Psychiatric Epidemiology

Ethnic differences in the marital status and psychological distress relationship

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Summary. This paper examines the relationship between marital status, as a measure of social support, and psychological distress among three ethnic minorities (Japanese Americans, Filipino Americans, and Native Hawaiians) and Caucasians in Hawai'i. A secondary analysis is conducted on survey data collected from a statewide sample of adults. The analyses show that the relationship between marital status and distress conforms to expectations among Caucasians: married adults have a lower level of distress than the non-married. However, the marital status and distress relationship is not consistent across ethnic minorities. We discuss the implications of these findings to the study of social support and distress among ethnic minorities.

The association between social relationships and health has been well established over the past two decades. People with strong ties have a more positive sense of well-being than those with weaker ties (Berkman and Syme 1979; Kessler 1982). Research on social support also has implications for studying the etiology of and recovery from physical illness and psychiatric distress (House et al. 1988; Broadhead et al. 1983).

Supportive resources assist individuals in overcoming stress and enhancing the individual's capacity to confront difficulties, solve problems, and maintain a healthy self image (Caplan 1986; Cassel 1974; Cobb 1976; House 1981).

Marital status, as a measure of social support, is one of the most powerful negative correlates of psychological distress (Kessler and Essex 1982). Unmarried people are more likely to report psychiatric

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symptoms than married people and, among the unmarried, people who have experienced marital disruption have higher rates of psychiatric distress than the never-married (Bachrach 1975; Bloom et al. 1978; Briscoe and Smith 1973; Campbell 1981; Veroff et al. 1981; Ensel 1982; Markides and Farrell 1985; Pearlin and Johnson 1977). Underlying this hypothesis is the notion that marriage represents a unique social bond, perhaps "one of the most fundamental and intimate ties among people" (Berkman 1985, p 253). Marriage provides individuals with a close relationship; a confidant who can help buffer the potential deleterious effects of chronic strains or uncontrollable negative events. Marriage can also foster behaviours that are health promoting (Umberson 1987)¹.

Few studies, however, have explored how social support varies among ethnic minorities. Most research demonstrating the relationship between marital status and psychological distress has used white samples or small samples of ethnic minorities (Broman 1988). Without comparable information on the importance of social relationships among ethnic minorities, our understanding about the factors that reduce distress and promote well-being within ethnic minority communities is limited (Staples and Mirande 1980). Researchers have recently begun to correct this deficiency by exploring the effects of marital status on health within ethnic minority communities, especially among blacks (Ball 1983; Broman 1988;

¹ Marital status as a measure of social support assumes a social causation explanation. However, another possibility for explaining the relationship between marital status and distress exists. The social selection hypothesis suggests that people who suffer from psychological instabilities are less likely to marry or, if they do marry, less likely to stay married (Odegaard 1946; Malzberg 1964; Garfield and Sundland 1966). The majority of support for the selection hypothesis has been drawn from research on psychiatric populations and is better suited to the explanation of severe disorders, making generalizations to the general population questionable (Pearlin and Johnson 1977). In support of this point, Gove et al. (1983) review the available evidence and suggest that "social selection is not a key determinant of the relationship between marital status and mental health in a normal population" (Gove et al. 1983, p 123)

Ball and Robbins 1986; Staples 1981; Zollar and Williams 1987).

Some evidence suggests that the concept of social bonds has different meanings for ethnic minorities (Reed et al. 1983). Kasl (1984a), for example, reports that marriage is more protective for blacks than whites. Among people from Mexican cultures, Mirowsky and Ross (1980) found that marital status was not associated with distress suggesting that people from Mexican cultures rely less on the nuclear family for social support. Markides and Farrell (1985) argue that the relationship between marital status and distress among Mexican Americans is significant only among young and middle-aged adults, but not for older adults. These few, disparate and sometimes conflicting findings about the relationship between marital roles and distress among minorities provide even more compelling reasons for pursuing its study.

This paper will add to these recent investigations on social support by assessing the relationship between marital status and psychological distress among three ethnic minorities, which have been largely neglected to date in the study of this association: Japanese Americans, Filipino Americans, and Native Hawaiians². Too often, these three groups are combined as "Asian/Pacific Islanders" or "others" when compared to Caucasians. This categorization ignores important historical, cultural, and social differences among these three groups that may alter the relationship between marital status and psychological distress. We also include a Caucasian sample in our analysis to determine whether marital status is as significant a predictor of distress for Caucasians in Hawai'i as it is among Caucasians on the mainland United States.

Our major focus is to determine differences in psychological distress between the married and never-married among ethnic groups, controlling for other variables such as gender, education, and age. We have chosen to omit respondents who have experienced some form of marital disruption (i.e., separation, divorce, widowhood). A consistent finding in research on marital status and distress is that people who experience some form of marital disruption have higher levels of distress. The dissolution of a relationship creates a multitude of problems related to finances, loneliness, sexuality, socialization, shame, and guilt (Bloom et al. 1978). Thus, in this context, people who are separated, divorced or widowed represent a group that suffers from low levels

of social support, as well as a group that is likely to be experiencing several negative life events or chronic strains precipitated by marriage disruption. The omission of respondents who have experienced marital disruption will allow for a clearer test of the relationship between marital status and psychological distress among different ethnic groups by eliminating the risk of confounding outlined above.

Method

Data

This paper reports on a secondary analysis of data from a Hawai'i3 statewide survey conducted in 1984. The survey sample consists of adult (18 years and older) residents from each of the major islands in Hawai'i. A two-stage cluster sampling design was implemented within each of the state's eight mental health catchment areas. The first stage involved the selection of household clusters within census blocks or districts and the second stage involved the selection of households within each cluster. A minimum of 300 households was selected per catchment area and one individual per household was interviewed. A total of 2,503 interviews were completed using this procedure. The survey interview focused on alcohol and drug usage, mental health problems, well-being, and other psychological variables (e.g., critical life events, life satisfaction, perceptions of family and work environments, social support).

Description of variables

Three ethnic minorities and Caucasians are selected for inclusion in this analysis. The three minority groups are chosen because they reflect different positions in the ethnic stratification system in Hawai'i. In addition, the sample sizes for other ethnic groups like the Chinese and Koreans were too small to do some of the analyses reported in this study.

The total population in Hawai'i excluding military personnel living onbase is 985,722 (State of Hawai'i Department of Planning and Economic Development 1984). Caucasians comprise the largest ethnic group in the state (24.5%); the majority of Caucasians are either long-time residents of Hawai'i or recent arrivals from the mainland United States. A high proportion of Caucasians are in professional and managerial occupations. The Japanese are the

² Hereafter, we forego the convention of using the "American" label. The ethnic groups in this study are assumed to be American residents unless otherwise stated

³ The use of the glottal mark is the preferred spelling of "Hawai'i" by Hawaiian language scholars and accurately represents its proper pronunciation

second largest ethnic group comprising about 23% of the state population. They have a higher than average median annual income and exceed the average percent in professional and technical occupations. Native Hawaiians are the indigenous people of Hawai'i and comprise about 20% of the state's population. They have been traditionally on the bottom rung of the social, economic, and political ladder. The Native Hawaiian group has experienced many of the hardships of other Native Americans. Filipinos were the last group of plantation laborers to arrive in Hawai'i and still represent the ethnic group with the largest annual rate of migration to Hawai'i. They currently comprise about 11% of the state population. Although the Filipinos have been denied entry into the social and economic hierarchy of the state, social scientists consider their growth rate as a potential power factor in future social, economic and political changes.

The independent variable, marital status, is coded into two categories: married and single (never-married). The dependent variable, psychiatric distress, is measured by items on the symptom checklist (SCL-90) developed by Derogatis and his colleagues (Derogatis 1977). Respondents were asked how often they experienced a particular symptom over a seven-day period (1 = never to 5 = extremely often). While the survey questionnaire contained 54 items of the SCL-90 that comprised five separate scales (depression, anxiety, somatic complaints, obsessive-compulsive, and interpersonal sensitivity), factor analyses revealed that a one factor solution was most interpretable. Not all of the items consistently loaded on this factor for all the ethnic groups. Twenty items common to all four ethnic groups were used to create a general distress scale. Reliability coefficients (Chronbach's alpha) for the scale averaged 0.93 for all four ethnic groups. Scores were created by summing the items for the general distress scale. Raw scores were standardized into Z-scores (mean = 0, sd = 1).

Three sociodemographic variables are used as controls: age, education, and gender. Age and education are recorded in years, and gender as a dummy variable (males as the comparison group). Education is our measure of socio-economic status since it is considered the most stable measure of social stratification and best predictor of health outcomes (Kitagawa and Hauser 1973; Franks and Boisseau 1980).

We also test whether the marital status relationship with distress is further illuminated by including a stressful life event measure. People who undergo a negative life event are more vulnerable to distress than adults who do not (Cannon 1939; Holmes and Rahe 1967; Selye 1956). While there are methodological and conceptual problems with life event

measures (Dohrenwend and Dohrenwend 1981; Kasl 1984b; Kessler 1983; Thoits 1981), a stressor measure controls for the fact that some groups of adults experience more stress in their lives than others. We chose thirteen life events that were not confounded with our distress measure (i.e., "an increase in your personal troubles or psychological troubles"). Respondents were asked if they had experienced the event over the past year. The events were summed and transformed into z-scores $(\text{mean} = 0, \text{sd} = 1)^4$.

Plan of analysis

The association between marital status and distress for different ethnic groups is explored using the following equation:

 $D = b_0 + b_1E + b_2MS + b_3 (MS \times E) + b_4C$ where:

D = general distress;

E = ethnic dummy variables with the ethnic groups changed to obtain different comparison groups;

MS = a dummy variable for marital status with married respondents as the comparison group;

 $(MS \times E)$ = interaction term for marital status and ethnicity;

C = series of control variables which includes gender, education, age and the stressful life events.

Multiple regression using a general linear models (GLM) framework is the principal method used to produce estimates of the relationship between marital status and distress for each ethnic group. The major hypothesis is that marital status will have a significant effect on distress for Caucasians, but will show an inconsistent effect for the other ethnic groups.

⁴ The events include: (a) a major change in the health or behavior of your family; (b) a major change in the financial condition of your family; (c) the death of a family member; (d) the loss of a job; (e) retirement from work; (f) the end of a love relationship; (g) child in the family who is failing or held back in school; (h) a move to a new place; (i) an increase in troubles with your boss; (j) a major conflict with spouse or family member; (k) a major frustration or disappointment; (I) the physical abuse of someone in your family; (m) detention in jail or institution. Since a number of these events occur more to married persons, we also tested the model with a single global measure, a major frustration or disappointment. This variable was coded as: 1=the occurence of a major frustration or disappointment and 0=non-occurrence. None of the principal findings reported in this paper was changed when this single measure was substituted for the events total. The frustration variable increased the R2 from 0.14 to 0.18 and reduced slightly the estimate for the marital status variable. However, the reduction did not affect the significance test

Findings

The data were weighted to reflect the original sampling strategy and provide appropriate statistical adjustment for geographic areas included in this study. Respondents with missing data on any of the variables in this particular study were excluded from the analyses. Table 1 displays the unweighted sample totals and the weighted percentages for selected sociodemograpic variables within each of the four ethnic groups. The samples in each ethnic group consisted of more women than men (except for Caucasians) and approximately three-fourths of the respondents in each ethnic group were married. The sample characteristics reflect the general population differences among the ethnic groups: (a) Caucasians had a high percentage of respondents who had more than a high school education (61%); (b) Filipinos had a relatively equal percentage in each of the educational categories and a relatively large percentage who were young or elderly; (c) Japanese respondents had a high percentage who were 55 years and older, and a high percentage with a high school education and beyond; and (d) Native Hawaiians had a relatively young sample and the lowest proportion of adults with over 12 years of education.

Means of the standardized general distress measure by marital status and ethnicity are presented in Table 2. Married adults had a lower general distress score than single adults. This finding is consist-

Table 1. Sample characteristics: weighted percentages for married and never-married adults

| Demographic | Ethnic g | roup | | | |
|---------------------------------|----------------|----------|---------------|--------|--------|
| variable Unweighted total | Cauca- sian | Filipino | Japa- nese | Hawai- | Total |
| | (535) | (244) | (422) | (363) | (1564) |
| Gender | | | | | |
| Male | 51 | 45 | 47 | 39 | 46 |
| Female | 49 | 55 | 53 | 61 | 54 |
| Marital status | | | | | |
| Married | 74 | 77 | 79 | 75 | 76 |
| Never married | 26 | 23 | 21 | 25 | 24 |
| Age | | | | | |
| 18-24 years | 15 | 18 | 8 | 18 | 14 |
| 25-34 years | 28 | 22 | 17 | 34 | 25 |
| 35-44 years | 22 | 21 | 18 | 23 | 21 |
| 45-54 years | 12 | 15 | 17 | 12 | 14 |
| 55 and older | 23 | 24 | 41 | 13 | 26 |
| Education Less than | | | | | |
| 12 years | 8 | 29 | 18 | 22 | 17 |
| 12 years | 31 | 36 | 42 | 52 | 39 |
| Over 12 years | 61 | 35 | 41 | 26 | 44 |

Table 2. General distress means and standard deviations for marital status among ethnic groups

| Variable | Unweighted n | Mean (sd) | Scheffe test ^a |
|------------------------------|--------------|---------------------------------------|---------------------------|
| Marital status | | | |
| Single (S) | 347 | 0.23 (1.15) | S > M |
| Married (M) | 1217 | -0.15(0.77) | |
| Marital status by etl | nic group | , , , , , , , , , , , , , , , , , , , | |
| Caucasian single (CS) | 124 | 0.19 (1.15) | CS>CM |
| Caucasian married (CM) | 411 | -0.14 (0.73) | |
| Filipino single (FS) | 54 | 0.16 (0.94) | n.s. |
| Filipino married (FM) | 190 | -0.08 (0.76) | |
| Japanese single (JS) | 90 | -0.06 (0.80) | JS> IM |
| Japanese married (JM) | 332 | - 0.24 (0.76) | 007 JH |
| Native Hawaiian single (HS) | 79 | 0.70 (1.46) | HS>HM |
| Native Hawaiian married (HM) | 284 | -0.06 (0.85) | |

a P≤0.05

ent with previous research findings. Comparisons of distress means between married and single adults within each ethnic group are presented in the ethnic group X marital status category. From these comparisons, marital status shows a fairly consistent relationship with psychological distress: Single adults have a higher mean distress score than married adults. The only exception to this pattern was among Filipino adults. While single adults did have a higher mean distress score than married adults, the difference was not statistically significant.

Table 3 displays the results of the multiple regression analysis of general distress. The major purpose of the regression analysis was to demonstrate whether the relationship between marital status and distress for each ethnic group was consistent with previous research which used primarily Caucasian samples. Two models are presented in the table. Model A tests whether the difference between single and married adults holds when controlled for age, gender, and education. Model B adds an additional control variable to the regression analysis: a standardized life events score. Each model represents four different regression runs with each ethnic group as the comparison group. Since our concern is primarily with the marital status and distress relationship, Table 3 displays only the estimates for single adults (compared to married adults) within each ethnic group.

| | Marital status (single) regression coeffic | | |
|-----------------|--|---------|--|
| | Model A | Model B | |
| Caucasian | 0.27ª | 0.22ª | |
| Filipino | 0.13 | 0.19 | |
| Japanese | 0.09 | 0.04 | |
| Native Hawaiian | 0.70 ^b | 0.55 b | |
| n | 1564 | 1564 | |
| \mathbb{R}^2 | 0.08 | 0.14 | |

^a $P \le 0.01$; ^b $P \le 0.001$

Note: each model represents four regression analyses with a different ethnic group as the comparison group. Model A controls for gender, age (in years), and education (in years). An interaction term (ethnic group X marital status) was included in the analysis to obtain the figures displayed in the table. Married adults represent the comparison group for the analyses. Model B controls for the socio-demographic variables and includes another variable, the number of life events over the past year

Before discussing the marital status and distress relationship for each ethnic group, some comments are in order about the other variables not reported in the table. Among the control variables, gender and age had a statistically significant relationship with general distress in both models. Females and younger respondents had higher levels of distress. The pattern for these two sociodemographic variables is consistent with previous findings (Kessler et al. 1985). Education had a negative relationship with distress, but the association was not statistically significant.

Model A displays the regression coefficients for single adults compared to married adults controlled for age, education, and gender. For Caucasians, the single adults still had a statistically higher level of distress than married adults controlled for the sociodemographic variables (0.27, P < 0.01). This finding is consistent with previous studies on marital status and distress. Among the three minority groups, only Native Hawaiians showed a significant marital status association with distress (0.70, P<0.001). Single Filipino and Japanese adults also had higher levels of distress than married adults, but the differences were not statistically significant. The large number of coefficients resulting from the four different regression analyses does not permit a convenient method for displaying the interaction terms (ethnic group X) marital status). Among the married, there was no significant différence in general distress across ethnic groups indicating that marriage was not more protective for some ethnic groups over others. Among the never married, however, Native Hawaiians had significantly higher distress than single adults from other ethnic groups, net of the socio-demographic variables.

Model B displays the regression coefficients controlled for the socio-economic variables and the life events variable. The inclusion of the life events variable raised the R² from 0.08 to 0.14, and reduced the regression coefficients for the marital status variable except among Filipino adults. Despite the strong effect of the life events variable, marital status still had a statistically significant effect for Caucasians and Native Hawaiians.

Marital status was not statistically significant in predicting distress for Filipinos and Japanese. Again, controlled for the socio-demographic and life events variables, single Native Hawaiian adults had higher levels of distress than single adults from other ethnic groups. We also tested whether marriage was more protective for men than women by introducing a three-way interaction term (ethnicity X marital status X gender). However, this hypothesis was not supported by our data (not reported here).

Discussion

Previous research has shown marriage to be positively associated with well-being: single never-married adults and adults who experience marital disruption have been found to experience a lower sense of wellbeing when compared to married adults. This conclusion is drawn from research that focused primarily on Caucasian samples. Indeed, in our study, married Caucasian adults has a lower mean psychological distress level than single Caucasian adults. However, when the relationship between marital status and distress was explored among three different ethnic minority groups, the relationship was much more complex. In our analysis, limited to single and married adults, only Native Hawaiians among the ethnic minorities showed a statistically significant association between marital status and distress.

The absence of a consistent marriage advantage over the never-married across ethnic groups warrants some further examination. As a source of social support, marriage provides protection from isolation, a confidant who can provide support in stressful times, and a friend to share pleasant events. Marital status appears to be an appropriate indicator of social support for Caucasians. The complex relationship between marital status and distress among ethnic minorities requires a different explanation. Glenn and Weaver (1988), in an attempt to explain the general decline in differences between the married and never-married, suggest that people are becoming more individualistic and less reliant on social groups. Marriage has lost the significance it once had. We

suggest, however, that this explanation may not be appropriate for some ethnic minorities. Social structural changes in American society are likely to have a more immediate effect on Caucasians than on minority cultures. We would expect Caucasians, not Japanese and Filipino adults, to show no marriage advantage over the never married. However, the reverse was true in our study.

Marital status, by itself, may not be an adequate measure of social support within certain ethnic minority communities. Ethnic minorities may have different meanings and expectations of marital roles. The never-married among ethnic minorities may also draw upon other sources including extended families for supportive relationships. Within this context, marriage does provide support for Japanese and Filipino adults, but single adults manage to find comparable support outside of marriage. Caces (1986/87), for example, found Filipino immigrants used an extensive network of family, friends, and community persons to make their initial adjustment in Hawai'i. Different groups of people within the network helped the new immigrant to find suitable housing, employment, recreation, education, and comfort in a new society.

This explanation may provide a partial account for our research findings. It does not explain, however, why marital status is an important predictor of distress among Native Hawaiians. Why are Native Hawaiians different from Filipino and Japanese adults? The answer may lie in the notion that social support is not only an individual characteristic but it is also a fact of larger social units. Communities themselves can be assessed for the levels of social support they provide certain groups (Williams and House, in press).

All cultures have successful coping methods for dealing with stressors; the major difference among ethnic groups is the extent to which coping methods are congruent with the prevailing cultural traditions in a society (Marsella and Dash-Scheuer 1988). Cultural congruence is dependent upon the position of the group within the larger social stratification system. Native Hawaiians, for example, evolved a web of cultural values that served as the basis for social relationships. These values imparted a deep concern for unity (lokahi) with a living, conscious and communicating cosmos. The values emphasized harmony with self - na'au (feelings), kino (body), and 'uhane (spirit). Equally important was harmony with kin ('ohana), elders (kupuna) and land ('aina). This world view encouraged supportive interpersonal relationships and less reliance on personal responsibility (Howard 1974). However, in the past two centuries, Hawaiian culture and traditional methods of resolving problems have been devalued through Westernization, leaving Native Hawaiians with few culturally-appropriate methods for coping with modern problems (E Ola Mau: Native Hawaiian Mental Health Task Force 1985; McNassor and Hongo 1972; Native Hawaiian Educational Assessment Project 1983). It may be that marital status is an important social support indicator for Native Hawaiians because the larger social structure does not provide single Native Hawaiian adults ample resources to cope with distress.

Unfortunately our data do not present the opportunity to test these hypotheses and so our comments remain speculative at this point. Our research supports the call by others for more research on the role of marriage within ethnic minority communities (Broman 1988; Staples and Mirande 1980). Researchers must begin to understand the meaning that ethnic minorities attach to marriage, being single, and other lifestyle arrangements. For example, when studying ethnic minorities, we must appreciate marital roles within the context of the group's country of origin and how the meaning of these roles change over time. Although we did test the age (as a measure of generation) and marital status interaction for each ethnic group and found no consistent pattern, more indepth analysis of this issue is needed. We also suggest a need to understand marital status within the larger context of social relationship among ethnic minorities. Future research needs to identify the dimensions of supportive relationships and how best to measure them. We cannot simply assume that supportive relationships that are appropriate in understanding Caucasian families are equally appropriate in describing minority families. Much of the research in minority mental health has begun to focus attention on developing better measures of psychological distress and psychiatric illness. Similar attention needs to be paid to refining measures for resources (such as social support) that may mediate the onslaught of distress or promote well-being.

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