Key Concepts : Empathy, Informal Caregiver, Lazarus-Folkman Stress Model

Empathy In Informal Caregiving: Extension of A Concept from Professional Practice

Haejung Lee[1] · *Patricia F. Brennan*[2]

ABSTRACT

The concept of empathy was examined in the professional caregiving relationship and its application was extended to the context of informal caregiving. Using the Lazarus and Folkman model, the influence of empathy on the caregiver's experience in the caregiving relationship was illustrated. The effects of the caregiver's empathy on his/her own caregiving outcomes were invest igated by examining the relationship between empathy and burnout experience and life satisfaction. Empathy increased emotional exhaustion while increased personal accomplishment and personalization, indicating conflicting relationship between empathy and burnout. This conflict relationship between empathy and burnout can be explained by suggesting the distinct roles of two dimensions of empathy: emotional and cognitive. The needs for more research to support the critical roles of empathy in informal caregiving context and to examine the definite roles of two dimensions of empathy were suggested.

With the increasing number of elderly, a growing number of family members have been involved in caregiving and have remained primarily responsible for providing care. Those who provide un-paid care in the community for ill or disabled elders were named as informal caregivers (Lawton, Moss, Kleban, Glicksman, & Rovine, 1991; Pearlin, Mullan, Semple, & Skaff, 1990) and their caregiving experiences captured the attention of researchers, policy makers, and advocacy groups (Schulz, O'Brien, Bookwala, & Fleissner, 1995). Since informal caregiving develops from interpersonal relationships (Pearlin et al., 1990) and involves a dyadic relationship between caregiver and care recipient (Young & Kahana, 1989), a caregiver's empathy was assumed to play an important role in the caregiver's perception of the caregiving experience as it did in professional caregiving context. The role of empathy in caregiving consequences were examined in professional caregiving context and was rarely examined in informal caregiving context. This paper aimed to analyse the

[1] RN, PhD, Assistant Professor, Pusan National University, School of Medicine, Nursing Dept. Pusan, South Korea
[2] RN, PhD, Moehlman Bascom Professor, University of Wisconsin-Madison, School of Nursing and College of Engineering, Wisconsin, U.S.A.

concept of empathy in the caregiving relationship and to extend its application to informal caregiving.

Empathy is an ability to place oneself mentally and emotionally in the world of another in order to understand another's feelings and experience, which influences the creation of a therapeutic care environment (Schrim & Fennel, 1991). Empathy is widely recognized as a critical component that influences the initiation of helping relationship and the outcomes of the caregiving activities in the professional caregiving (Archer, Diaz-Loving, Gollwitzer, Davis, & Foushe, 1981: Astrom, Nilsson, Norberg, Sandman, & Winblad, 1991: Coke, Batson, & McDavis, 1978: Roberts, 1991: Williams, 1989). Because informal caregiving shows many characteristics similar to the professional caregiving, it is likely that empathy is also a crucial component of family caregiving initiation and outcomes (Bramwell & Whall, 1986: Lee & Song, 1999: Robertson & Suinn, 1968: Schulz, 1990). Empathy was considered as having two dimensions: emotional and cognitive. The relationship between empathy and burnout was explored to identify the role of emotional and cognitive dimensions of empathy in the caregiving context. The theoretical model of Lazarus and Folkman (1984) was utilized to illustrate how empathy influences on the caregiver outcomes.

I. EMPATHY IN CAREGIVING

Evidence of empathy in caregiving

The concept of empathy was recognized in nursing practice in the 1950s when Carl Rogers drew attention to its importance in any therapeutic helping relationships (Morse et al., 1992). Helping relationships include interpersonal alliance in which one person assists another to fill another's needs. Examples are the relationship between counselor and patient, nurse and patient, family caregiver and care recipient, and volunteer helper and help receiver. Empathy is identified as a key ingredient in a helping relationship (Barrett-Lennard, 1981: Carkhuff, 1969: Kalisch, 1971: LaMonica, Carew, Winder, Haase, & Blanchard, 1976). Without empathy, there is no basis for a helping relationship (Carkhuff, 1969). Empathic tendency is a primary personality attribute to predict helping behaviors (Ehmann, 1971: Mehrabian & Epstein, 1972) and increase the effectiveness of the helping behaviors (LaMonica, Wolf, Madea, & Oberst, 1987). Empathic understanding serves to increase the knowledge of another's difficulties and empathic persons are emotionally responsive to others needs (Ehmann, 1971). Therefore, empathy is a required component in a helping relationship and enables the caregiver to ultimately fulfill others needs through increased effectiveness of helping.

Family or informal caregiving represents a unique type of intimate relationship different from a professional caregiving. Empathy acts as a motive in becoming informal caregivers, especially among those for elderly family members (Schulz, 1990). Caregivers' empathy not only influence the initiation of the helping behavior, but also influences the consequences of the helping relationships (LaMonica et al., 1987: Lee & Song, 1999). The consequences can be observed as either the care recipient's outcomes or caregiver's outcomes. Carkhuff (1969) argued that if a caregiver did not possess empathy, the influence of caregiving to the care recipient may be more detrimental than good. Katz (1963) pointed out that a caregiver with poor empathy would have difficulty in responding appropriately to the care recipient's needs and feel insecure and dissatisfied in caring for the care recipient. On the other hand, the caregiver with a high level of empathy can respond efficiently to the care recipient's needs and assist the care recipient

with warmth and understanding (Astrom et al., 1991). As a result, caregivers with high empathy would experience lower emotional burden and high satisfaction with the caregiving activities.

Since people possess different levels of empathy (Ehmann, 1971; Stetler, 1977), there will be individual differences in the levels of empathy among informal caregivers. Therefore, caregivers possessing high levels of empathy will show different perceptions of care recipient's needs and different effectiveness of caregiving activities when they were compared with those possessing low levels of empathy. These differences in perception of caregiving demands and effectiveness of caregiving activities will influence caregiver outcomes.

Role of empathy in the caregiving context

The role of caregiver's empathy on his/her own caregiving outcomes were studied by examining the relationship between empathy and burnout among professional caregivers (Astrom, Nilsson, Norberg, & Winblad, 1990; Bexter, 1992; Roberts, 1991; Williams, 1989). Burnout consists of three dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach, 1982). A combined phenomenon of increased emotional exhaustion, increased depersonalization, and reduced personal accomplishment is characterized as burnout. Williams (1989) reported that emotional empathy had significant positive correlation with emotional exhaustion (r = .23, $p < .001$) and personal accomplishment (r = .25, $p < .001$) in a sample of 492 nurses, social workers, and school teachers. Subjects who possessed high emotional empathy were more emotionally exhausted and experienced higher personal accomplishment through their job-related activities, which indicates the conflict influence of emotional empathy on burnout experience.

Roberts (1991) reported empathic concern and perspective-taking were important components in predicting personal accomplishment (in Canonical correlation, structure coefficient > .50) of staff nurses (N=200) and nurses with high empathic concern and perspective-taking interact in supportive ways with others. Baxter (1992) reported a significant negative correlation (r = -.33, $p < .001$) between depersonalization and empathy among 200 registered nurses, indicating that nurses with high empathy less depersonalized their clients. Astrom and associates (1990) found a weak negative correlation (r= -.19) between burnout and empathy among nurses (N = 557), indicating that nurses with high levels of empathy showed less burnout experience. Overall, empathy is likely to reduce burnout experience among caregivers. However, conflicting findings were noticed from Williams' study (1989). According to the definition of burnout (Maslach, 1982), it is hard to conclude that empathy is related to decreased burnout experience. Empathy is associated with increased emotional exhaustion while it is associated with increased personal accomplishment. These conflicting findings can be explained by the distinct roles of two different dimensions of empathy that occur in the helping relationship. A more detailed explanation will be provided in a later section of this article.

Lazarus and Folkman Stress Model as an Organizing Framework

In the present study, the Lazarus and Folkman stress model (Lazarus & Folkman, 1984) serves to explain the influence of empathy on caregiving appraisal, coping, and caregiver outcomes. Appraisal rests on the individual's subjective interpretation of a person and environment transaction. According to Lazarus and Folkman, a person's adaptability in

potentially stressful situation depends on the perspective of how the person perceives the situation. In the caregiving situation, a caregiver's empathy influences his/her perception of the caregiving transaction by assisting him/her to perceive the transaction from the care recipients perspective. Therefore, the theory postulates that a caregiver's empathy will influence his/her appraisal of caregiving situation, which influences his/her adaptability in the situation.

Empathy is critical for retaining quality of the relationship that is beneficial to both caregiver and care recipient (Ludemann, 1968). This retained quality of relationship may lead positive caregiving outcomes. Though little is known about the direct influence of empathy on caregiver outcomes, in this paper, empathy is proposed as a critical personal factor which influences appraisal, coping and adaptive outcomes among informal caregivers within the Lazarus and Folkman stress model.

Ⅱ. EMPATHY DEFINED

Multidimensional, two major aspects

Rogers (1957) defined empathy as being able to perceive another's feelings and experiences with accuracy, as if one were the other person, but without ever losing the "as if" condition. The definition of empathy provided by Rogers served as a basis of further conceptualization and operationalization of empathy. However, the ambiguity in the conceptualization of empathy has been generated and has remained.

Empathy has been considered as a multiphasal (Barrett-Lennard, 1993: Ehmann, 1971: Gallop, Lancee, & Garfinkel, 1990: Ludemann, 1968: Zderad, 1969), multistage (Gladstein, 1983: Stewart, 1956), or multidimensional construct (Davis, 1983: Gould, 1990: Morse et al., 1992: Williams, 1990). Zderad (1969) and Ludemann (1968) described three phases of empathy: 1) internalizing the other persons situation as if he/she were the person, 2) experiencing an inner response, and 3) objectification. Ehmann (1971) described empathy as four phases: (1) identification, (2) incorporation, (3) reverberation, and (4) detachment. In the phase of objectification or detachment, the empathizer withdraws from his/her subjective involvement, breaks his/her identification with the person and looks at the vicarious experience objectively, scrutinizing the others experience critically. When the empathizer gets overinvolved with the other, he/she has become stuck in his/her identification with the other, and consequently is unable to be helpful. To keep the relationship helpful, the empathizer should be able to withdraw from this subjective involvement and resume his/her own identity.

Gladstein (1983) defined empathy as a multistage interpersonal process that included emotional contagion, identification, and role taking. Stewart (1956) defined empathy as four stages: (1) raw identification, (2) deliberate identification, (3) resistance, and (4) deliberate reidentification. Empathy was also considered as a multidimensional construct (Davis, 1983: Morse et. al., 1992: Williams, 1990). Williams (1990) conceptualized empathy as having emotional, cognitive, communicative, and relationship components. Morse and associates (1992) described empathy with four components: moral, emotive, cognitive, and behavioral. Davis (1983) defined four components of empathy which include fantasy, perspective taking, personal distress, and empathic concern. Even though each theorist defined empathy as having multiple stages or dimensions, the importance of resuming the empathizer own identification and keeping objectivity in the situation was emphasized repeatedly. As it was described above, no matter how empathy was defined, both aspects of emotional arousal and keeping objectivity

were consistently included as components of empathy (Alligood, 1992: Davis, 1983: Ludemann, 1968: Morse et al., 1992). Therefore, in this paper two aspects of emotional arousal and keeping objectivity were considered as substantial dimensions of empathy and defined as emotional and cognitive empathy as Alligood (1992) suggested.

Emotional empathy is an emotional response to another's experience, which includes the ability to subjectively experience and share in another's psychological states, emotions or intrinsic feelings, which naturally develops with maturity and has an inherited potential (Morse et al. 1992). Emotional empathy is contagious (Gladstein, 1983), therefore, the empathizer demonstrating high emotional empathy would have a desperate feeling or sadness for the person who has a frustrating or painful experience. Finally, the emotional empathizer would feel overwhelmed by the other's experience and find him/herself caught up in his/her own feelings toward the person. To use his/her own feelings therapeutically, the emotional empathizer should draw the fine line between emotional distance and emotional involvement (Ludemann, 1968). The emotional empathizer needs to be aware of his/her own feelings and to identify the situation objectively. As subjectivity is transformed into objectivity, cognitive empathy takes the place of emotional empathy (Morse et al., 1992). Emotional empathy is an antecedent of cognitive empathy (Grattan & Eslingher, 1989: Morse et al., 1992).

Cognitive empathy is a cognitive response to another's experience and is defined as an intellectual ability to identify and understand another person's feelings and perspective from an objective stance (Morse et al., 1992). Cognitive empathy has been named in several different ways, examples being: sophisticated empathy, clinical empathy, trained empathy, role taking, and perspective taking. People who are better at utilizing their cognitive empathy will perceive the other's experience from an objective stance and distance themselves from the vicarious emotions involved. Williams (1990) argued that empathy can be matured when emotional empathy and cognitive empathy interact with each other and are synthesized. Failure to synthesize emotional and cognitive empathy results in either an overemotional involvement or depersonalization. To achieve mature empathy, the empathizer needs to keep a balance between emotional empathy and cognitive empathy, where he/she extends him/herself into others situation without losing his/her own identity (Ehmann, 1971).

Balance between emotional and cognitive empathy

Wheeler and Barrett (1994) argued that empathizers knowing how to appropriately distance themselves emotionally from others is as important as knowing how to understand and be involved with others in helping relationships. In the professional caregiving situation, caregivers who possessed high emotional aspects of empathy had difficulties in detaching themselves from care recipients (Roberts, 1991). These caregivers were more vulnerable to the negative impacts of helping relationships and more quickly experience an overextension of their abilities in providing emotional and psychological support to care recipients.

Emotional empathy seems to be a two-edged sword for the caregivers. Since emotional empathy is likely to lead to helping responses for others in the interpersonal relationship (Davis, 1979), there would be no helping behavior without emotional empathy. On the other hand, emotional empathy alone generates overinvolvement with the care recipients, which results in the caregivers being overwhelmed or burned out (Maslach, 1982). Cognitive aspects

of empathy serve to facilitate coping and effective management of the caregiving situation by keeping an objective stance (Roberts, 1991). The caregivers who have tendencies toward perspective taking would be better equipped to adopt the detached concern necessary in their caregiver roles and be psychologically healthy (Davis, 1979; Roberts, 1991). Caregivers must possess concern for the problems of the care recipients while remaining emotionally detached (Lief & Fox, 1963).

Emotional empathy only, without cognitive empathy, could be viewed as a weakness or vulnerability, rather than a strength. The person whose feelings are easily aroused, but not easily controlled, is going to have far more difficulty in dealing with emotionally stressful situations than the person who is less excitable and more psychologically detached (Maslach, 1982). This phenomenon explains the conflict findings of Williams' study (1989), showing that emotional empathy increased emotional exhaustion while increasing personal accomplishment. Therefore, cognitive and emotional aspects of empathy need to be considered simultaneously to understand the roles of empathy in the caregiving relationship.

Prior uses of empathy in helping relationships

Despite the emphasis of both emotional and cognitive empathy in empathy research, few researchers have considered the two dimensions of empathy simultaneously. Empathy has been valued as an important caregiver's characteristic which influences the consequences of the caregiving relationship (Astrom et al., 1991; LaMonica et al., 1987; Schrim & Fennel, 1991). However, the findings on the effects of empathy on the caregiving outcomes were conflicting due to the diverse conceptualizations of the empathy. The next section describes prior uses of empathy in helping relationships of lay people, informal caregivers, and professional care-providers.

Empathy has been discussed as an important characteristic to enable people to help others. In a sample of 56 nursing students, Fakouri, Zucker, and Fakouri (1991) found that students who have higher empathy have positive concepts about others. Empathic concern was a significant predictor of helping in a sample of 33 female general psychology students (Coke et al., 1978) and in a sample of 123 female undergraduates (Archer et al., 1981). Mehrabian and Epstein (1972) also supported the relationship between an empathic tendency and helping behavior in a sample of 81 undergraduates in a university. These findings revealed the importance of empathy in the helping relationship, where empathy motivates helping behaviors.

The influence of empathy in the informal caregiving context was examined by the progress of stroke patients in rehabilitation and caregivers self-assessed adequacy in his/her provision of support to the care recipient (Bramwell & Whall, 1986; Robertson & Suinn, 1968). Robertson and Suinn (1968) reported the positive relationship ($r = .43$) between stroke patients progress in rehabilitation and the empathy of family caregivers ($N = 20$). Family caregivers with high levels of empathy provided a more favorable milieu for recovery and facilitated their care recipients' progress in rehabilitation. Bramwell and Whall (1986) found a weak positive relationship of wife's empathy with her self-assessed adequacy of support provision ($r = .05$) and a negative relationship with her state anxiety ($r = -.07$) in a sample of 82 wives of myocardial infarction patients. Abilities to view the recovery process through eyes of their husbands helped the wives to provide adequate support and to reduce their state anxiety.

In the counseling literature, empathy has been identified as a crucial factor in generating positive change in clients (Barrett-Lennard,

1962; Carkhuff, 1969; Parloff, 1961) and to provide client-centered psychotherapy (Rogers, 1975). Barrett-Lennard (1962) found that clients who perceived their therapists as more empathic showed quicker improvement than those who perceived their therapists as less empathic in a sample of 42 clients and 21 therapists. However, Lesser (1961) found no relation between counseling progress and the empathic understanding of the counselor in a sample of 22 students and students' wives who had sought personal counseling and of 11 counselors.

Inconsistent findings in the effects of empathy on the outcomes of the helping relationship were also observed in a transaction between a nurse and a patient. Warner (1992) found no relationship between nurses' self-reported levels of empathy and patients' perceptions of satisfaction with nursing care received in a sample of 20 registered nurses working on medical-surgical units and 38 patients. While Reid-Ponte (1992) found that the greater the use of empathy by primary nurses, the less the distress of their primary patients was ($N = 65$ dyads, $p < .05$). Raudonis (1993) found a positive relationship between a nurse's empathy and a patient's physical and emotional well-being in a sample of 14 hospice nurses and their patients. These inconclusive findings across studies of the influence of empathy on the caregiving outcomes can be explained by mis-specified conceptualization of empathy, failure to select an instrument consistent with empathy conceptualization, and small sample sizes. Even though it was defined as empathy, one studied the emotional aspect of empathy (Archer et al., 1981; Fakouri et al., 1991), another did the cognitive aspect (Astrom et al., 1991; Barrett-Lennard, 1962; Bramwell & Whall, 1986; Reid-Ponte, 1992; Warner, 1992) and others did mixed aspects (Coke et al., 1978; Raudonis, 1993; Robertson & Suinn, 1968). Since the influences of emotional empathy and cognitive empathy on the caregiving outcomes are expected to be different, incongruent findings were anticipated.

Inconsistency between the conceptualization of empathy and its measurement has raised serious problems in doing empathy research, which threatens the construct validity of the measures (Layton, 1979). Layton and Wykle (1990) supported that different instruments measure slightly different concepts. Gladstein (1983) argued that scales designed to measure empathy can measure different empathic aspects or some qualities related to but different from empathy. Barrette-Lennard (1981) also emphasized that each phase of the empathy requires its own unique measurement. To reduce the controversy regarding empathy measurement, instruments of empathy should be consistent with its conceptualization and the diverse concepts of empathy should be incorporated (Deutsch & Madle, 1975).

In summary, empathy is an important characteristic for motivating helping behavior (Archer et al., 1981; Coke et al., 1978; Mehrabian & Epstein, 1972; Schulz, 1990). Even though the influences of empathy in a counseling relationship and a nurse-patient relationship were inconclusive, the importance of empathy in the relationships has been demonstrated. For the influence of empathy on his/her own caregiving outcomes among professional caregivers, empathy significantly enhanced their personal accomplishment, while increasing emotional exhaustion (Williams, 1989). This supports that empathy is a two-edged sword for caregivers. Therefore, considering two distinct dimensions of empathy is essential to understand the complex role of empathy in the caregiving context. The relationship of empathy to caregiving outcomes in professional caregiving settings serves as a foundation for positing the relationship between informal caregivers' empathy and their

caregiving outcomes. In the previous studies, few studies supported the positive influence of informal caregivers' empathy on patient outcomes (Bramwell & Whall, 1986; Robertson & Suinn, 1968). More research on the relationship between informal caregivers' empathy and their own caregiving outcomes are needed. Lee and Song (1999) reported that informal caregivers (N=140) with low levels of burnout possessed high cognitive empathy. Lee, Brennan, and Daly (under review) reported negative relationship between emotional empathy and life satisfaction among informal caregivers of older adults (N=140). With these findings, it is reasonable to present empathy as an important personal factor that influence informal caregiving outcomes.

Ⅲ. CONCLUSION

This paper proposed empathy as a therapeutic tool in the informal caregiving relationship as it did in professional caregiving relationship. Since empathy assists the caregiver to assess the care recipient's needs from the care recipients perspective, it is critical for the caregiver's adaptation in the caregiving situation, which influences the consequences of caregiving. The identification of emotional and cognitive empathy in the conceptualization of empathy is vital for understanding its roles in the context. The influence of empathy on the caregiver outcomes was examined in relation to his/her burnout experience and life satisfaction (Astrom et al., 1990; Lee & Song, 1999; Lee et al., under review; Williams, 1989). Various indicators can be used to examine the effects of empathy on caregivers. White and Weiner (1986) argued that empathy influences the body's immunological system in a beneficial manner. Therefore, biological indicators can also be used to examine the effects of empathy on caregivers. Further research on the role of empathy in informal caregivers will provide a better understanding of various caregiver's experiences and help to identify effective nursing interventions to increase caregiver's adaptability.

REFERENCES

Alligood, M. R. (1992). Empathy: The importance of recognizing two types. Journal of Psychological Nursing: Mental Health Service, 30(3), 14-17.

Archer, R. L., Diaz-Loving, R., Gollwitzer, D. M., Davis, M. H., & Foushe, H. C. (1981). The role of dispositional empathy and social evaluation in the empathic mediation of helping. Journal of Personality and Social Psychology, 40, 876-796.

Astrom, S., Nilsson, M., Norberg, A., Sandman, P., & Winblad, B. (1991). Staff burnout in dementia care-relations to empathy and attitudes. International Journal of Nursing Studies, 28(1), 65-75.

Astrom, S., Nilsson, M., Norberg, A., & Winblad, B. (1990). Empathy, experience of burnout and attitudes towards demented patients among nursing staff in geriatric care. Journal of Advanced Nursing, 15, 1236-1244.

Barrett-Lennard, G. T. (1962). Dimension of therapist response as causal factors in therapeutic change. Psychologic Monographs, 76,(43, whole, no. 562).

Barrett-Lennard, G. T. (1981). The empathy cycle: Refinement of a nuclear concept. Journal of Counseling Psychology 28(2), 91-100.

Barrett-Lennard, G. T. (1993). The phases and focus of empathy. British Journal of Medical Psychology, 66, 3-14.

Bexter, D. E. (1992). Empathy: Its role in nursing burnout. Unpublished doctoral dissertation, Peabody College for Teachers of Vanderbilt University.

Bramwell, L., & Whall, A. L. (1986). Effect of

role clarity and empathy on support role performance and anxiety. Nursing Research, 35(5), 282-287

Carkhuff, R. R. (1969). Helping and human relations: a primer for lay and professional helpers (Vol 1). New York: Holt, Rinehart and Winston.

Coke, J. S., Batson, C. D., & McDavis, K. (1978). Empathic meditation of helping: A two page model. Journal of Personality and Social Psychology, 36, 752-766.

Davis, M. (1979). Individual differences in empathy: A multidimensional approach. Unpublished doctoral dissertation, The University of Texas at Austin.

Davis, M. H. (1983). Measuring individual differences in empathy: Evidence for a multidimensional approach. Journal of Personality and Social Psychology, 44, 113-126.

Deutsch, F., & Madle, R. A. (1975). Empathy: Historic and current conceptualizations, measurement, and a cognitive theoretical perspective. Human Development, 18, 267-287.

Ehmann, V. E. (1971). Empathy: its origin, characteristics and process. Perspective Psychiatric Care, 9, 72-80.

Fakouri, C., Zucker, K. B., & Fakouri, M. E. (1991). Empathy, other-concept, and prosocial orientation. Perceptual and Motor Skills, 72, 743-747.

Gallop, R., Lancee, W. J., & Garfinkel, P. (1990). The empathic process and its mediators: A heuristic model. Journal of Nervous and Mental Disease, 178, 649-654.

Gladstein, G. A. (1983). Understanding empathy: Integrating counseling, developmental, and social psychology perspectives. Journal of Counseling Psychology, 30(4), 467-482.

Gould, D. (1990). Empathy: A review of the literature with suggestions for an alternative research strategy. Journal of Advanced Nursing, 15, 1167-1174.

Grattan, L. M., & Eslingher, P. J. (1989). Empirical study of empathy. American Journal of Psychology, 146(11): 1521-1522.

Kalisch, B. J. (1971). An experimental in the development of empathy in nursing students. Nursing Research, 20(3), 202-211.

Katz, R. (1963). Empathy: Its nature and uses. London: The Free Press of Glence, Collier-Macmillan Limited.

LaMonica, E. L., Carew, D. K., Winder, A E, Haase, A. H., Blanchard, K. H. (1976). Empathy training as the major thrust of a staff development program. Nursing Research, 25(6), 447-451.

LaMonica, E. L., Wolf, R. M., Madea, A. R., & Oberst, M. T. (1987). Empathy and nursing care outcomes. Scholarly Inquiry for Nursing Practice: An International Journal, 1(3), 197-213.

Lawton, M. P., Moss, M., Kleban, M. H., Glicksman, A., & Rovine, M. (1991). A two-factor model of caregiving appraisal and psychological well-being. Journal of Gerontology: Psychological Sciences, 46, 181-189.

Layton, J. M. (1979). The use of modeling to teach empathy to nursing students. Research in Nursing and Health, 2, 163-176.

Layton J. M., & Wykle, M. H. (1990). A validity study of four empathy instruments. Research in Nursing and Health, 13, 319-325.

Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal and coping. New York: Springer.

Lee, H. S., Brennan, P. B., & Daly, B. J. (under review). Effects of empathy on appraisal, depression, life satisfaction, and physical health in informal caregivers of older adults. Research in Nursing & Health.

Lee, H., & Song, R. (1999). Predictors of burnout among informal caregivers of older adults: Using discriminant analysis. Journal of Korean Academy of Nursing, 29, 585-595.

Lesser, W. M. (1961). Relationship between counseling progress and empathic understanding. Journal of Counseling Psychology, 8, 330-336.

Lief, H. I., & Fox, R. C. (1963). Training for detached concern: in medical students. In H. I. Lief, V. F. Lief, N. R. Lief (Eds.), The psychological basis of medical practice. New York: Harper and Row.

Ludemann, R. S. (1968). Empathy: A component of therapeutic nursing. Nursing Forum, 7, 275-288.

Maslach, C. (1982). Burnout: The cost of caring. New York: Prentice Hall.

Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. Journal of Personality, 40, 525-543.

Morse, J. M., Anderson, G., Bottorff, J. L., Yonge, O., O'Brien, B., Solberg, S. M., & McILveen, K. H. (1992). Exploring empathy: A conceptual fit for nursing practice. Image: Nursing Scholarship, 24(4), 273-280.

Parloff, M. B. (1961). Therapist-patient relationships and outcome of psychotherapy. Journal of Counseling Psychology, 25, 29-38.

Pearlin, L. I., Mullan, J. T., Semple, S. J., & Skaff, M. M. (1990). Caregiving and the stress process: An overview of concepts and their measures. The Gerontologist, 30(5), 583-594.

Raudonis, B. M. (1993). The meaning and impact of empathic relationships in hospice nursing. Cancer Nursing, 16(4), 304-309.

Reid-Ponte, P. (1992). Distress in cancer patients and primary nurses' empathy skills. Cancer Nursing, 15(4), 283-292.

Roberts, D. C. (1991). In search of Florence Nightingale: A multivariate look at personality traits, job reactions, and occupational burnout in nurses. Unpublished doctoral dissertation, The University of Texas at Austin.

Robertson, E. K., & Suinn, R. M. (1968). The determination of rate of progress of stroke patients through empathy measures of patient and family. Journal of Psychosomatic Research, 12, 189-191.

Rogers, C. (1957). The necessary and sufficient conditions of therapeutic personality change. Journal of Counseling Psychology, 21, 95-103.

Rogers, C. R. (1975). Empathic: An unappreciated way of being. Counseling Psychologist, 5(2), 2-10.

Schrim, V., & Fennel, S. (1991). Nurse empathy to caregivers of chronically ill elders. Journal of Gerontological Nursing, 17(10), 18-22.

Schulz, R. (1990). Theoretical perspectives on caregiving: Concepts, variables, and methods. In D. E. Biegel & A. Blum (Eds.), *Aging and caregiving: Theory, research, and policy* (p 27-52). Newbury Park: Sage.

Schulz, R., O'Brien, A. T., Bookwala, J., & Fleissner, K. (1995). Psychiatric and physical morbidity effects of dementia caregiving: Prevalence, correlates, and causes. The Gerontologist, 35, 771-791.

Stetler, C. B. (1977). Relationship of perceived empathy to nurses' communication. Nursing Research, 26(6), 432-438.

Stewart, D. A. (1956). Preface to empathy. New York: Philosophical Library.

Warner, R. R. (1992). Nurses' empathy and patients' satisfaction with nursing care. Journal of the New York State Nurses Association, 23(4), 8-11.

Wheeler, K., & Barrett, E. A. M. (1994). Review and synthesis of selected nursing studies on teaching empathy and implications for nursing research and education. *Nursing Outlook, 42*(5), 230-236.

White, C. L., & Weiner, M. B. (1986). The theory and practice of self psychology. New York: Brunner/Mazel.

Williams, C. A. (1989). Empathy and burnout

in male and female helping professionals. Research in Nursing and Health, 12, 169-178.

Williams, C. A. (1990). Biopsychosocial elements of empathy: A multidimensional model. Issues in Mental Health Nursing, 11, 155-174.

Young, R. F., & Kahana, E. (1989). Specifying caregiver outcomes: Gender and relationship aspects of caregiving strain. The Gerontologist, 29(5), 660-676.

Zderad, L. T. (1969). Empathic nursing: Realization of human capacity. *Nursing Clinics of North America*, 4(4), 655-662.