

Social Support and The Elderly's Mental Well-Being in Modernizing Korea*

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I. Introduction

During the last decade in Korea, social modernization has had various effects on elderly peoples' lives. Demographically, the growth rate of the elderly population far exceeded that of the total population. During the 1970's, the elderly population grew at an annual average rate of 3.4 percent, while the growth rate of the total population was only 1.8 percent. This difference is expected to increase further; it has been estimated that the corresponding rates will be 3.7 percent versus 1.4 percent in the 1990's. Consequently, the proportion of the elderly population in Korea grew from 3.3 percent in 1970 to 3.9 percent in 1980, and is predicted to be 4.5 percent in 1990.¹⁾

In addition to such a demographic transition, the quality of elderly peoples' lives has also changed significantly. In particular, the mental well-being of the elderly has been threatened by different life patterns and bases for social relationships associated with rapid social change. For instance, the National Institute for Psychiatric Treatment

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1) Economic Planning Board, *Report on the Demographic Survey in Korea*, EPB, 1980; Economic Planning Board, *The 5th Five-Year Economic Development Plan: Population*, EPB, 1981.

reported that number of aged psychiatric patients has abruptly increased since 1975.²⁾ A noticeable characteristic shared by the aged mentally ill was that they had commonly experienced stressful life events closely related to the modern way of life. Dissolution of the traditional large family system was deemed the most critical aspect of such experiences.³⁾ Since industrialization encourages a family system organized to conduct economic activities rather than to support family members, the aged gradually face unfavorable circumstances for satisfying various social and physical needs. Due to the prospect of diminishing social support, the mental well-being of the aged has become a serious social concern in Korea, which has deepened as the proportion and size of the aged population has grown.⁴⁾

Using two sets of survey data on a group of Korean elderly respectively collected by KIPH in 1984 and by this another in 1987, the current study examines the impacts of social support on the mental well-being of the aged population. For both social support and mental well-being, this study applies recently developed indices with minor modifications to reflect the particular life situation of Korean elderly. As the theoretical body of knowledge and advanced methods of measuring major elements of the elderly's well-being have been developed mostly in regard to Western elderly people, their validity is not taken for granted. Therefore, substantial attention to the possible cross-cultural differences in the elderly's life satisfaction was paid in both discussion and analysis. In other words, this study addresses not simply the universal trend of diminishing social support for Korean elderly under social modernization but also any particular patterns of change in the elderly's life caused in the unique socio-cultural context of Korea.

In the following, first, major theoretical and empirical works on the relations between social support and the elderly's mental well-being will be reviewed to derive a set of propositions to be tested here. Second, details on the sample of Korean elderly,

2) Kim, C. K., "Mental Health in Aging", in Korea Institute for Population and Health, eds., *Nucleation of Family and Elderly Well-Being*, 1982, pp.165~179.

3) *Ibid.*

4) Lee, J., H. Suh and S. Chung, "Depression on Old Age", *Journal of Korea Gerontological Society*, 4, 1984, pp.44~51.

instruments for measuring main variables, and analytical methods will be presented. In the following section are shown main findings of this study on the proposed hypotheses. This paper will conclude with a brief discussion of theoretical and practical implications generated from this research.

II. Review of Related Literature

Social support and social network. Social support is the process by which individuals attain the resources to meet various needs in life through the web of social relationships surrounding them.⁵⁾ The web of social relationships is called a social network whereas the process of resource exchange between individual within the network is referred to as social support. Although the definition of social network by Berkman⁶⁾ is succinct, more elaborate descriptions have been proposed by many other scholars. Mitchell, for instance, describes social network as a “specific set of linkages among a defined set of persons (individual or group), with the additional property that the characteristics of these linkages as a whole may be used to interpret the social behavior of the persons involved.”⁷⁾ This elaboration by Mitchell is particularly significant when the social or psychological outcomes generated from the social networks are considered, as in this study.

Although both structural and interactional characteristics critically describe social networks, those studies centered on social support tend to examine separately the interactional characteristics as “the characteristics of the process” operating within a given structure of network. The process in these studies is defined as social support. The most common mode of describing social support has been functionalist, which differentiates instrumental and affectional social support.

5) Berkman, L. F., “Assessing the Physical Health Effects of Social Networks and Social Support”, *Annual Review of Public Health*, 5, 1984, pp.413~432.

6) *Ibid.*

7) Mitchell, J.C., “The Concept and Use of Social Networks” in Mitchell J. Clyde, eds., *Social Networks in Urban Situations*, 1969, p. 2.

Caplan⁸⁾ describes a support system as formal and informal relationships through which an individual receives emotional, cognitive, and material support needed in managing difficult experiences. Cobb⁹⁾ argues, in line with Caplan, that Social Support is the process by which emotional aids, information, and goods and services are provided by a network of mutual obligations, Thoits¹⁰⁾ identifies basic social needs to be met through interaction with others (such as affection, esteem, identity, and security) and proposes that these needs are met by socioemotional and instrumental aid.

Recently, another insightful argument on the social support typology has been presented by Israel.¹¹⁾ She has emphasized the necessity of studying basic characteristics of social networks in addition to the consequences of social support. She presents structural, interactional, and functional characteristics of social support networks. Israel's¹²⁾ work is significant in that she implicitly points out the problematic static nature of the social network which is generated when social support is treated as a conceptually separable entity from social network.

Despite numerous efforts at distinctly conceptualizing social network and social support, they can be treated as two different aspects of the same theoretical construct, i.e., social support. This is why the same set of classification schemes are applicable both to social network and social support. Likewise, in the following discussion on the impact of social support on the elderly's physical health and mental well-being, no theoretical distinction is made between social network and social support.

General functions of social support. The impact of social support on physical health has been evident in the problems which emerge when adequate social support

8) Caplan, G., "Support Systems and Community Mental Health", New York, Behavioral Publications, 1974.

9) Cobb, S., "Social Support as a Moderator of Life Stress", *Psychosomatic Medicine*, 38.5, 1976, pp. 300~314.

10) Thoits, P. A., "Conceptual, Methodological, and Theoretical Problems in Studying Social Support as a Buffering Against Life Stress", *Journal of Health and Social Behavior*, 23, 1982, pp. 145~159.

11) Israel, B. A., "Social Network and Social Support: Implication for Natural Helper and Community Level Interventions", *Health Education Quarterly*, 12.1, 1985, pp. 65~80.

12) *Ibid.*

is lacking. Such problems include the increasing susceptibility of individuals to various forms of disease¹³⁾ as well as a greater mortality rate.¹⁴⁾

However, mental well-being is the core area where the importance of social support is acknowledged. In particular, the impact of social support on the mental well-being of the elderly is emphasized since they are more likely to lose their social network (through a spouse's death, children's leaving, or retirement) than young groups. The activities classified under social affiliation are associated with happiness;¹⁵⁾ peer group friendship based on mutual choice provides high satisfaction to elderly people's lives;¹⁶⁾ subjective social ties were found to increase morale through emotional and material help;¹⁷⁾ decrease in social relationship increase stress.¹⁸⁾ These findings share a main theme that emotional and material support generated from social relationships, whether among the elderly themselves or with other social groups, enhances the mental well-being of elderly people. The emphasis is on the expressive and congenial nature of such social networks and accordingly on the subjective rather than objective dimensions of elderly people's psychological states.¹⁹⁾ In this view, the underlying mechanism by which instrumental or affectional support produces mental well-being is the perception of emotional interaction. As a results, instrumental support based on superficial responsibility or charity fails to make the aged happy.

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- 13) Kaplan, B. H., J. C. Cassel and S. Gore, "Social Support and Health", *Medical Care*, 15.5 (Supplement), 1977, pp. 47~58.
 - 14) Berkman, L. F. and L. Syme, "Social Networks, Host Resistance and Mortality: A Nine Year Follow-Up Study of Alameda County Residents", *American Journal of Epidemiology*, 1979.
 - 15) Cutler, S. J., "Membership in Different Types of Voluntary Associations and Psychological Well-Being", *The Gerontologist*, 16.4, 1976, pp. 335~339.
 - 16) Chappell, N. L., "Informal Support Networks among the Elderly", *Research on Aging*, 5.1, 1983, pp. 77~99.
 - 17) Liang, J., L. Dvorkin, E. Kahana and F. Mazian, "Social Integration and Morale: A Re-Examination", *Journal of Gerontology*, 35.5, 1980, pp. 746~757.
 - 18) Cohen, C. I., J. Teresi and H. Douglas, "Assessment of Stress-Buffering Effects of Social Networks on Psychological Symptoms in an Inner-City Elderly Population", *American Journal of Community Psychology*, 14.1, 1986, pp. 75~91.
 - 19) Diener, E., "Subjective Well-Being", *Psychological Bulletin*, 95.3, 1984, pp. 542~575.

Buffering effect of social support. Many researchers have noted that social support has greater influence on the mental well-being of people with poor health or those suffering from stressful life events. In crisis situations such as illness, hospitalization, alcoholism, and job termination, social support can play a protective function or buffering role against nervous breakdown or physical collapse.²⁰⁾ Thoits²¹⁾ has observed that if a high level of social support is maintained throughout a crisis period, then impact is less damaging to the psychological state than it otherwise would be. In early study, Lowenthal and Haven²²⁾ explain more explicitly that the presence of an intimate relationship serves as a buffer both against gradual social losses in role and interaction and against more traumatic losses accompanying widowhood and retirement. As Chovan and Chovan²³⁾ point out, physical illness is the most important source of life strain for the aged. Hence the interaction effect of social support and physical health on mental well-being is a significant consideration in this study.

Instrumental and affectional support by kin and nonkin. The types of social network and of social support are generally classified as kin versus nonkin and instrumental versus affectional, respectively, these classifications can be cross-applied.

Family and friends are the most important groups of social support provides. While family support has an asymmetric and obligatory character, support from friends has a voluntary and reciprocal character. People with ill health (i.e. the impaired elderly) require higher instrumental support such as care and help with daily activities, with the family as the core provider.²⁴⁾ However, one-sided instrumental help can sometimes threaten the receivers' self-esteem and self-efficacy. The feeling of dependence added

20) Cobb, S., "Social Support as a Moderator of Life Stress", *Psychosomatic Medicine*, 38.5, 1976, pp.300~314; Dean, A. and N. Lin. "The Stress-Buffering Role of Social Support", *The Journal of Nervous and Mental Disease*, 165.6, 1977, pp.403~417.

21) Thoits, P. A., *op. cit.*, 1982.

22) Lowenthal, M. F. and L. Haven, "Interaction and Adaptation: Intimacy as a Critical Variable", *American Sociological Review*, 33.1, 1968, pp.20~30.

23) Chovan, M. J. and W. Chovan, "Stressful Events and Coping Responses Among Older Adults in Two Sociocultural Groups", *The Journal of Psychology*, 119.3, 1985, pp.253~260.

24) Townsend, A. L. and W. Poulshock, "Intergenerational Perspectives on Impaired Elder's Support Network", *Journal of Gerontology*, 41.1, 1986, pp.101~109.

to the inability to reciprocate causes negative effects on mental well-being.²⁵⁾ In other words, instrumental help without emotional closeness may contribute to better physical health, but not always to better mental well-being.

As the choice of friends involves voluntarism and reciprocity, support from friends includes emotional sympathy.²⁶⁾ Although this aspect of friendship is conducive to effective emotional support, its universal significance is much weaker than that of familial ties.²⁷⁾ Nonetheless, the current direction of social change certainly lies in the increasing significance of nonfamilial (nonkin) support including friendship.

Mental well-being: life satisfaction and depression. According to McDowell,²⁸⁾ mental well-being as assessed through survey instruments consists of three dimensions. The first dimension is a cognitive process in which an individual compares his aspirations to his perception of the current situation. Mental well-being is hereby understood in terms of life satisfaction, which refers to a personal assessment of one's condition as compared to an external reference standard or one's aspirations.²⁹⁾ The Life Satisfaction Index of Neugarten, et al.³⁰⁾ and the Life Satisfaction Index Z of Wood, et al.³¹⁾ are widely accepted as instruments to measure life satisfaction. The second dimension of mental well-being comprises affective responses to experience, i.e., the feeling states

25) Roberto, K. and J. P. Scott, "Equity Considerations in the Friendship of Older Adults", *Journal of Gerontology*, 41.2, 1986, pp. 241~247; Schumaker, S. A. and B. Arlene, "Toward a Theory of Social Support: Closing Conceptual Gaps", *Journal of Social Issues*, 40.4, 1984, pp. 11~37.

26) Gottlieb, B., *Social Networks and Social Support*, Beverly Hills, 1981.

27) Litwak, E. and K. Stephen, "Technology, Proximity, and Measures of Kin Support", *Journal of Marriage and the Family*, 49, 1987, pp. 649~661; Litwak, E. and S. Ivan, "Primary Group Structures and Their Functions: Kin, Neighbors, and Friend", *American Sociological Review*, 34, 1969, pp. 465~481.

28) McDowell, N., *Measuring Health: A Guide to Rating Scale and Questionnaires*, New York: Oxford, 1987.

29) *Ibid*, p.204.

30) Neugarten, B. L., R. J. Havinghurst. and S. S. Tobin, "The Measurement of Life Satisfaction", *Journal of Gerontology*, 16, 1961, pp. 134~143.

31) Wood, V., M. L. Wylie and B. Sheafor, "An Analysis of a Short Self-Report Measure of Life Satisfaction: Correlation with Rater Judgement", *Journal of Gerontology*, 24.4, 1969, pp. 465~469.

inspired by daily experience. Bradburn's affective balance scale³²⁾ is one example of those measurements designed to monitor affective responses.

The third dimension reflects the extent of some of the symptoms of psychological distress, i.e., anxiety or depression. This takes a somewhat more clinical orientation although the scales designed to measure it do not make diagnostic classifications. Instead, they screen for signs of general psychological distress. While life satisfaction manifests a longer-term mental state cumulatively affected by living conditions, depression captures a rather clinical aspect of immediate mental distress. Zung's Self-Rating Depression Scale³³⁾ is the most widely accepted instrument for measuring this dimension.

Although the dimension of affective responses may reflect more or less short-term responses to daily experiences, its theoretical implications for the elderly's mental well-being are contained either in life satisfaction or in depression. On the other hand, the distinction between life satisfaction and depression is widely agreed-upon. Therefore, these two dimensions are defined respectively as long-term retrospective evaluation of general living conditions and as immediate clinical symptoms caused by stressful environmental stimuli.³⁴⁾ They are adopted as the two components of the elderly's mental well-being in this study.

Social support in Korea. The process of rapid industrialization in Korea has brought drastic changes to the lives of the elderly. The importance of social support for them is directly linked to the transformation of the traditional large, extended family system where into a nuclear family system, family members cannot ensure the necessary total support, from nutrition to affection, for the aged. Gradual dissolution of the traditional patterns of total dependence between parents and children, coupled with rapid changes in other life events, has made elderly people's mental well-being a matter of serious concern.

Social and academic attention has been directed to the role of social support in

32) Bradburn, N. M., *The Structure of Psychological Well-Being*, Chicago: Aldine, 1969.

33) Zung, W. K., "A Self-Rating Depression Scale", *Archives of General Psychiatry*, 12, 1965, pp. 63~70.

34) McDowell, *op. cit.*, 1987.

this situation in two ways. First, friends and voluntary associations have been recognized as important social support institution which may supplement what the family is unable to do.³⁵⁾ Second, and more significantly, the role of the family for supporting the aged is no longer taken for granted.³⁶⁾ That is, the traditional function of the family had not been well appreciated until a new form of family system emerged causing many problematic situations for the aged. In fact, the particularly strong intrafamilial ties in Korea with a crucial significance for supporting the aged parents is now much more appreciated than ever before as its change has generated an immediate and crucial impact on the elderly's lives. Therefore, researchers in this field have tried to elucidate not only new patterns of social support undertaken by friends and organizations but also traditional and modern functions of the family in supporting the aged.

Although more often now than before the elderly lean on friends to solve emotional difficulties and participate in social activities to diversify their lives, they are still primarily supported by their children in economic, emotional, and other areas.³⁷⁾ They still express more satisfaction from contact with family members,³⁸⁾ or show higher levels of mental well-being when living with their family.³⁹⁾

Although an increasing number of the aged participate in social activities through senior citizen centers, senior citizen schools, village or block meetings, voluntary asso-

35) Lee, H. J., "A Social Economic and Spatial Study of Elderly's Life", *Korea Institute for Culture Study*, 34, 1979, p.259; Lee, K. J., "The Program of Volunteer Services for the Aged", *The Collection of Papers at the Seminar on the Situations and Policies about the Elderly Problem*, 1987, pp.65~95.

36) Lee, W. Y. and N. O. Song, "Mental Health of Normal Older Persons in Korea: Comparative Studies Between Family Cared and Institutionalized Older Person", *Journal of Korea Medical University*, 9.2, 1972, pp.259~271; Kim, T. H., *A Study of Family Services for the Aged in Korean Society*, Ph. D. Dissertation at Korea Univ., 1981.

37) Park, J. G., "Aged Problems in 21th Century and Private Assistance Function for the Aged", *Journal of Korea Gerontological Society*, 5, 1985, pp.54~61.

38) You, S. J., "Ego Structure in Life Process of the Aged in Korea", *Journal of Korean Nursing Association*, 10.2, 1980, pp.95~115.

39) Lee, J., H. Suh and S. Chung, "Depression on Old Age", *Journal of Korea Gerontological Society*, 4, 1984, pp.44~51.

ciations, and informal friendship networks, the majority of the elderly still spend most of their time at home. A survey of the aged in the Seoul area reported more than half of the women (79.4 percent) and about half of the men (48.7 percent) usually spend time at home.⁴⁰⁾

However, friendship and social activities are not unimportant for friendship, the affectional support elements is likewise highlighted. You⁴¹⁾ found that friendship enhances aged people's emotional satisfaction. She reports that elderly people prefer to share their loneliness and exchange their emotional problems with peers. Most of them have congenial friends within walking distance. Interaction between contemporaries who have interests and experiences in common appears to increase emotional understanding more easily than interaction with other aged groups. Social activities through senior citizen centers, senior citizen schools, village meetings, and voluntary associations provide opportunities for the elderly to enjoy social relations and acquire instrumental services. Accordingly, Kim⁴²⁾ reported that social activities and educational activities through senior citizen centers and other institutions significantly affect life satisfaction for the aged. The function or implicit goal of these social activities is usually so diffuse that affectional and instrumental support almostly inseparably occur.

Propositions. Based on these considerations six propositions were elaborated.

1. Social support in general enhances the mental well-being of the elderly, including life satisfaction and (absence of) depression.
2. The positive effect of social support on mental well-being is greater for those elderly who suffer physical illness than for those who do not because the depression generated by self-reported physical illness is buffered by social support.
3. The elderly's mental well-being is influenced by both instrumental and affectional support, and by both kin and nonkin support.
4. Both kin-affectional and kin-instrumental support are important for the elderly's mental well-being, whereas only nonkin-affectional support (and not nonkin-inst-

40) Lee, K. J., *op. cit.*, 1987.

41) You, S. J., *op. cit.*, 1980.

42) Kim, J. I., "Older Adults in Social Educational Activities and Their Life Satisfaction", *Journal of Korea Gerontological Society*, 6, 1986, pp. 139~164.

strumental support) affects mental well-being.

In addition, the following propositions are presented concerning the particular situation of the Korean elderly,

5. The significance of kin support for the elderly's mental well-being is much greater than that of nonkin support.
6. Although both kin-instrumental and kin-affectional support are important for the elderly's mental well-being, the former is particularly so because no major alternative social and administrative mechanisms are available to provide instrumental aid to the elderly.

III. Research Design

Sample

1984 survey. In 1984, a community survey was conducted by the Korea Institute for Population and Health (KIPH) of 3,704 elderly people aged 60 years and over.⁴³⁾

The observations were based on a national representative sample that used a cluster sampling method and personal interviews by professional interviewers. The purpose of the original survey were first, to explore the living situation of the aged and to learn about their social attitudes, emotional conflicts, and financial problems; second, to analyze social and economic activities, employment, financial conditions, health status of the aged; and third, to find out the younger generation's perceptions and attitudes toward the aged and the degree to which economic dependence of the aged population played a role in those perceptions.

1987 follow-up survey. In 1987, a sample of 102 elderly people in Seoul, taken from the Seoul population of 445 respondents surveyed in 1984, were interviewed using a questionnaire which was more comprehensive in regard to social support, self-reported physical health, life satisfaction and depression. Seoul, a highly industrialized and populous urban center, reflects rapid sociocultural changes which may cause

43) Lim, J. K., S. K. Kong, J. S. Kim, J. J. Nam and H. S. You, *A Study on Aged Population in Korea*, Korea Institute for Population and Health, Korea, 1985.

problems for elderly people in regard to living conditions, mental well-being, and the need for various types of social support.

Among the 343 subjects who were included in the KIPH survey but not interviewed in the 1987 survey, 19 people were too ill to be interviewed; 21 people had died; 9 people refused to be interviewed; and 69 people were married. Only one person of each married couple was interviewed in 1987, whereas both people had been interviewed in the KIPH survey. The reason for this was to avoid gathering repetitious information from the two people in the same environment. If possible, husbands were interviewed to improve the underrepresentation of males among the elderly. The other reason for selection of the sample was the inability to trace respondents due to a high moving rate and incorrect addresses: 151 people had moved away and 74 people could not be located. High geographic mobility in Seoul is exemplified by the immigration rate of 28.5 percent into city and emigration rate of 28.2 percent leaving Seoul in 1984.⁴⁴⁾

Measurements

Measures of network size and support plurality. Following the theoretical interest in the distinction between social network and social support, these two constructs of social support were measured in terms of the size of network and the plurality of support, respectively. Network size denotes the total number of people who provide "meaningful" social support of any kind to each respondent (i.e., helpful as actually perceived by recipient). The plurality of support indicates the sum of the actions in various support categories. The basic difference between network size and support plurality, therefore, is that variety of supports by each provider is counted in support plurality while each provider is counted as only one point in network size regardless of the variety of supports he or she offers.

In measuring social support, it may be argued that frequency of social support, regardless of its kind, is more important than plurality of social support. However, as suggested earlier in the review of the literature, social support is less likely to be determined by the pure frequency of contacts than by the nature of human relations

44) Economic Planning Board, *Korea Statistical Yearbook*, EPB, 1986.

denoted by the support. Especially in Korea, human relations are rarely one-dimensional (e.g., work colleague, tennis partner, etc.). Even when two people come to know each other on a particular instrumental basis, mutual relationships often develop in other life dimensions. Consequently, the meaningfulness of a tie between people is crucially designated by the width of interrelations rather than the pure number of encounters. This is particularly the case when social support for elderly is concerned.

In the 1987 survey, based on the McCallister and Fischer scale,⁴⁵⁾ the following questions were asked to measure social support: 1. When you go to visit your friends or relatives, who gives you a ride ? ; 2. Who has helped you with grocery shopping, preparing meals, doing laundry, or cleaning your room at least for once in the last six months ? ; 3. Who provides you with your pocket money for buying snacks, going to the movies, and traveling ? ; 4. If you have difficulties with your daily activities, who primarily takes care of you ? ; 5. Who takes care of the financial problems you might have ? ; 6. With whom do you share your social activities ? ; 7. With whom do you discuss social events ? ; 8. Who are your best friends ? ; 9. With whom do you discuss personal worries or family problems ? ; 10. Whose advice do you consider in making important decisions ? .

From the compilations of information, the following data were calculated: support network size (overall number of people named from questions #1 to #10); support plurality (sum of actions provided by people in questions #1 to #10) ; instrumental network size (overall number of people named from questions #1 to #5); instrumental support plurality (sum of actions provided by people in questions #1 to #5); affectional network size (overall number of people named from questions #6 to #10); and affectional support plurality (sum of actions provided by people in questions #6 to #10). Social support was also divided on the basis of kin versus nonkin. A further classification was made by matching kin/nonkin support with instrumental/affectional support, so that kin instrumental, kin affectional, nonkin instrumental, and nonkin affectional support were computed in terms of network size and support plurality.

45) McCallister, L. and C. S. Fischer, "A Procedure for Surveying Personal Networks", *Sociological Method & Research*, 7.2, 1978, pp.131~148.

Measures of self-reported physical health. Self-reported physical health was measured on the scale developed in the "Human Laboratory Survey" (HLS).⁴⁶⁾ The following eight items were selected from the HLS scale considering the reliability and internal validity among the items: 1. number of chronic diseases (inversely coded); 2. number of symptoms for the previous week (inversely coded); 3. objective feeling about the respondent's physical health (1=very poor to 5=excellent); 4. experiences of cutting down activities (1=a great deal to 3=not at all); 5. energy level compared to others (1=a lot less energy to 5=a lot more energy); 6. frequency of having trouble sleeping (1=often to 3=never); 7. feeling tired when they had only 4-5 hours of sleep (1=very tired to 3=not at all); 8. worn out (1=often to 3=never).

Measures of mental well-being. Mental well-being was measured in terms of life satisfaction and depression. Life Satisfaction Index⁴⁷⁾ was used to measure life satisfaction as more or less long-term retrospective evaluation of general living conditions. The items for this index were as follows: 1. As I grew older, things seem better than I thought they would be; 2. I have gotten more of the breaks in life than most of the people I know; 3. This is the dreariest time of my time; 4. I am just as happy as when I was younger; 5. These are the best years of my life; 6. Most of things I do are boring or monotonous; 7. The things I do are as interesting to me as they were; 8. As I look back on my life, I am fairly well satisfied; 9. I have made plans for things I'll be doing a month or a year from now; 10. When I think back over my life, I don't get most of the important things I wanted; 11. Compared to other people, I get down in the dumps too often; 12. I've gotten pretty much what I expected out of life; 13. In spite of what people say, the lot of the average man is getting worse, not better. For each item, different scores were given to different responses (yes=2; don't know=1.5; no=1) except for those items with negative questions such as items 2, 3, 6, 10, and 13.

Another measure used in this study is Zung's Self-Rating Depression Scale (SDS).⁴⁸⁾

46) Belloc, N. B., L. Breslow and J. R. Hochstim, "Measurement of Physical Health in a General Population Survey", *American Journal of Epidemiology*, 93.5, 1971, pp.328~336.

47) Wood, V., M. L. Wylie and B. Sheafor, *op. cit.*, 1969.

48) Zung, W. K., *op. cit.*, 1965.

The Zung scale measures depression as the immediate symptom of psychological distress due to stressful events and is a widely used depression scale. The items for this index were: 1. I feel down-hearted and blue; 2. Morning is when I feel the best; 3. I have crying spells or feel like it; 4. I have trouble sleeping at night; 5. I eat as much as I used to; 6. I notice that I am losing weight; 7. I have trouble with constipation; 8. My heart beats faster than usual; 9. I get tired with for no reason; 10. I find myself restless and can't keep still; 11. My mind is as clear as it used to be; 12. I find it easy to do the things I used to; 13. My life is pretty full; 14. I feel hopeful about the future; 15. I found it easy to make decisions; 16. I am more irritable than usual; 17. I still enjoy the things I used to; 18. I feel that I am still useful and needed; 19. I feel that other would be better off if I were dead.

Originally, Zung's scale consisted of 20 items. In this study of the Korean elderly, the item on sex (libido decrease) was eliminated due to cultural reasons. The scoring system for Zung's SDS was the following, except for those negative questions: most of time=3; moderate=2; a little of the time=1. For the items with negative questions, (items 1, 3, 4, 6, 7, 8, 9, 10, 16, 19), the scores were reversely coded.

In the tests of reliability and internal validity of the indices, all the measures showed good internal validity and high levels of reliability: the Cronbach's alpha was .8289 for self-reported physical, .8402 for life satisfaction, and .8875 for depression.

Sociodemographic Variables. The demographic and socioeconomic factors, which serve as control variables, were measured in the following ways; age: chronological age; sex: male=0, female=1, marital status: widowed, divorced=0, married=1, education: no schooling=1, elementary school=2, middle school=3, high school=4, college and above=5 (each level of schooling includes both partial and complete attendance), pocket expenses (satisfaction about pocket expenses): no pocket expenses=1, very deficient (very difficult to manage and insufficient)=2, deficient (nearly enough)=3, manageable=4, and plenty=5.

Analysis

The analysis in this study consisted of two main steps: the preliminary and exploratory examination of the data and multiple regression of self-reported physical health

and mental well-being on social support. The first step, in turn, was composed of tests of measurements of reliability and internal validity using factor analysis and inspection of characteristics of variables based on frequencies, cross-tabulations, t-tests, and correlations. In the step of estimating the effects of social support on mental well-being, multivariate OLS (ordinary least squares) regression analyses were conducted.

For drawing empirical inferences, the data generated from the 1987 survey were used for the reasons explained above. The models to be estimated using multiple regression for the cross-sectional data of 1987 was:

$$MWB = a_0 + a_1A + a_2S + a_3MS + a_4E + a_5PE + a_6PH + a_7SS + e_1$$

(Where MWB: mental well-being, A: age, S: sex, MS: marital status, E: education, PE: pocket expenses, PH: self-reported physical health, SS: social support.)

The first equation was run with regard to all combinations between different aspects of mental well-being and different types of social support, e.g., life satisfaction and total support, life satisfaction and kin support, depression and total support and so on. Since social support was conceptualized as social support (support plurality) and social network (network size), these equations were run both with support plurality and network size.

In order to examine a possible buffering effect of social support on the mental well-being using the 1987 data, the elderly in the sample were divided into low and high health groups using the median level of health as the split point. Then, the effects of social support on mental well-being were estimated for each of these two groups and compared with each other. The differences between the two sets of estimates may show the buffering effect of social support.

Finally, using the two waves of data from 1984 and 1987, the impact of social support on mental well-being was longitudinally estimated from the following panel design equation:

$$MWB = d_0 + d_1MWB' + d_2A' + d_3S' + d_4MS' + d_5E' + d_6PE' + d_7PH' + d_8SS' + e_4$$

(Where MWB denotes mental well-being in 1987 and all other variables (with apostrophe) are the same variables as in the previous equation with 1984 values.)

In these panel design equations, the effects of social support, were estimated on the net changes in levels of mental well-being since the original levels of mental well-being were controlled statistically.

IV. Findings

General Descriptions of Respondent as of 1987

Since people aged 60 or over had been selected in the 1984 survey, the respondents' ages varied from 63 to 87 as of 1987 (mean age=69.64). Among the 102 people, 51.0 percent were woman, and 49.0 percent were married. While 80 percent of the men were married, only 13.5 percent of the woman were married. The mean age of the single group was 70.92, whereas that of the married group was 68.12. The mean age of the men was 69.5 and that of the women was 69.76. Half of the respondents had primary school education or less. The males showed higher educational levels than their female counterparts. Less than half of the people were satisfied with their pocket expenses and the rest of them either felt their money fell short of pocket expenses or they did not have any expenses.

General Effect of Social Support on Mental Well-Being

Social support (network size) and life satisfaction. Tabel 1 contains detailed analyses on the impact of social support networks on life satisfaction, the general psychological state which denotes a largely subjective evaluation of life conditions. Among socioeconomic and demographic variables, the only one that exerted a constantly significant effect on the elderly's life satisfaction was pocket expenses. Education showed some weak effect only in the equation of the kin-affectional network.

When self-reported physical health was examined as a determinant of the elderly's life satisfaction, it also proved to be significant. It has been found that the total support network size improved the elderly's life satisfaction, as the regression coefficient .362, significant at the .01 level, displayed. The explanatory strength of relationship of the equation in terms of adjusted R-square was as large as .478. The larger the elderly's network of social support, the higher the level of life satisfaction.

Table 1. The Impact of Support Network Size on Life Satisfaction in 1987 (in Terms of OLS Regression Coefficients).

	Intercept	[A] Age	Sex (female =1)	Marry (married =1)	Educ.	Econ.	[B] PH	[C] NS	Adj. R-sqr
[A]	13.720*	.020	.700	1.146	.553 ⁺	1.367**	—	—	.348**
[A+B]	12.054*	-.030	1.255	1.099	.410	1.302**	.227**	—	.421**
[A+B+C]									
C : total	13.466**	-.050	.896	.826	.196	.960**	.192**	.362**	.478**
C : kin	12.622*	-.039	.872	.636	.410	.996**	.184**	.482**	.489**
C : nkin	12.371*	-.034	1.247	1.148	.332	1.007**	.224**	.159	.419**
C : instr	13.423**	-.046	.956	.836	.384	.988**	.180**	.418**	.468**
C : affec	11.673*	-.030	1.222	.962	.320	.950**	.219**	.338*	.444**
C : kin- instr	13.082**	-.042	.964	.828	.392	.999**	.182**	.414**	.466**
C : kin- affec	10.586*	-.020	1.292	.801	.505 ⁺	.988**	.227**	.475*	.443**
C : nkin- instr	12.149*	-.032	1.253	1.108	.409	1.030**	.226**	.177	.415**
C : nkin- affec	12.434*	-.034	1.222	1.143	.320	1.002**	.222**	.194	.420**

+ p<.10; *p<.05; **p<.01

Note : [A] represents sociodemographic variables (age, sex, marital status, level of education, pocket expenses); [B] represents self-reported physical health; [C] represents each type of social support network size (total support, kin support, nonkin support, instrumental support, affectional support, kin-instrumental support, kin-affectional support, nonkin-instrumental support, nonkin-affectional support).

The size of the affectional support network did have a statistically significant impact (i.e., coefficient of .338, significant at the .05 level), but that of the instrumental support network turned out to be a more important determinant of the elderly's life satisfaction (with the coefficient of .418, significant at the .01 level). While the size of the nonkin

support network had only a trivial consequence, that of the kin support network was much more essential in affecting life satisfaction (as shown by the coefficient of .482, significant at the .01 level).

These results were further substantiated when the influence of the support network was examined in a more specific way. The kin-instrumental support network generated an impact statistically significant at the .01 level; the kin-affectional support network posited an impact significant at the .05 level. However, the nonkin support network did not show any significant impact. In short, kin support effectively improved the elderly's life satisfaction. Furthermore, instrumental support generated by kin had a more significant influence on life satisfaction than affectional support generated by kin.

Social support (support plurality) and life satisfaction. Basically the same patterns of relationships between social support and life satisfaction were found when the impact of the plurality of social support generated from the given support network was examined (see Table 2). The impact of social support on the elderly's life satisfaction was largely accounted for by examining the plurality of the support. Especially, affectional and kin-affectional support were more significant when measured by support plurality than when measured by network size.

Concerning self-reported physical health and socioeconomic and demographic variables, identical impact on life satisfaction (both in terms of coefficient size and their significance) was found in the equations including network size variables and in those including support plurality variables. Self-reported physical health and pocket expenses were significant determinants of life satisfaction in each of these equations. Education showed a weak effect (significant at the .10 level) in the equations where the support plurality variables were kin and kin-affectional support.

Thus, social support plurality significantly enhanced the elderly's life satisfaction in general. While kin, instrumental, affectional, kin-instrumental and kin-affectional support were observed to exert significant impact on life satisfaction, the role of nonkin support was trivial both in instrumental and affectional aspects.

Social support (network size) and depression. As the depression scale was built in such a way that a higher score means a lower amount of depression, a positive

impact of social support on the variable measured on the depression scale was interpreted as a resulting decrease of depression. To reduce the intuitive confusion hereby created, the term "psychological comfort" may be adopted to denote the absence of depressive symptoms and substitute it for "decrease of depression", to facilitate the discussion.

Table 2. The Impact of Support Plurality on Life Satisfaction in 1987 (in Terms of OLS Regression Coefficients).

	Intercept	[A] Age	Sex (female = 1)	Married (married = 1)	Educ.	Econ.	[B] PH	[C] SS	Adj. R-sqr
[A]	13.720*	.020	.700	1.146	.553 ⁺	1.367**	—	—	.348**
[A+B]	12.054*	-.030	1.255	1.099	.410	1.302**	.227**	—	.421**
[A+B+C]									
C : total	11.177*	-.028	1.206	.809	.328	.887**	.198**	.210**	.479**
C : kin	10.473*	-.018	1.125	.748	.484 ⁺	.937**	.182**	.266**	.491**
C : nkin	12.257*	-.033	1.240	1.104	.354	1.021**	.226**	.076	.417**
C : instr	12.625*	-.042	1.105	.901	.414	.974**	.188**	.294**	.467**
C : affec	11.335*	-.024	1.180	.838	.294	.930**	.214**	.272**	.455**
C : kin- instr	12.295*	-.038	1.121	.896	.416	.978**	.190**	.291**	.467**
C : kin- affec	9.722 ⁺	-.008	1.196	.792	.504 ⁺	.948**	.221**	.424**	.462**
C : nkin- instr	12.430*	-.035	1.248	1.112	.402	1.020**	.226**	.479	.415**
C : nkin- affec	12.260*	-.032	1.254	1.105	.316	1.005**	.225**	.128	.421**

⁺p<.10; *p<.05; **p<.01

Note : [A] represents sociodemographic variables (age, sex, marital status, level of education, pocket expenses); [B] represents self-reported physical health; [C] represents each type of social support plurality (total support, kin support, nonkin support, instrumental support, affectional support, kin-instrumental support, kin-affectional support, nonkin-instrumental support, nonkin-affectional support).

Among socioeconomic and demographic variables, pocket expenses (the coefficient is significant at the .01 level in every equation) was again the most important factor in helping to reduce the elderly's depression and in enhancing their psychological comfort. Education was also observed to have some influence in the first equation, but with self-reported physical health and social support network introduced as additional independent variables in the subsequent equations, this influence became insignificant. Everyday financial situations, or pocket expenses, not only affected the long-term general living conditions as retrospectively evaluated by the elderly but additionally determined the short-term psychological state: financial difficulty significantly increased the elderly's depression.

In Table 3, when self-reported physical health was examined from the second equation on, it significantly affected the elderly's depression state. Better physical health appeared to enhance psychological comfort as the positive coefficients illustrate, each significant at the .01 level. Additionally, the adjusted R-square of the second equation, which increased substantially from the first equation, was attributable to self-reported physical health. These findings show that self-reported physical health played a major role in the elderly's mental well-being in regard to the depression dimension.

In the equation which included each different kind of support network, the main causal relation under investigation (i.e., the relation between social support and mental well-being) was examined in view of network size and depression. In contrast to life satisfaction, which was significantly affected by six different network variables, depression turned out to be influenced by only two types of social support, kin and kin-affectional network. The impact of these two networks was significant only at the .05 level, while many were significant even at the .01 level concerning life satisfaction. As a corollary, the improvement in adjusted R-square by including each kind of support network as an additional independent variable was hardly noticeable. Self-reported physical health and pocket expenses, by contrast, appeared to be invariably important in each of the equations. Though crude and premature, it may be said that given proper levels of physical health and financial condition, the role of support network for the elderly's state of depression was relatively limited in variety and strength. Particularly, social support could not be said to enhance the elderly's psycho-

logical comfort because the total size of the support network was not a significant factor. Nor were the impact of nonkin, instrumental and affectional networks significant in these equations (see Table 3).

However, the importance of the kin network, which was earlier evident with regard to its impact on life satisfaction, was again documented. More specifically, the kin-affec-

Table 3. The Impact of Support Network Size on Depression in 1987 (in Terms of OLS Regression Coefficients).

	Intercept	[A] Age	Sex (female =1)	Marry (married =1)	Educ.	Econ.	[B] PH	[C] NS	Adj. R-sqr
[A]	32.010*	.036	-.694	.840	1.202 ⁺	2.709**	-	-	.299*
[A+B]	25.956*	-.149	1.320	.672	.685	1.494**	.826**	-	.516**
[A+B+C]									
C : total	27.210**	-.167	1.002	.428	.495	1.429**	.794**	.322	.521**
C : kin	26.708**	-.161	.812	.057	.684	1.448**	.768**	.639*	.538**
C : nkin	25.672*	-.146	1.328	.628	.756	1.516**	.828**	-.142	.511**
C : instr	27.450**	-.166	.994	.384	.656	1.445**	.775**	.456	.524**
C : affec	25.508*	-.149	1.282	.511	.579	1.396**	.816**	.398	.519**
C : kin- instr	27.060**	-.161	1.009	.380	.665	1.458**	.778**	.444	.523**
C : kin- affec	23.256*	-.130	1.388	.123	.859	1.414**	.826**	.874*	.530**
C : nkin- instr	26.086*	-.150	1.318	.684	.683	1.490**	.824**	.244	.510**
C : nkin- affec	25.878*	-.148	1.328	.662	.704	1.500**	.826**	-.040	.510**

⁺p<.10; *p<.05; **p<.01

Note : [A] represents sociodemographic variables (age, sex, marital status, level of education, pocket expenses); [B] represents self-reported physical health; [C] represents each type of social support network size (total support, kin support, nonkin support, instrumental support, affectional support, kin-instrumental support, kin-affectional support, nonkin-instrumental support, nonkin-affectional support).

tional support network was observed to have a significant effect on depression. On the other hand, nonkin network was seen to have only a trivial on depression, as was the case in its relation to life satisfaction. Interestingly, only the kin and kin-affectional networks proved to be significant in determining the elderly's psychological comfort. When the factors for life satisfaction were examined, the instrumental support

Table 4. The Impact of Support Plurality on Depression in 1987 (in Terms of OLS Regression Coefficients).

	Intercept	[A] Age	Sex (female =1)	Marry (married =1)	Educ.	Econ.	[B] PH	[C] SS	Adj. R-sqr
[A]	32.010*	.036	-.694	.840	1.202 ⁺	2.709**	-	-	.299**
[A+B]	25.956*	-.149	1.320	.672	.685	1.494**	.826**	-	.516**
[A+B+C]									
C : total	24.793*	-.146	1.256	.287	.576	1.301**	.786**	.278*	.534**
C : kin	23.858*	-.132	1.148	.206	.782	1.368**	.766**	.353*	.539**
C : nkin	26.008*	-.150	1.316	.673	.670	1.490**	.826**	.020	.510**
C : instr	26.655**	-.164	1.137	.428	.688	1.422**	.778**	.360 ⁺	.527**
C : affec	25.174*	-.143	1.238	.388	.558	1.382**	.812**	.296	.520**
C : kin- instr	26.254*	-.159	1.156	.422	.693	1.426**	.780**	.358 ⁺	.527**
C : kin- affec	23.150*	-.124	1.250	.302	.797	1.393**	.818**	.510 ⁺	.525**
C : nkin- instr	26.816*	-.160	1.306	.702	.664	1.464**	.823**	1.094	.512**
C : nkin- affec	26.054*	-.150	1.320	.674	.640	1.480**	.824**	.060	.511**

⁺ p<.10; *p<.05; ** p<.01

Note : [A] represents sociodemographic variables (age, sex, marital status, level of education, pocket expenses); [B] represents self-reported physical health; [C] represents each type of social support plurality (total support, kin support, nonkin support, instrumental support, affectional support, kin-instrumental support, kin-affectional support, nonkin-instrumental support, nonkin-affectional support).

network proved more important than the affectional support network, and the kin-instrumental network more than the kin-affectional network.

Social support (support plurality) and depression. Relations between depression and social support plurality in Table 4 were more similar to those between life satisfaction and support plurality than those between depression and network size. The impact of total support plurality on depression was significant, unlike that of total network size. The implication was that the variety of social support, rather than the sheer size of the support was network, counted in reducing the elderly's depression when total social support was concerned. The importance of kin social support for psychological comfort, together with the insignificance of nonkin social support, was again in evidence concerning support plurality.

The importance of kin support plurality held for both instrumental and affectional support. The statistical significance of the impact of the kin-affectional network size. By contrast, the kin-instrumental support plurality was observed to have a stronger affect than the kin-instrumental network size and became as meaningful as the kin-affectional support plurality. Likewise, instrumental support plurality showed only a weak influence on the elderly's psychological comfort. As a result, the observation that depression was more or less a function of affectional support cannot be further substantiated.

However, both instrumental and affectional social support were deemed important factors for the elderly's psychological comfort. The two types of social support were seen to be predominantly delivered by kin members to reduce depression as well as to enhance life satisfaction of the aged.

Buffering Effect of Social Support

The next question to be discussed is whether the social support, especially by kin members, played a particularly significant role for those elderly who were suffering from a negative situation caused by poor physical health. In this study of the relations between social support and mental well-being, the critical interest in dealing with self-reported physical health consists of the interactive mechanism between social support and physical health which magnifies the effect of social support on mental well

-being for those elderly in poor physical health.

This interactive mechanism was examined in tables 5 through 8. This set of analyses was intended to test a “buffering effect” of social support against psychological distress generated by poor physical health. The respondent were divided into two groups with low and high physical health, based on the median score of self-reported physical health.

Buffering and life satisfaction. Tables 5 and 6 display the impact of the social support network on life satisfaction for the high and low physical health groups. For the physically healthier elderly, the impact of the social support network was weakly

Table 5. High Physical Health Group (N=54) : The Impact of Support Network Size on Life Satisfaction in 1987 (in terms of OLS Regression Coefficients).

	Intercept	[A] Age	Sex (female =1)	Marry (married =1)	Educ.	Econ.	[B] NS	Adj. R-sqr
[A]	18.664*	-.004	2.515 ⁺	1.125	.616	.310	—	.084
[A+B]								
B : total	20.583**	-.037	1.872	.587	.259	.404	.280 ⁺	.131 ⁺
B : kin	19.924**	-.031	2.016	.538	.494	.455	.264	.109 ⁺
B : nkin	19.284*	-.008	2.394 ⁺	1.218	.371	.246	.301	.084
B : instr	20.698**	-.040	1.922	.510	.444	.424	.306 ⁺	.130 ⁺
B : affec	18.925*	-.012	2.412 ⁺	.894	.518	.302	.208	.085
B : kin-instr	20.530**	-.038	1.930	.496	.460	.438	.295	.122 ⁺
B : kin-affec	18.607*	-.006	2.514 ⁺	1.035	.635	.324	.071	.064
B : nkin-instr	18.398*	-.001	2.588 ⁺	1.296	.602	.270	.935	.073
B : nkin-affec	19.448**	-.010	2.332 ⁺	1.188	.334	.224	.382	.094

+p<.10; *p<.05; **p<.01

Note : [A] represents sociodemographic variables (age, sex, marital status, level of education, pocket expenses); [B] represents each type of social support network size (total support, kin support, nonkin support, instrumental support, affectional support, kin-instrumental support, nonkin-instrumental support, nonkin-affectional support).

observed when the total and instrumental network were examined ($p < .10$). Among sociodemographic variables, only sex (being female) had some effect on life satisfaction ($p < .10$); however, it was only in those equations where the support network was insignificant. As a consequence of these weak patterns of significance, none of the equations had a statistically significant explanatory strength of relationship (in terms of R-square) at the conventional level of .05, although some were significant at the .10 level. In sum, the physically healthier elderly's life satisfaction was not much affected by social support or other sociodemographic factors (see Table 5).

In contrast, the impact of the social support network on life satisfaction of the elderly was largely significant in the low physical health group. The support network, as a whole, proved to be a significant determinant of life satisfaction at the .01 level. Among the subcategories of support network, kin network took on a particular significance at the .01 level. Not only was kin network in general important, but its instrumental and affectional networks also showed significant effects. The significance of instrumental and affectional networks seemed to be sustained by kin members, considering the insignificance of nonkin network, whether in the general, instrumental, or affectional dimension.

Among the socioeconomic and demographic variables, pocket expenses produced a significant impact on life satisfaction in a positive direction (at the .01 level). More interestingly, marital status and education were seen to exert some influence on life satisfaction. That is, those physically weak elderly who were married or who were more educated showed higher life satisfaction than those who were not. As many factors produced significant impact on life satisfaction, all of the equations in table 6 had significant explanatory strength of relationship at the .01 level.

When buffering effect of social support denoted by plurality was examined, almost identical patterns of the effects of social support and other variables were found, with some exception. First, for the high physical health group, the total plurality of support had a significant impact on life satisfaction (at the .05 level) and kin, instrumental, and kin-instrumental support plurality had some impact (all significant at the .01 level). Second, for the low physical health group, the statistical significance of the support plurality variables was weaker than that of the network size variables.

Table 6. Low Physical Health Group (N=48) : The Impact of Support Network Size on Life Satisfaction in 1987 (in Terms of OLS Regression Coefficients).

	Intercept	[A] Age	Sex (female =1)	Marry (married =1)	Educ.	Econ.	[B] NS	Adj. R-sqr
[A]	13.692*	-.009	1.416	1.912	.656	1.434**	-	.396**
[A+B]								
B : total	12.705*	-.013	1.116	1.993*	.585 ⁺	1.170**	.430**	.486**
B : kin	9.404	-.031	.854	1.905 ⁺	.836*	1.097**	.662**	.496**
B : nkin	14.249*	-.022	1.484	2.013 ⁺	.587	1.402**	.278	.400**
B : instr	11.560 ⁺	.004	1.116	2.094*	.784*	1.197**	.512*	.445**
B : affec	11.617 ⁺	.008	1.363	1.999 ⁺	.621 ⁺	1.273**	.422*	.434**
B : kin-instr	11.051	.012	1.135	2.115*	.783*	1.195**	.508*	.445**
B : kin-affec	7.727	.061	1.206	1.828 ⁺	.808*	1.197**	.874*	.434**
B : nkin-instr	12.366	.009	1.458	1.968 ⁺	.656 ⁺	1.424**	-1.282	.385**
B : nkin-affec	14.251	-.021	1.451	2.008 ⁺	.575	1.396**	.311	.403**

+p<.10; *p<.05; **p<.01

Note : [A] represents sociodemographic variables (age, sex, marital status, level of education, pocket expenses); [B] represents each type of social support network size (total support, kin support, nonkin support, instrumental support, affectional support, kin-instrumental support, kin-affectional support, nonkin-instrumental support, nonkin-affectional support).

Buffering and depression. Tables 7 and 8 examine the buffering effect of social support with regard to depression created by ill health. Upon inspection of the impact of support network size in Tables 7 and 8, the buffering function of social support (network size) was again seen to be in evidence. While the depression, or psychological comfort, of those elderly in good physical health was not significantly influenced by the social support network, the depression of those in bad physical health was indeed affected. For the low physical health group, the total network size had a significant effect on depression (at the .05 level). Kin, instrumental, and kin-instrumental networks also produced significant effects (significant at the .01, .05, .05 levels, respectively).

Table 7. High Physical Health Group (N=54) : The Impact of Support Network Size on Depression in 1987 (in Terms of OLS Regression Coefficients).

	Intercept	[A] Age	Sex (female =1)	Married (married =1)	Educ.	Econ.	[B] NS	Adj. R-sqr
[A]	41.573**	.006	2.024	1.151	.471	1.644*	—	.110 ⁺
[A+B]								
B : total	42.512**	-.011	1.701	.888	.296	1.690*	.137	.092
B : kin	43.074**	-.026	1.430	.452	.326	1.820*	.314	.103
B : nkin	40.808*	.011	2.173	1.036	.774	1.723*	-.372	.095
B : instr	42.666**	-.014	1.705	.820	.379	1.705*	.164	.093
B : affec	42.221**	-.014	1.770	.580	.229	1.624*	.518	.119 ⁺
B : kin-instr	42.538**	-.012	1.721	.825	.390	1.710*	.152	.092
B : kin-affec	40.908**	-.012	2.014	.099	.694	1.798**	.828	.142 ⁺
B : nkin-instr	41.378*	.008	2.078	1.276	.461	1.614*	.691	.090
B : nkin-affec	41.289*	.007	2.090	1.128	.572	1.674*	-.138	.090

+ p<.10; * p<.05; ** p<.01

Note : [A] represents sociodemographic variables (age, sex, marital status, level of education, pocket expenses); [B] represents each type of social support network size (total support, kin support, nonkin support, instrumental support, affectional support, kin-instrumental support, nonkin instrumental support, nonkin-affectional support).

Education is another factor which showed differential impact on depression between the low and the high physical health groups as it affected and reduced depression. Pocket expenses was the only element which affected depression of both the low and high physical health groups. As many factors showed significant, either at the .05 or .01 levels. This suggests that the social support network, together with pocket expenses and education, substantially affected the level of depression among physically weak elderly people.

Because depression is the core dimension of the elderly's mental well-being that immediately reflected psychological strains generated from physical illness and other

Table 8. Low Physical Health Group (N=48) : The Impact of Support Network Size on Depression in 1987 (in Terms of OLS Regression Coefficients).

	Intercept	[A] Age	Sex (female =1)	Marry (married =1)	Educ.	Econ.	[B] NS	Adj. R-sqr
[A]	37.373*	-.103	2.018	2.695	1.436 ⁺	1.575*	-	.189**
[A+B]								
B : total	35.716*	-.109	1.514	2.832	1.318 ⁺	1.131 ⁺	.721*	.262**
B : kin	28.998*	-.024	.918	2.681	1.788*	.916	1.293**	.306**
B : nkin	38.120**	-.119	2.108	2.830	1.344 ⁺	1.531*	.372	.181*
B : instr	32.594*	-.072	1.345	3.102	1.723*	1.043 ⁺	1.147*	.268**
B : affec	35.474*	-.086	1.968	2.774	1.404 ⁺	1.427*	.378	.185*
B : kin-instr	31.460*	-.055	1.388	3.148	1.722*	1.038 ⁺	1.137*	.269**
B : kin-affec	36.009*	-.086	1.970	2.676	1.471 ⁺	1.520*	.200	.172*
B : nkin-instr	34.700*	-.065	2.101	2.809	1.438 ⁺	1.554*	-2.584	.174*
B : nkin-affec	38.240**	-.121	2.071	2.844	1.311 ⁺	1.516*	.482	.186*

+ p<.10; * p<.05; ** p<.01

Note : [A] represents sociodemographic variables (age, sex, marital status, level of education, pocket expenses); [B] represents each type of social support network size (total support, kin support, nonkin support, instrumental support, affectional support, kin-instrumental support, kin-affectional support, nonkin-instrumental support, nonkin-affectional support).

crisis situations, the buffering effect of social support was expected to be more vividly manifested in reducing depression than in enhancing life satisfaction. Although ample evidence was presented to prove the buffering effect of the social network on depression, such an effect was not conspicuously different from the buffering effect of social network on life satisfaction. The distinction found here lies rather in the fact that depression was buffered mainly by kin-instrumental network, whereas life satisfaction was enhanced both by kin-instrumental and kin-affectional networks among the unhealthy elderly.

Considering the immediacy of depression generated from physical illness, the kind

of social support required to cope with related physical and mental difficulties seemed to be, above all, timely instrumental support. On the other hand, the long-term and general nature of life satisfaction may enable affectional support to play as important a role as instrumental support. At any rate, as the support network showed conspicuously more significant effects on both life satisfaction and depression of the low physical health group than of the high physical health group (and of the entire sample of elderly people), the buffering effect of the social support network was empirically validated in this study.

An almost identical set of relationships was found between social support and depression. The plurality of social support reduced the depression of the low physical health group. Also, the plurality of kin, instrumental, and kin-instrumental support performed the significant buffering function of reducing depression caused by ill health.

Panel data. For space limitation, details on the results of the panel design analysis of the 1984-1987 data are not presented here. In brief, the panel data provide much weaker support for the hypothesized impacts of social support on the elderly's mental well-being. It could be concluded that the mental health effect of social support was realized only for a short duration. However, the earlier mentioned weakness of the instruments for the 1984 survey data limit such an implication. The time dimension, according to Jacobson,⁴⁹⁾ is an essential elements for effective social support, and it should be carefully taken into account in future research.

V. Discussion

This study was conducted to examine the impact of social support on the mental well-being of the Korean elderly, using two sets of survey data collected on the same group of people in 1984 and in 1987. Drawing inferences from previous research in the U.S. and Korea, the relationship between social support and the elderly's mental well-being was derived. In the following, the empirical findings of this study on the

49) Jacobson, D. E., "Types and Timing of Social Support", *Journal of Health and Social Behavior*, 27(September), 1986, pp. 250~264.

relationships implied in the propositions (see Section II) are summarily presented.

Proposition 1. The positive effects of social support on the elderly's mental well-being are well supported by the results of the analyses. In the regression analyses of the 1987 data, the total size of the social support network showed statistically significant impact on life satisfaction of the elderly ($p < .01$). The total plurality of social support also had significant effects on life satisfaction and depression of the elderly. Although both life satisfaction and depression were affected by social support, the latter seemed more resistant to the impact of social support; i.e., social support had less impact on depression. This justifies the need to distinguish between life satisfaction and depression and the fact that depression may have both exogenous and endogenous causes. Besides the expected relationships, these findings measured by support plurality, is an important quality of social networks that affects the mental well-being of the elderly.

Proposition 2. The buffering effect of social support against a stressful life situation (i.e., physical illness) was strongly in evidence. When the elderly were divided into low and high physical health groups, the effects of social support on the mental well-being indicators were much greater for the low group than for the high. Both the total network size and the total support plurality showed significant association with life satisfaction and depression of those elderly in the low health group. For the high health group, only life satisfaction was significantly affected by the total network size and the total support plurality. However, it was even less significant than life satisfaction of the low physical health group. Hence, the buffering effect of social support was more apparent for the elderly's depression than for life satisfaction. This was an expected result, as the buffering effect is theorized to reduce immediate clinical symptoms caused from stressful events. It also justifies the distinction between life satisfaction and depression as different component of the elderly's mental well-being.

Proposition 3. As projected, both instrumental and affectional support, in terms of network size and support plurality, were significantly associated with life satisfaction. However, the level of depression was largely unaffected by instrumental and affectional support, except for the instrumental support plurality at the .10 level of significance. Considering that the instrumental network size also showed slightly more significant

effects on life satisfaction of the elderly than the affectional network size, the instrumental social support appears to be a bit more important than the affectional social support for the Korean elderly's mental well-being (cf. Proposition 6). Moreover, it was again implied that depression is more resistant to the general impact of social support than life satisfaction.

However, the impact of kin and nonkin social support on the elderly's mental well-being was not well supported. As expected, kin support, in terms of network size and support plurality, improved all components of the elderly's mental well-being with statistical significance ($p < .05$ or $p < .10$). However, nonkin support, whether in terms of network size or support plurality, did not affect the elderly's mental well-being. It is assumed that a relatively smaller number of nonkin supporters (network size 1.58; support plurality 2.30) than that of kin (network size 3.50; support plurality 7.98) adds to the insignificance of nonkin support on the mental well-being. However, this strongly support predicted superior impact of kin support on the elderly's mental well-being in proposition 5.

Proposition 4. The projected impact of nonkin-affectional support on the elderly's mental well-being was not supported, while the impact of kin-instrumental and kin-affectional support was largely supported. Kin-instrumental support and kin-affectional support, in term of both network size and support plurality, significantly improved the elderly's life satisfaction. Both the plurality of kin-instrumental support and that of kin-affectional support reduced the elderly's depression ($p < .10$). Yet only the network size of kin-affectional support, and not that of kin-instrumental support, significantly affected their depression ($p < .05$).

Proposition 5. As noted above, the expected superiority of kin over nonkin support for the Korean elderly's mental well-being was fully documented. Only kin support significantly improved the mental well-being of the Korean elderly.

Proposition 6. No notable differences found between kin-instrumental support and kin-affectional support on the Korean elderly's life satisfaction. With regard to depression, in terms of network size, only the kin-affectional support and the kin-instrumental support significantly affected their depression ($p < .05$); however, in terms of support plurality both kin-instrumental support and kin-affectional support showed a certain

impact on depression ($p < .10$). These results, suggest that kin-affectional support is more important than kin-instrumental support in terms of network size as far as the Korean elderly's depression level is concerned. However, in general it may be concluded that kin support is important in both its affectional and instrumental dimensions for improving the Korean elderly's mental well-being.

Research implications. This study shows that the function of social support for the elderly's mental well-being, which have been tested mainly with regard to the Western elderly, are also relevant to Korea. Hence, the cross-cultural evidence provided in this study strengthens the existing scientific knowledge on the relationship between social support and the elderly's mental well-being. It is also shown that the sociocultural peculiarities of Korea may generate a uniquely important role for kin as social support. The empirical support for this contextualized proposition was even stronger than had been expected.

Detailed propositions on the impact of different types of social support were also supported. Thus, the conceptual differentiation of various types of social support is empirically justified. In addition, social support was conceptualized as both social network and social support, considering the comprehensiveness of interactions within a given network. Thus, a theoretically meaningful criterion by which social networks can be qualitatively evaluated was devised. As expected, the degree of association was higher between social support (support plurality) and mental well-being than between social network (network size) and mental well-being.

The distinction between life satisfaction and depression as different components of mental well-being was also justified. While social support in general affected life satisfaction more strongly than depression, its buffering effect was more strongly apparent with depression than with life satisfaction. These results not only conform to the underlying expectations when two different components of the elderly's mental well-being were introduced, but also suggest that such a distinction should receive more theoretical attention. In particular, the differential impact of social support on life satisfaction and depression needs to be theoretically formulated.

Policy implications. The recent social concern about the life of the elderly in Korea revolves around the gradual decline of the extended family as the prime institution

for supporting the elderly. The results of this study, however, signal that most Korean elderly still turn to their families for instrumental and affectional support. The sustained importance of kin support under rapid socioeconomic modernization not only differentiates the Korean situation from the Western experience but also suggests a different way of coping with growing aged population. As in other Asian societies, "the West as a model"⁵⁰⁾ may not be acceptable for Korea.

Given the preserved tradition of strong familial ties in Korea, the family is not only the most important but also the most efficient social institution for supporting the elderly. Hence, every effort should be made to encourage families to continue supporting their elderly. Ultimately, a strong sociocultural tradition may not be a sufficient condition for preserving the social support function of the family; thus, active governmental policies and social campaigns may have to complement the tradition for such a purpose. For example, financial support programs such as subsidies and tax redemptions need to be developed and expanded.

The sustained significance of kin support can, at the same time, imply a problematic situation, i.e., lack of alternative sources of social support for the elderly. This problem was more directly shown by the insignificant role of the nonkin social support for the elderly's mental well-being. The support function of the family can be crucial, not only when the sociocultural tradition is strongly maintained, but also when no major alternative sources of social support are available for the elderly. Although the former is largely deemed to be the case, the latter is also a social fact.⁵¹⁾

In Korea, comprehensive social security programs for the elderly are not yet available and extra-familial private mechanisms for social support are rare. One major social support institution for the elderly at present is senior participatory social activities and for entertainment. However, as of 1986, only approximately one quarter of the Korean elderly population were served by senior citizen centers.⁵²⁾

When kin social support for the elderly needs to be further encouraged, more socio-political attention and economic investment should be made to develop complementary,

50) Martin, L. G., "The Aging of Asia", *Journal of Gerontology: Social Sciences*, 43.4, 1988, S109.

51) Lee, H. J., *op. cit.*, 1979.

52) Lee, K. J., *op. cit.*, 1987.

rather than substitutive, mechanisms of social support. Institutional arrangements for social, cultural, and educational activities including senior citizen centers and senior citizen schools are such complementary mechanisms. More comprehensive financial support programs for the elderly, such as health insurance, subsidies, and pensions may be introduced in the future. But these programs should also be complementary to other available sources of social support. The emphasis on the complimentary nature of the prospective means for social support is congruent with the emphasis on need, rather than age, as the criterion for allocation of resources (Martin 1988: s111). Age-based programs, such as pensions for the elderly in less developed countries, have been criticized as perpetuating an already unequal distribution of income and opportunity. Therefore, social support programs for the elderly should fully reflect the different realities of available kin and nonkin support for the different socioeconomic groups of the elderly in Korea.

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家族 및 社會扶養이 韓國老人의 精神健康에 미치는 影響

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이 論文은 서울에 居住하는 老人을 대상으로 1984年과 1987年 두차례에 걸친 設問調査 結果를 통해서 老人扶養이 精神健康에 미치는 影響을 분석한 것이다.

본 研究에서는 老人扶養이 精神健康에 미치는 效果를 구체적으로 考察하기 위해서 家族扶養, 社會扶養, 物質扶養 또는 情緒扶養 등 扶養形態別로 老人들의 生活滿足感과 憂鬱感에 미치는 影響을 분석하였다. 이를 위해서 多變量回歸分析 등 최근에 개발된 尺度를 적용하였는데 이들 尺度의 信賴性은 韓國老人에서도 有意함이 立證되었다.

이들 分析에서 老人扶養이 精神健康에 미치는 基本假說을 입증하였고, 특히 家族에 의한 扶養이 物質的, 精神的인 측면에서 큰 비중을 나타내고 있음을 알 수 있었다. 또 健康한 老人과 病弱한 老人을 구분한 分析에서 家族扶養이 病弱한 老人의 精神健康에 미치는 影響은 健康한 老人에서 보다도 월등한 점을 알 수 있었다. 이와 같은 결과는 西歐의 경우와는 달리 韓國老人의 精神健康은 家族의 지속적인 보살핌에 의해서 결정됨을 볼때, 家族共同體의 重要性이 제시된 점이라 하겠다. 특히 社會的 近代化過程에서 核家族化의 성향과 老人의 社會扶養體制의 擴人は 특유한 家族文化圈을 형성해 온 韓國에서 老人의 精神健康내지 精神疾患이 家族과 連繫性을 가질때 安定과 豫防에 큰 도움이 있음을 豫示하고 있다.

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