctuated in depression levels across interviews, culminating with a rising level of depression by interview 5 that began to exceed that in the experimental group.

Again among widows with an income of \$500-\$849/month, the depression among the experimental groups declined over time, while among those in control groups it declined until interview 4 and then increased by interview 5, exceeding the level of depression found in the experimental group (see Figure 6).

Among women who experienced a sudden loss of spouse, those in the experimental groups showed gradually declining levels of depression, though the control groups fluctuated up and down, culminating with a rising level of depression at interview 5, exceeding that found among women in experimental groups (see Figure 7).

Death Sudden and Anxiety

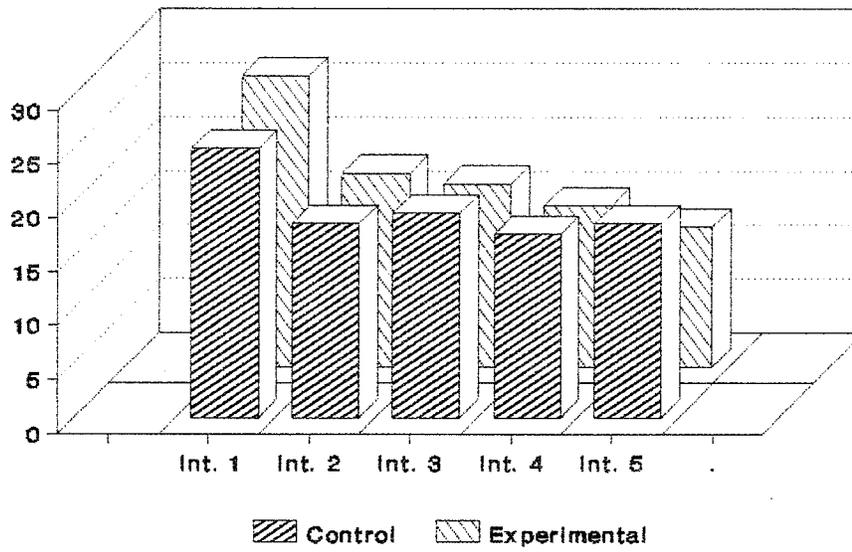


Figure 4

Widowhood Length and Depression (CESD) 5 or more months

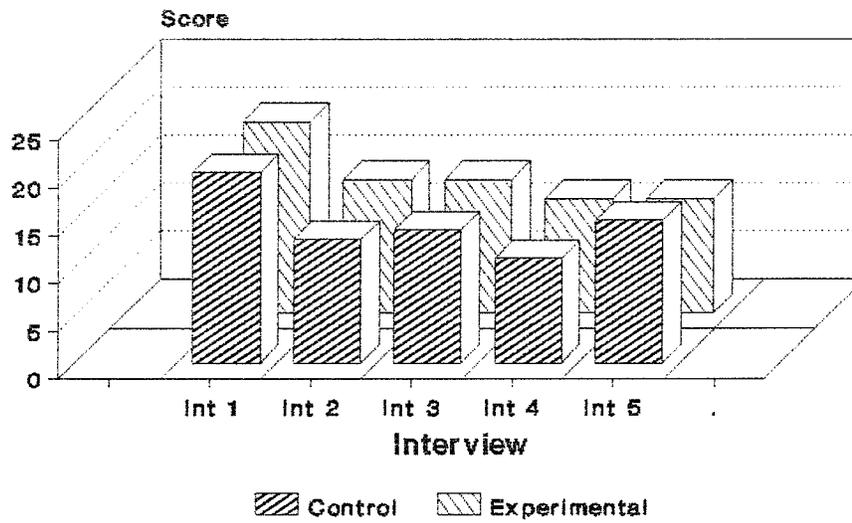


Figure 6

Income and Depression (CESD) \$500 - \$849 per month

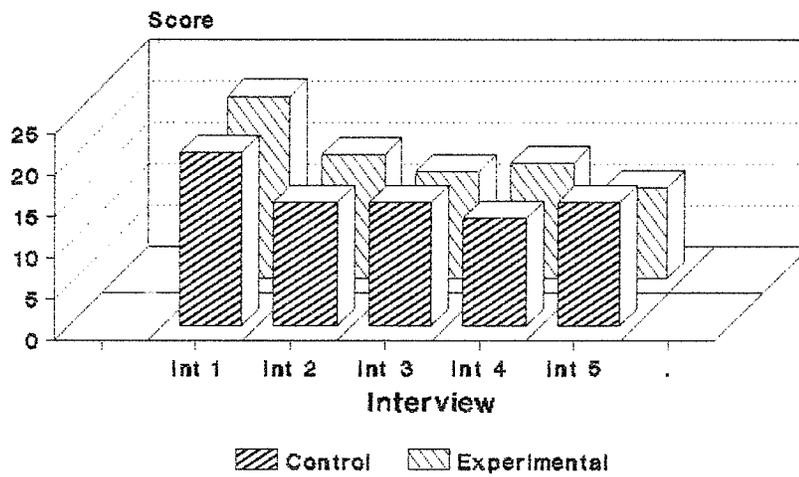


Figure 6

Sudden Death and Depression (CESD)

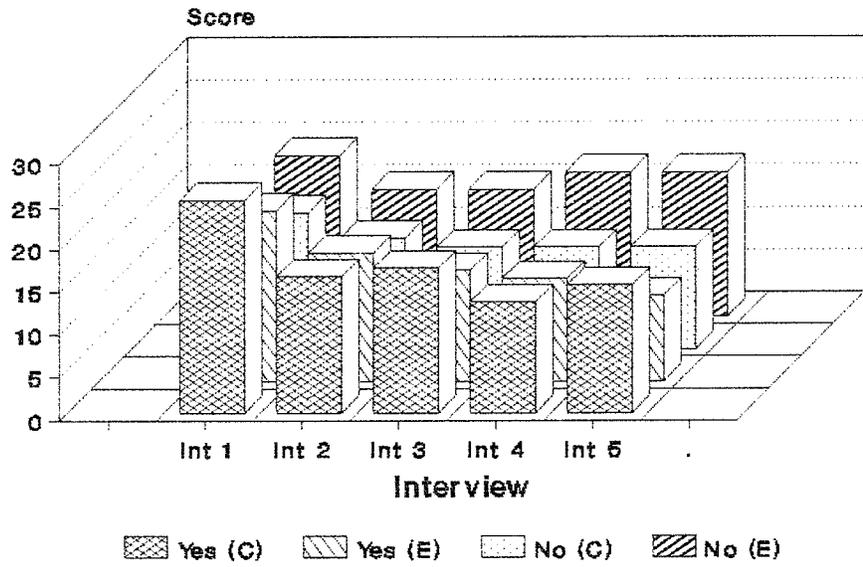


Figure 7

For the third and final dependent variable, life satisfaction, among widows with lower levels of education (0-6 years), those in experimental and control groups were about equal at baseline (see Figure 8). Members of experimental groups increased their life satisfaction between the first and third interviews then dipped down, only to rise again at the fifth interview. Widows in control groups initially dropped in level of life satisfaction from interview 1-2, then also increased again but never reached the level of life satisfaction demonstrated by experimental groups during the measurement time.

In our analysis of life satisfaction among other sub-groups, we found that experimental groups evidenced higher life satisfaction than the controls at baseline, although this difference was not significant. On the variable of sudden death (see Figure 9), widows in the experimental groups continually gained in life satisfaction, while those in control groups stabilized at the level exhibited at the first interview. We discovered one highly significant difference in life satisfaction between the experimental and control subgroups for the variable of no work outside the home (Figure 10). Among these widows who had never worked outside their home, members of experimental groups had higher levels of life satisfaction at interview 4 and 5 than controls (significant at the .02 level at interview 4 and .01 level at interview 5). The degree of acculturation also appears to be related to differences in life satisfaction (Figure 11). Among those we identified as "very Mexican," widows in experimental groups exhibited higher levels of life satisfaction at interviews three and four than did those in control groups (significant differences at .04 and .03 levels), although they were not equal at baseline. We noted a similar finding among the 30-49 year old women in experimental groups who differed significantly from their controls in degree of life satisfaction at interview 4 (Figure 12).

All of these findings only reflect trends in the data. Very few are statistically significant, although they are substantively meaningful. The trends imply that the

Education and Life Satisfaction Cantril Ladder

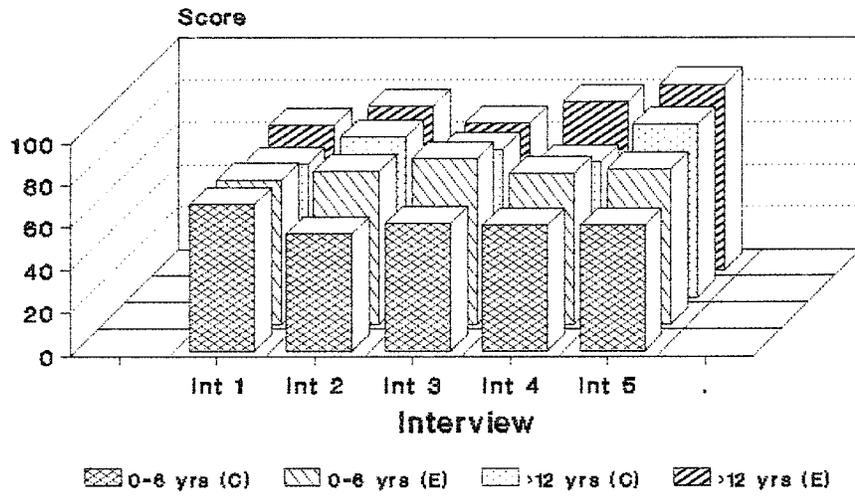


Figure 8

Life Satisfaction Sudden Death

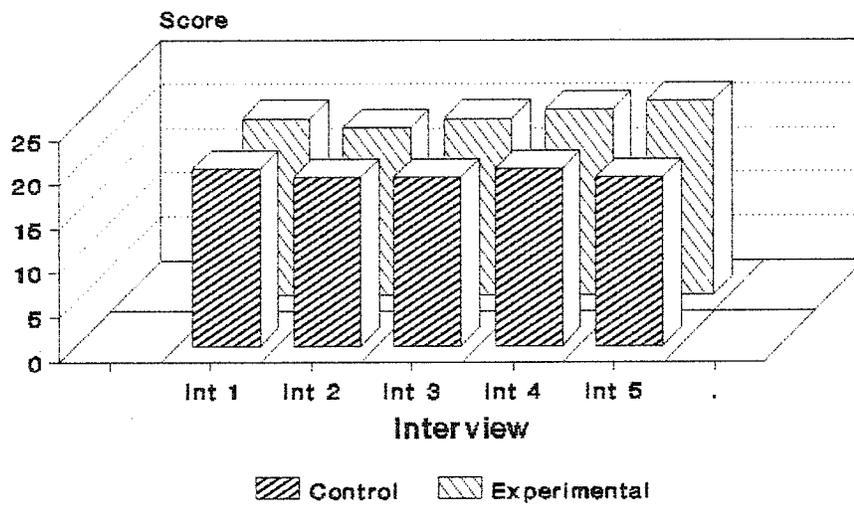


Figure 9

Life Satisfaction and no work outside home

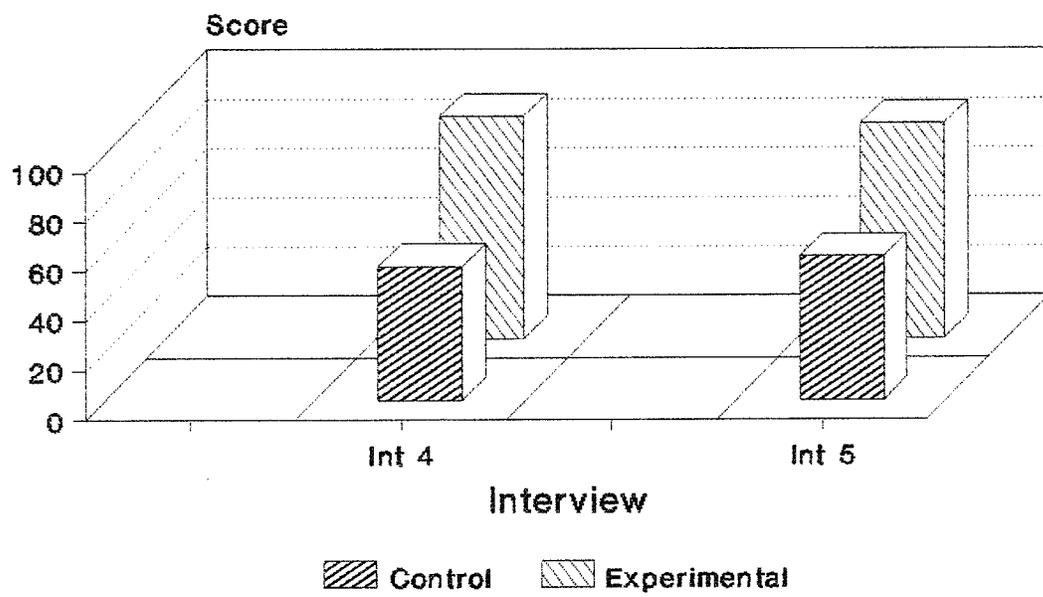


Figure 10

Acculturation & Life Satisfaction (Cantril Ladder)

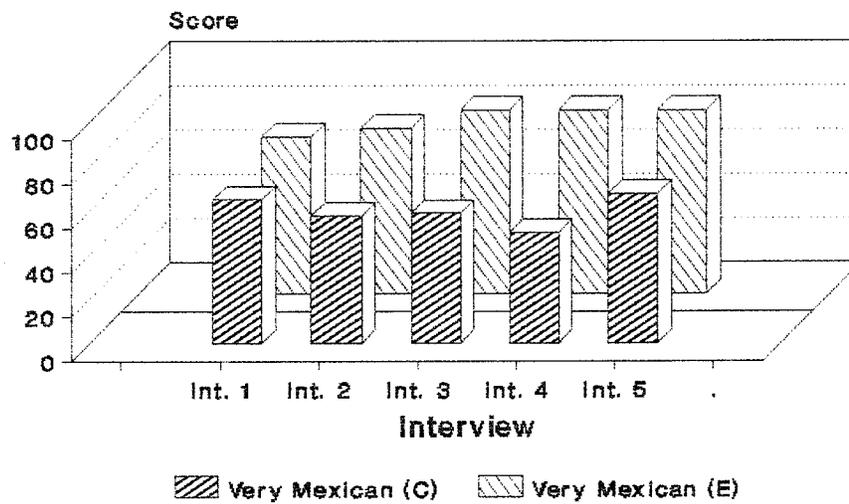


Figure 11

Life Satisfaction

30-49 yrs old & 66 yrs & older

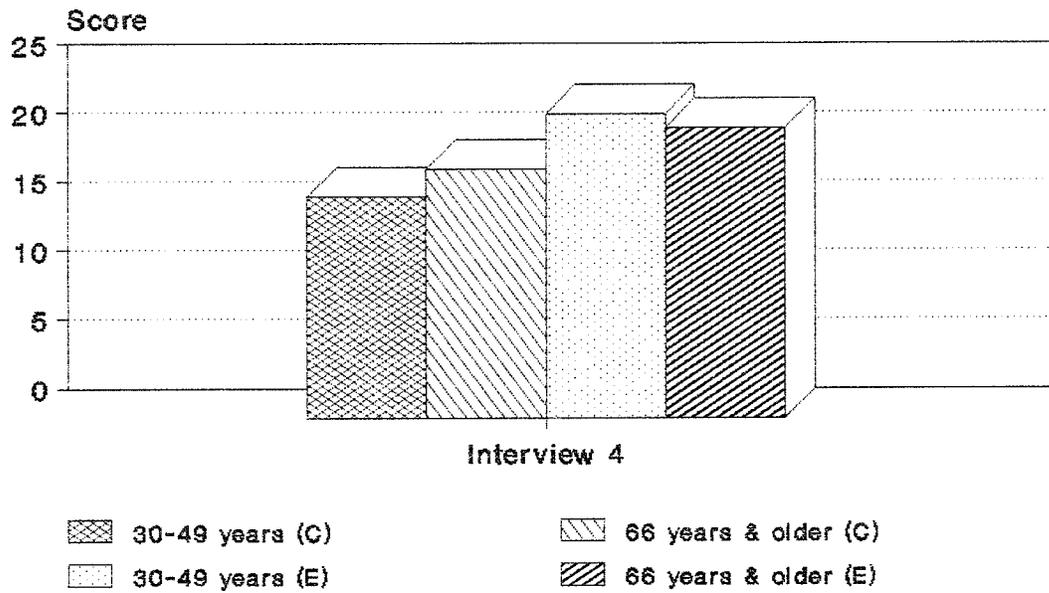


Figure 12

treatment has no immediate effects. Any effect that may be evidenced when all six treatment offerings are concluded and data collection is completed, will likely be at interviews 4 and 5. This is not surprising because 69 percent of the widows are highly oriented to their traditional culture. As the previous authors have noted, the cultural ties are very strong and continually reinforced by family and friends. Thus it seems that only when the women in the support groups have forged strong ties with other group members and have integrated these people into the fabric of their social network, are they armed with enough affirmation to move away from the depression and bereavement, lose some of the inhibiting anxiety and find some coherence between their prior life and their developing new skills and goals. It is only after 6 months of weekly treatment and 3 months of reinforcement that the psychological distress began to modify. Yet life satisfaction generally appeared higher which may indicate that just the knowledge of being in a support group as well as the experience provides some level of optimism and coherence.

One might be tempted to identify a profile of subjects that are sensitive to the intervention based upon the consistency with which selected sub-groups appeared to show trends toward treatment benefit across the three variables, but the data are not of sufficient strength to support such an action. Our findings, although interesting, are quite sparse and indicate that the treatment is not very strong in producing a major effect during the measurement time. As we have suggested, it could be that changes occur later than hypothesized and measurement should continue beyond the first anniversary of the spouse's death. Another consideration is that the treatment was not sufficiently well defined nor sufficiently developed to address critical aspects of the problem. The treatment components may not have been clearly delivered, the integrity of the treatment may have been poor.

Another possibility, is that the data gathering activity confounded the treatment by functioning as an alternative treatment. The necessity of being very sensitive to the widows may have been interpreted by the interviewers as bonding with them. Such bonding could have functioned as an alternative treatment and weakened the identification of treatment effects.

To address such a concern, we have added another control group to the study. This control group will be measured only at interview 1 and interview 5. The interviewers have been instructed to modify their behavior to discourage bonding yet maintain sensitivity to the subject and respect. These data will be used to address the issue of confounding of the experimental design.

Considerations in the Management of Qualitative and Quantitative Data Sets

Marianne E. Yoder

A study such as ours generates a large amount of both quantitative and qualitative data. Managing these data can become quite complex, leading the researcher to wonder whether she is managing the data or whether the data are managing her.

Managing and analyzing research data is one of the three task domains of nurse researchers identified by Abraham and Schultz (1986). The other two domains they identified are dissemination of research findings and project management. These domains are further subdivided into component tasks. The necessary tasks they identified for management and analysis of research data include: 1) management of data bases; 2) statistical analysis; and 3) clinical data storage and retrieval.

These tasks provide an overall framework for the nurse researcher managing the data base, but do not offer guidance in how to accomplish them. In order to manage and analyze research data successfully, aspects of data coding, data entry, and statistical analysis must be considered. This paper will delineate how to select relevant techniques for data management.

The microcomputer and modem have altered forever our view of data management and analysis. No more must researchers be supplicants to the temple of the computer center, bringing offerings of punch cards and waiting while incantations are performed in rooms out of sight, until finally the high priests deliver unto them the printouts of their analyses. Instead, the microcomputer offers nurse researchers a choice and an opportunity to automate much more of the data management process. Interest in computer management of research data is high, as evidenced by the continuing

department on computer use and nursing research in the Western Journal of Nursing Research. To meet this interest, this paper will also provide examples of microcomputer software that can be used to manage research data.

We need to consider six criteria when selecting data management techniques. First, the method selected for data coding and data entry should take into consideration human logic, not just computer logic. The format must be meaningful to humans, or as stated in computer slang, "user-friendly." Names selected for variables should match the item being coded, such as "unhappy" for a question asking the subject to rate degree of unhappiness. This is much clearer to the person working with the variable than naming each item on an instrument scale consecutively, such as ESGMAW1, ESGMAW2, ESGMAW3, etc. Most software programs allow up to eight letters and numbers to be used to name a variable.

Consistent coding of data also enhances clarity for the users. If the number zero (0) indicates a response of "no," or the absence of whatever is being measured for some of the variables, then it should be used consistently for all of the variables requiring that type of rating. Likert scale ratings should also be coded uniformly.

The data to be entered should be presented in a format that is easily accessible to the data entry personnel. FORTRAN coding sheets requiring line after line of long lists of numbers make data entry tedious and difficult to complete without error. A more congenial way to enter data is to use a template. A template lists each variable by name, following the order in which the data are presented on the original data collection instrument or coding sheet. The values are entered for each variable name, and movement from variable to variable is either automatic, or occurs by pressing a single key, such as TAB. The researcher can program in the expected limits of each variable so that entry of data values out of range is not allowed. For example, if subjects in the

treatment group are coded as 1 and subjects in the control group are coded as 0, any attempt to enter a letter or a number other than 0 or 1 for the assigned group would not be allowed. Among the computer programs which permit template entry are Statpac, SPSS Data Entry III, or data base programs such as PC-File III.

The second criterion to consider in selecting data management techniques is that data coding and data entry should be efficient. We suggest that to be efficient, the data should be handled only once. For example, if the researcher uses several different software programs to analyze the data, she need not reenter the data in each program. Rather, data can be extracted from the original file and brought into the other program. If the research project is large, however, and many different people are working with the data, it might be easier to code and enter quantitative and qualitative data into separate data files.

The third criterion to consider is the need to verify the accuracy of data entry. Verification can be accomplished in several ways. One possible way is to reenter a set percentage of the data and compare the file of re-entered data with the original. Another method is to use a template that blocks attempts to enter values out of range. A third way is to run frequencies on each variable to identify (recognize) values out of range. Finally, exploratory data analysis (EDA) such as the Examine procedure in SPSS-PC can be used to identify outliers. With this procedure, the computer program identifies the cases with extreme values for low and high scores on each variable. Any cases containing unexpected values, such as 38 for number of persons in the household, can be rechecked for accuracy. Methods two through four have limitations, however, because they will not identify values entered within the acceptable range, yet still wrong, such as entering the male code for a female subject.

The fourth criterion to consider in selecting procedures for managing data is to evaluate whether the data base is created in a form that will be flexible enough to allow for modifications. It is not necessary to wait until the end of the period of data collection to create the data base, rather the file can be created and updated as data are collected. As the study progresses and the researcher identifies the need for new variables, they can be created and added to the data base. To do this, however, requires that any software program selected for establishing the data base must allow for modification of the original files.

The fifth criterion to consider is that the data base must be fully transportable. Transporting in computer jargon means taking a program created on one type of computer system and running it with another type of computer system, for example, taking data created on a microcomputer and running it on the mainframe VAX. When a modem is used to send data files created on a PC at home to the mainframe computer, the data are being transported. In order for a data base to be transportable, it must be able to be converted to a pure ASCII file, or to a file compatible with the expected use (e.g., delimited files between data bases, Lotus WK files, D-Base files, DIF files, etc.). However, the greatest flexibility offered for transporting files are software programs that can save the data base as an ASCII file.

The sixth, and last criterion to address in selecting approaches to data management is the realistic use of resources. A major issue to consider is the extent to which support is available, including equipment, software, and consultant services. The location of the equipment and software are important; it is generally more efficient to use equipment on hand, not at a remote site. If a particular software program is available, but it is expected to be used daily, it is unrealistic to share it. If a software program will only

occasionally be used, however, and can be borrowed or shared without violating copyright laws, money to purchase that program would be best spent on something else.

It is also important to consider the availability of consultant support for help with statistical problems or the use of computer programs. If possible, the researcher should select software programs that are familiar to local consultants. For example, the researcher may have used SAS at a previous facility, but at the present facility most people use SPSS. Unless the researcher can write and run analyses for SAS without assistance, she would be best advised to switch to SPSS.

Another important consideration is the financial one -- software and hardware should be selected on the basis of its suitability, and not simply because it is the least expensive or represents the latest in technical advances.

The last resource the researcher should consider is the experience of the personnel working with the project. What software do they already know? Weber (1986) has estimated that it takes the average user between 20 and 100 hours to "get up to scratch" on a software program. Accordingly, if a staff member is familiar with SuperCalc IV, it is more efficient to select that than to retrain her to use Lotus 1-2-3. Since data are transportable between each spreadsheet program, it is not complicated to share the data with someone at another institution who uses a different spreadsheet.

The type of data collected in the research study will determine how these selection criteria are applied. The data base may include quantitative or qualitative data only or a combination of the two. If the data are only in quantitative form, they can be converted to ASCII files on a microcomputer with a simple word processing command, or with more accuracy by using a data entry program. This file can then be sent via modem to any mainframe for statistical runs, or the data may be analyzed using microcomputer-based programs such as SPSS-PC, BMDP/PC, Statpac Gold, or Sigstat.

Whether to choose a mainframe or a microcomputer to analyze the data depends on how complex an analysis one needs. If the data are qualitative, analysis may be approached in one of two ways. One can either create a data base using identified fields, with the data entered accordingly, or create a text file and then analyze the data. Appropriate software for qualitative analyses includes DB-IV, Professional File, Data Perfect, Paradox, Ethnograph, FYI, or any relational data base.

If the data set consists of a combination of quantitative and qualitative data, two approaches are possible. First, one file can be created incorporating both quantitative and qualitative data, where the data are entered in fields. The quantitative data can be moved from field format to statistical analysis format by using programs such as DBMS/Copy (V1.2 from Conceptual Software) and then run on the statistics program. Alternatively, separate files can be created for the quantitative and qualitative data. This method has the advantage of allowing the researcher to select the best software and create the best data base for each type of data. It should be seriously considered if the project has several microcomputers, but is not relying on a file server. If this method is used, each type of data can be entered and analyzed by staff working at the same time on separate machines. This is not to imply that they can enter the same data on both machines at the same time unless qualitative and quantitative data have been coded on separate coding sheets.

So far this paper has presented criteria to consider in selecting approaches to managing data bases. I will conclude by describing how we handled the large data bases created in the research on the efficacy of support groups for Mexican American widows. For the most part we relied on microcomputers and employed separate quantitative and qualitative files. We selected this approach because the data entry and analysis was straight-forward for each method, and various team members were already familiar with

them. When we added a second microcomputer, we devoted one computer to the quantitative data and the other to the qualitative.

The schedule of the data collection in this study also had a bearing on our procedures. It extended over an 18 month period for each of six separate groups of participants. This means that we were collecting data for Interview 1 with one group of participants while simultaneously collecting data for Interview 5 with another group. Each interview yielded over 200 discrete items because of the many scales and instruments used. The traditional method of working with such material would be to wait to enter complete data for each participant and treat each interview as a separate record/line of data. But since the collection and entry of data occur at different times with different groups of participants, at any one time a master data file would not contain an equal number of records for each participant. Also, obviously, one large data file of such complexity can become quite unwieldy and confusing to a researcher. For that reason, we decided to create a separate data file for each interview (i.e. Interview 1, Interview 2, Interview 3, Interview 4, and Interview 5). As each participant was interviewed, that data were added to the appropriate data file.

To analyze data across interviews, we merged the files. Because we are usually only interested in particular scales at any one time, we calculated the scale scores from the variables in the interview data, then merged and analyzed them.

We entered quantitative data using a data entry template created in Statpac. We used Statpac because the software was already owned. However, we have found the template difficult to modify whenever we created new variables and added them to the data file. We verified data entry using a program written in FORTRAN by a statistical consultant. We reentered the data and compared it with the original data file.

Although five people have entered data, the accuracy has been high, with less than a five per cent error rate.

We selected SPSS-PC for quantitative data analysis because in the long run it would be cheaper than the cost of using the mainframe version, but it has also been more convenient. The research office was located some distance from the main University computer center and no direct hard wiring was available for computers until late in the work of the project. It is not always possible to get a clear phone connection on the modem, and sometimes multiple attempts are necessary before connection is achieved. Also, the mainframe is not always functioning. Sometimes it is not even as fast as the microcomputer, for when the demand is high, analysis can be slow. We have used SPSS-PC for a variety of analyses including calculation of reliabilities, frequencies, all descriptive statistics, cluster analysis, ANOVAs, t-tests, chi-squares, multiple regressions, factor analyses, and EDA stem & leaf and box plots. We used the BMDP program on the CYBER mainframe to run repeated measures only because we preferred the BMDP output over the SPSS output.

We entered qualitative data directly into fields created on a file in Professional File. The College of Nursing already owned this program and provided consultant support to users. We have used Professional File to retrieve data using single and multiple criteria, such as looking at emotive and somatic symptoms, and luto (mourning) practices.

The microcomputers are located in a corner of the project office. A major advantage of this location is that the project member responsible for managing data is not isolated from the rest of the research team and the rest of the research team also have contact with the data management. This arrangement has enabled each team member to be more aware of the total project, and has often generated fruitful

responses to inquiries. For example, a team member might wonder about a possible theoretical relationship and the data person will immediately explain how it can be approached.

In summary, even large complex quantitative and qualitative data bases can be managed using microcomputers. The nurse researcher can successfully complete tasks related to data management and analysis if she considers the management of data coding, data entry and analysis in the manner I have proposed.

Referenced Cited

Abraham, I. L., & Schulz, II, S. (1986). Interfacing microcomputers and nursing research: 1. Management and analysis of research data. Western Journal of Nursing Research, 8, 386-91.

Weber, A. (1986). Training media offer wide variety of learning options. Data Management, 23, May, 20-22.