EMPATHY IN CLINICAL DIETITIANS AND DIETETIC INTERNS

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CHAPTER I

INTRODUCTION

Empathy, defined by the Oxford English dictionary (1) as "the power of projecting one's personality into (and so fully comprehending) the object of contemplation," has been described and studied by many authors with various backgrounds. Since the initial development of the empathy concept, the studies and measures of empathy have differed dependent on the individual author's viewpoint (2-7). Therefore, there is lack of agreement on an operational definition of empathy.

There is evidence in the literature to support the theory that empathy is an important component of an individual's psychological make-up (8-17). The research suggests that highly empathic individuals are more emotionally arousable, more capable of taking the roles of others and, are more socially adept than people with lower empathy levels (8-15, 17). Empathy in human development appears to be associated with family and social interactions; and, in children seems to progress with age and cognitive skill (10, 18-21).

Empathy has long been considered an important aspect of psychological counseling ever since Carl Rogers (22) pioneered the concept that empathy is a "necessary" component to bring about behavioral change. He contended that empathic understanding experienced and demonstrated by the counselor towards the client is an integral part of the counseling process. Rogers (22) claimed that empathy applied to any situation which promoted "constructive

personality change" (p. 96). And, individuals committed to helping others in various situations could gain empathic abilities either experientially and/or educationally.

Since Rogers initiated the concept of the importance of empathy in client-centered care, empathy has been recognized as playing a vital role in the helping professions (23-30). The helping professions are concerned with people and their welfare; and, as such, require the application of their specific knowledge to the individuals whom they are helping (24). In psychological counseling, research studies have suggested that more experienced counselors are more empathic (31, 32). And, that the more empathic counselors may contribute to client continuation in therapy and a more positive counseling outcome (33, 34).

Studies in the educational field appear to support the contention that empathy is an integral interpersonal skill needed by educators in teacher-student interactions (30, 35-39). Explorations of empathy in the teaching profession demonstrate that more empathic teachers may help increase student academic and behavioral achievement and motivation (27, 36-39). Educator empathy levels have been improved after attendance at a structured training program designed specifically to increase empathic interpersonal skills (40-43).

The research literature in the medical field and in medical education demonstrate that physicians' affective interpersonal skills should complement their technical knowledge (26, 44-48). And, that empathic communication abilities are related to patient satisfaction with medical care and/or a more positive therapeutic outcome (26, 44,

49). However, studies have shown varying results when empathy was measured in medical students and physicians with varying experience levels (48, 50, 51).

Empathy has long been recognized as a crucial factor in nurse-patient relationships (15, 52-54). Some studies in the nursing profession demonstrate that nurses with higher education levels and/or with attendance at structured empathy training programs were more empathic than their less educated counterparts (54-56). Others have found, however, a decline in nursing staff empathy levels with increasing experience (52, 57). Therefore, since Carl Rogers' contention that empathic skills could be gained through experiential and/or educational processes, the research literature in psychology, education, nursing and medicine suggest that professional education and/or experience may influence helping professionals' empathic skills.

Clinical dietetics, one of the many helping professions, is defined by Mason et al. (58) as "nutritional care, offered in an environment where clients and their needs, physical, socioemotional, and intellectual are the foci of professional effort" (p. 6). One of the principal concerns of clinical dietitians is direct client care and nutritional counseling (59, 60). Nutrition counseling encompasses psychological and educational principles applied to nutritional sciences within a medical context (58, 61, 62). To be an effective nutrition counselor, dietitians need to develop the ability to experience and communicate empathy to their clients in the counseling process (58, 61). Therefore, dietitians must be "knowledgeable

experts, having current, in-depth, comprehensive understanding of nutrition science and art; [and], committed healers, caring in word and action" (63, p. 8). Presently, there is limited research literature on empathy and clinical dietetics, and dietitians' empathic abilities as affected by experience and/or education.

Based on the premises that empathy is important to patient care and nutrition counseling outcome, and that empathic skills can be gained either experientially and/or educationally, the purpose of this research is to measure clinical dietitians' and dietetic interns' empathy levels with the Davis Interpersonal Reactivity Index (IRI) - a multidimensional empathy scale. This information will be used to ascertain if the empathy levels of clinical dietitians' and dietetic interns are affected by education and/or experience. Therefore, it is hypothesized that the empathy levels of clinical dietitians and dietetic interns, as measured by the Davis IRI, will not be influenced by educational and/or experiential processes.

Because research on empathy in clinical dietetics is limited, the findings of this study should be considered preliminary and serve as a baseline for more extensive studies. Since it appears that empathy is important to the helping professions, this thesis reviews the benefits and thus excludes possible adverse effects of overempathizing. The concept of empathy encompasses a wide range and a variety of sources of literature, definitions and measures; therefore, the scope of the literature review is limited to the professional fields related to clinical dietetics. These fields include psychological counseling, education, medicine and nursing.

CHAPTER II

REVIEW OF LITERATURE

Early Development of the Empathy Concept

Empathy has been described and defined by many authors and researchers of varying backgrounds and disciplines. The definitions and measures of empathy have also varied depending on the perspective of the author (2-7). The concept of empathy has developed from a vast array of different sources and has "a heritage rich with varied meanings" (64, p. 358). However, in reviewing the literature, it appears that empathy has been considered from three common viewpoints. One is that empathy is the ability to cognitively recognize another's emotional experience (8-12). The second view is that empathy is an affective sharing of another person's feelings (13, 14). And the third is a combined cognitive and affective experiencing of another individual's emotional situation (18-21, 65, 66).

The Oxford English Dictionary (1) defines empathy as "the power of projecting one's personality into (and so fully comprehending) the object of contemplation." This definition is derived from two sources. The Greek word empathia meaning "to put into or upon suffering or feeling." And, the German word Einfühlung which was translated to mean empathy (1). Lipps' (67) theory of Einfühlung concerned the aesthetic appreciation of beauty in art. In order to truly appreciate beauty, Lipps described an affective process of feeling oneself into an object [such] "that the distinction between self and the object disappears" (p. 253).

Over a century prior to Lipps' aesthetic theory of empathy, Adam Smith (68) introduced a two-sided approach to sympathy in which his discussion of sympathy appears to describe the empathic process. He described sympathy as feeling another person's emotions by "imagination" and "it is by the imagination only that we can form any conception of what are his sensations" (p. 3). This definition implies a vicarious experiencing of another's emotions. On the other hand, Smith also described sympathy as "sensibly" observing another's situation without actually experiencing his feelings. "Nature it seems, when she loaded us with our own sorrows, thought they were enough and therefore did not command us to take any further share in those of others" (p. 66).

According to Wispé, Titchener's interpretation of empathy also consisted of both an affective and cognitive nature (7). Titchener described empathy as a "tendency to feel oneself into a situation" by imagination (69, p. 98). He further stated that by experiencing past emotions, a person is more able to "empathically realize the attitudes and responses of those, who in other departments, have reached the same mental level" (p. 293). Empathy, in his viewpoint, develops throughout one's lifetime because prior affective sensations and experiences enable one to cognitively recognize another's emotions and circumstances.

To the contrary, Cooley (70) did not believe that previous lifetime experiences allowed an individual to empathize with another. Instead, he thought that the imaginative processes alone gave one the capacity to cognitively recognize the feelings of his fellow person.

He stated that "thought and sentiment are highly complex and imaginative personal ideas...and there are so many aids to the imagination that little can be judged as to one's experience by the merely external course of his life" (p. 139).

Mead (71) defined sympathy/empathy as putting oneself "in the place of another" (p. 299). But, Mead takes a more cognitive social approach by stating that one must first recognize and then respond to another's situation in order to feel sympathy towards him. As such, sympathy is "a co-operative process" (p. 300). McDougall (72) considered sympathy a mutual emotional agreement between two people; however, he labeled this "reciprocal relation" as active sympathy, which he distinguished from primitive sympathy. He defined primitive sympathy as an instinctive affective experiencing of the emotions of others. It is a direct reaction "to the expressions of the feelings and emotions of our fellow-men" (p. 94).

The concept of putting oneself in another's situation was also discussed by Sigmund Freud (73). He called it identification. Freud stated that identification is "the earliest expression of an emotional tie with another person" (p. 37). And, with identification "we are faced by the process which psychology calls 'empathy (Einfühlung)' and which plays the largest part in our understanding of what is inherently foreign to our ego in other people" (p. 40). Cottrell (74), having been influenced by the writings of Mead, Cooley and Freud, considered empathy an interactive process wherein one identifies with or assumes the roles of others throughout one's lifetime. And, these role-taking experiences form a foundation in which to perceive various

situations (74). Stein (75) described empathy as experiencing the inner feelings of others and as "a kind of act of perceiving" (p. 11).

The early development of the concept of empathy has been discussed and expounded on by many authors with varying perspectives and ideas. The ones mentioned here are but a few of the major authors that have written on this topic. However, within these diverse definitions lies a similar core: empathy is an affective and/or cognitive sharing of another individual's emotional situation (positive or negative).

Empathy and Personality

Authors have reported that empathy is a unique personality characteristic which is central to an individual's psychological make-up (8-17). Despite the different theories, viewpoints and measures of personality and empathy in the literature, a common thread exists. The highly empathic individual appears to be more socially adjusted, more emotionally arousable, more able to take the perspectives of others; and, has genuine interest in those around him than the person with lower empathy levels (8-16). The emergence of empathy in human development seems to progress with a child's age and cognitive skill; and, it appears to be associated with family and social interactions (10, 18-21).

The Empathic Personality

There is evidence to support the theory that empathy is an important component of an individual's personality (8-17). Early

research on personality and empathy was conducted by Dymond (10). She defined empathy as "the imaginative transposing of oneself into the thinking, feeling and acting of another" (p. 127). This definition was based on studies which suggested that a highly empathic individual could more easily take the role of another when compared to an individual with lower empathy levels (8, 9). Research conducted by Stotland et al. (14, 15) showed that subjects who scored higher on a Fantasy-Empathy scale were more capable of imaginatively placing themselves in another's situation which influenced their emotional responses to others.

One of Dymond's later studies (10) showed that individuals with a higher empathy score seemed to be more extroverted, more socially adept and had a more positive outlook on life than individuals with a lower empathy score. Hogan (11), after testing a cognitive empathy measure on 1,086 subjects, concluded that an empathic individual appears to be warmer, more personable, and more comfortable in interpersonal relations than the individual with an unempathic personality. A later study, conducted by Grief and Hogan (76), confirmed these results. After reviewing the research that used the Hogan scale as an empathy measurement instrument, Chlopan et al. (2) reported that "the highly empathic individual is less anxious, less depressed, more likeable and is generally better adjusted than their less empathic counterparts" (p. 644).

The affective nature of empathy and personality have also been explored in the literature (2, 13-15, 77). Affective empathy is defined as emotional arousal experienced by an individual after

observing and perceiving another's emotional state (13, 14). Mehrabian and Epstein's studies (13) on empathy and aggression in college students showed that highly empathic individuals were significantly less aggressive when the "victim" was within their sight. The low empathy individuals were aggressive regardless of whether the "victim" was visible to them or not. Thus, the more empathic students were more likely to experience emotional arousal than the low empathy students.

A later study by Mehrabian (77) confirmed the prior findings that empathic individuals are more easily aroused emotionally. In this research, the author administered a battery of personality tests to 325 undergraduate college students to determine if an "arousable" person reacts more dramatically to an unpredictable stimulus than a nonarousable person. Mehrabian found a significant negative correlation between emotional empathy and the ability to screen stimuli. Kendall et al. (78) reported similar results in their studies on empathy and anxiety. Gruen and Mendelsohn (17) suggested that empathy is a stable personality characteristic which enables an individual to "mirror the emotions of another" (p. 613).

Davis (65, 79-81) and Davis et al. (82) provide evidence that empathy is a multidimensional construct within an individual's personality. Davis contends that empathy consists of four components: perspective taking, fantasy, empathic concern, and personal distress. Perspective taking is a person's ability to take on another's viewpoint. Fantasy is an individual's tendency to take the roles of fictitious people in plays, films and novels. Empathic concern is a

person's tendency to feel compassion for others who are suffering in emotionally negative situations. And personal distress represents an individual's unease and apprehension when observing another person's negative emotional state (65). Within this context, the author developed and tested a self-report empathy scale - The Interpersonal Reactivity Index - which "reliably assesses four separate, and relatively independent, qualities of the individual" which are all integral components of empathy (65, p. 13).

After administering the Interpersonal Reactivity Index (IRI) to 1,344 undergraduate college students, Davis' study (80) suggested that empathy is a multifaceted personality characteristic. Individuals that scored higher on the perspective taking scale seemed to be more capable of engaging in more positive interpersonal relationships; and, they had higher levels of self-esteem. High fantasizers appeared to be more prone to emotional arousal and sensitivity to others. Individuals high in empathic concern tended to be more emotionally responsive, anxious and caring when perceiving others in an emotional state. High scorers on the personal distress scale were more likely to have fewer interpersonal relations skills and lower self-esteem (80). In this same study, Davis (80) also found that his empathic concern and fantasy scales were significantly and highly correlated with Mehrabian and Epstein's Emotional Empathy Scale. His perspective-taking scale was significantly correlated with the Hogan Empathy Scale (cognitive). Davis suggested that the study findings "support a multidimensional view of empathy because they provide evidence that the four qualities tapped by the IRI are indeed separate

constructs, each related in specific and specifiable ways with other psychological measures" (p. 123).

In a more recent study of empathic response to film stimuli, Davis et al. (82) found that affective and cognitive components of empathy were associated with diverse emotional states. The ability to take the perspective of another was found to significantly influence the emotional states of friendliness, tranquility and happiness. The empathic concern scale was significantly related to friendliness, depression, hostility and anxiety. Davis et al. concluded that these results proposed that emotional responses are influenced differently by cognitive perspective taking and affective empathic concern.

Empathy in Human Development

Evidence demonstrates that most researchers in the field of human development consider empathy a multifaceted process which encompasses both an affective and cognitive aspect (18-21, 66, 83, 84). Hoffman, (20, 21) contends that the affective state is central to the formation of empathic ability in human development. And, cognitive empathy develops in children dependent on their developmental stage, age and environment; and, it comes into play throughout one's lifespan as needed in various situations. On the other hand, Feshbach (18, 19) believes that the core component of empathy is cognitive skill. The child must first be able to recognize the emotion of another in order to respond empathically.

Affective empathy or emotional arousal has been described in infants as young as one to two days old (85). Sullivan (86) has also

discussed that an infant's reaction to his caretaker's anxiety is part of the empathic process. Hoffman (20, 21) has designated the newborn's distress reaction as the first level of empathic arousal in his six mode developmental empathy model. In his model, a developing child progresses through the first five modes mostly on an involuntary basis which requires minimal cognitive ability. The sixth mode--role taking--is an intentional and highly cognitive act where one purposely places himself in another's position to imagine another's emotional situation; and thus, it may be a relatively infrequent behavior. Role taking, or the sixth mode, is theorized by Hoffman as following a four-level schedule which extends from birth to adolescence. By early adolescence, a child recognizes that others have individual thoughts, emotions and experiences beyond the present situation. He states that "empathy may thus be viewed as having an affective component that is experienced differently as the child progresses through these four social-cognitive stages" (p. 286).

Strayer (87) found, in her naturalistic study of preschoolers, that five year olds can recognize that other children feel differently from themselves. And, they can respond to the other child's emotional condition. Because the children were more responsive to displays of happiness versus other affective states, the author suggested that the children selected to participate more in happy experiences than sad ones with others. And, a preschooler's responses to other children's emotions were significantly related to the responder's affective condition and not necessarily their perspective-taking ability.

Similar findings had been reported earlier by Borke (88). Her study of three to eight year olds showed that children as young as three years of age could readily identify feelings of happiness in others. And, three year olds were aware of feelings in other individuals. Borke (88) contended that these results challenged Piaget's theory that children are mostly egocentric until the age of seven.

Chandler and Greenspan (89) disputed Borke's findings. After researching egocentrism and perspective taking in children, they reported that young children can in fact detect emotions in others. But, perspective taking or nonegocentric thought, which they argue is not the awareness of feelings in others, does not develop until middle childhood (as suggested by Piaget).

Since the debate between Borke and Chandler and Greenspan, other researchers have attempted to determine children's role-taking skills and the age at which children are able to take on the roles or perspectives of others (90-96). Based on these findings, some authors have developed different role-taking paradigms. They contend that role taking consists of both an affective and cognitive constituent - the ability to emotionally experience and cognitively think about what another person is feeling and thinking (5, 97).

Selman and Byrne (95) studied social role-taking skills in 40 children between the ages of four and ten years old. They found a significant positive correlation between role taking and age. Based on a four-level structural concept of role-taking development, 80 percent of the four year olds were at level zero and could not discern

their points of view from others. In the group of children at eight years of age, zero percent were at level zero and 50 percent were at level two - the ability to see one's own behavior from another's perspective. Similar results were reported by others (90, 93, 94). Kurdek and Rodgon (93), in their study of 167 children in grades kindergarten through sixth, found that cognitive, perceptual and appropriate affective role-taking ability increased with grade and inappropriate affective role taking decreased with increasing grade. Inappropriate affective role taking was defined as expressing an emotion that is incongruent with the situation. It was also found that cognitive perspective taking appeared to develop more completely prior to perceptual perspective taking.

Hughes et al. (91) found that empathic understanding tends to increase with age. If younger children were asked to concentrate on their own emotional responses to other's affective conditions, they were more able to understand other's emotions. Wilson and Cantor's study (98) showed increased empathic arousal with age, but the authors suggested it was because of the older children's ability to role take. Ianotti's study (96) showed that although increased role-taking experiences positively influenced role-taking behavior, they did not increase empathic behavior. To determine children's understanding of others' affective states, Gove and Keating (92) studied 32 children in two groups with average ages of 46 and 62 months. They proposed that a child's ability to infer another's perspective by focusing on the situation is a complex developmental process versus a stage model of role-taking capacity.

Children's development of empathy has also been related to parental empathy and family characteristics (99-102). Barnett et al. (99) studied family and empathy in 295 undergraduate college students. Students that scored high on the Mehrabian and Epstein self-report empathy scale reported that their parents were more affectionate, spent more time with them and openly communicated emotions with them than did students with low empathy scores. Similar findings had been published earlier by Dymond (10).

Barnett et al. (99) also found that empathy development in children seemed to be influenced more by interaction with their mothers than their fathers. Another study conducted by the same authors with 54 preschool and kindergarten children showed similar results (100). Siegal reported that girls who identified more over time with their mothers had significantly higher empathy scores than girls whose identification with their mothers differed over time. In contrast to these studies, Kalliopuska (102) found in her study of 215 nine to twelve year olds that children's ability to empathize did not appear to be related to their mothers' empathy levels. In fact, as a group, there was significant and positive correlation between the children's and their fathers' empathy scores as measured by the Mehrabian and Epstein empathy scale.

In summary, the emergence of empathy in human development is a complex behavioral, social and psychological process which can't be represented by a single paradigm or measured by a single instrument (19).

Empathy and Helping Behavior

Evidence in the research literature indicates that the empathic process is related to helping behavior (79, 81, 103-108). Helping behavior is defined as an intentional act that, based on the helper's viewpoint, is worthwhile and beneficial to the recipient (109). Coke et al. (103) theorized that the empathic transfer of helping consists of two phases. First, a person's ability to imaginatively place himself in another's situation tends to potentiate his empathic feelings for the person in distress. And, the empathic emotion that one feels is the driving force behind his desire to help to reduce another's distress. The authors (103) found in their two experiments with college students that perspective taking increased helping behavior because it tended to increase one's level of empathic concern. Davis (79), however, did not find a significant relationship between perspective taking and helping. But, the subjects in the perspective-taking experimental condition did have significantly more self-reported feelings of warmth and concern than those in the observe condition.

In a previous study by Stotland and Sherman (14), it was found that the subjects who had been instructed to imagine themselves in another's position empathized significantly more with that person than the subjects who were told to simply observe the person. Toi and Batson (108) also found higher self-reported empathy ratings by subjects in the imagine experimental condition as compared to subjects in the observe condition.

To determine if an individual with an empathic personality was more likely to help others, Mehrabian and Epstein (13) measured empathy and helping in college students. The students completed a series of questionnaires which concerned their attitudes and various aspects of their personalities and emotions. The subjects were then exposed to a distressed individual who requested their help. The results showed that helping behavior was significantly related to empathic attributes within an individual's personality. And, empathy was significantly correlated with emotional arousal. Marcus et al. (110) found in their study of preschoolers that empathy "plays an even greater role in prosocial behavior under conditions of affective arousal" (p. 347).

In a study by Barnett et al. (107), high school students completed the Mehrabian and Epstein Emotional Empathy Scale prior to viewing either an emotionally arousing or nonarousing videotape. The students were then asked to help by making activity books for mentally and physically disabled children. The more empathic subjects had significantly increased self-reported sad feelings and made more activity books after watching the arousing videotape than their lower empathy counterparts. But, the more empathic personalities' helping behavior wasn't affected by the arousing video. They were more inclined to help regardless of the experimental condition. Davis (81) found that individuals with higher scores on the empathic concern scale were significantly more likely to watch a Muscular Dystrophy telethon. And, they were more likely to donate their time and money

after viewing the telethon than the individuals with low empathy scores.

Archer et al. (104) contend that although emotional arousal and perspective taking both play a role in the empathic process, the social environment may dictate the degree of helping. For example, if it is more socially acceptable to help, helping behavior will be greater. Their study showed that more empathic individuals helped significantly more when they experienced increased levels of emotional arousal and perceived that helping was the proper behavior. The findings also demonstrated that in the empathic person, feelings of personal distress affected helping behavior. Others have reported similar results (105). Davis (79), however, found that feelings of anxiety and distress caused by witnessing another's negative situation were not related to helping.

As demonstrated by the research, empathy within one's personality and as perceived in a social situation influences helping behavior. However, the multifaceted and complex nature of empathy makes it difficult to discern to what extent empathy is actually involved in the helping process.

Empathy and the Helping Professions

The ability to experience and demonstrate empathy is considered a highly desirable skill in the helping professions (23-30). Empathy and a warm, caring attitude promote a constructive interpersonal relationship which facilitates a positive outcome (22-30). Carkhuff (23) stated that "without empathy there is no basis for helping"

(p. 83). And, if empathy is inadequate in a helping relationship, there may be deterioration of the "helpee's" condition. Empathy is especially crucial in the helping professions because the skilled expert is concerned with "helping people achieve effective relationships between themselves and others or with the world in which they live" (24, p. 4).

Carl Rogers pioneered the concept that empathy is an important constituent of a helping relationship (22, 28). Others have researched, refined and further emphasized the significance of this phenomenon in human interaction (23-25, 27, 31). After reviewing the literature, Traux and Carkhuff (25) concluded that all the diverse theories in counseling research depict empathy, warmth and genuineness as core interpersonal skills in any helping relationship. Carkhuff (23) has noted that despite the differences in a variety of possible interpersonal relationships, the central dimensions of empathy, respect and genuineness still play integral roles. Combs et al. (24) has written that "helping techniques must fit the helper, the client, the purposes of helping, and the peculiar settings in which they are employed" (p. 12).

Empathy in Counseling

The work in client-centered therapy was initiated by Rogers (22) when he theorized that in order for "constructive personality change to occur" (p. 96), there are certain conditions that should exist in the counseling process. They consist of therapist genuineness, unconditional acceptance, empathic understanding of the client

and the therapist's capability of expressing this empathic understanding to the client (22, 28). Rogers (22) contends that these abilities can be gained experientially and/or through a structured training program.

Empathic understanding, in any situation, is considered by Rogers to be an integral part of the counselor's attitude towards his client (22, 28). "It is the counselor's function to assume, in so far as he is able, the internal frame of reference of the client, to perceive the world as the client sees it" (28, p. 29). Traux and Carkhuff (25) interpreted Rogers' client-centered theory to mean that empathic understanding by the therapist opens the doors to accepting the client as himself; and thus, it allows the therapist to feel genuine warmth and regard towards his client.

Since Rogers first introduced the idea that empathy is a "necessary" component to effectively bring about behavioral change, research has been conducted to determine if empathy is a crucial factor in the counseling process (31-34, 111-114). Barrett-Lennard (31) tested the hypothesis that empathic understanding, regard, congruence and willingness to be known all play a role in bringing about personality change; and, these changes will be more pronounced in clients counseled by more experienced therapists. The author developed an instrument - The Relationship Inventory - to measure the therapist attitude variables mentioned above. The scale was administered to 42 clients and 21 therapists with varying levels of experience. The study showed that the clients with greater change had an increased perception of the therapist attitude variables. It was

also found that the more experienced counselors were perceived by the clients as displaying more empathic concern and congruence. And, clients with more experienced therapists exhibited more constructive change than the clients counseled by the less experienced therapists. There was also a significant difference between the experienced and novice counselors and their clients regarding agreement of empathic understanding.

Almost ten years later, Mullen and Abeles (32) studied the effects of counselor experience on their levels of empathy, warmth and client change. Thirty six therapists with varying levels of experience were tape recorded while interviewing their clients. The interviews were rated using Traux and Carkhuff's Accurate Empathy Scale. The results showed that there was a significant relationship between therapist empathy and counseling outcome success. There was also a significant difference between experienced and inexperienced counselors. The more experienced counselors had significantly higher empathy levels than the novice counselors. The authors (32) concluded that "experienced therapists, because of their greater experience and/or training are generally more aware of all levels of the client's feelings throughout therapy" (p. 43). Dubnicki (111) found in her study, however, that a patient's prognosis was more positive when the therapist was empathic but less experienced.

The Traux and Carkhuff Accurate Empathy Scale was also employed as an empathy measure by Altmann (33) to determine if therapist empathy, warmth and genuineness are conducive to client continuation of counseling sessions. Of the original 19 subjects counseled by

seven therapists, eight discontinued treatment after the first interview. The remaining 11 subjects stayed for the full amount of therapy sessions. The empathy levels of the therapists who counseled the clients who discontinued treatment were significantly below the median. In the remaining 11 clients, nine clients' counselors' empathy levels were significantly above the median. Altmann (33) stated that "the dimension of accurate empathy plays a vital role in determining whether clients will continue or terminate counseling after the original interview" (p. 227). In another study with similar results, the authors concluded that although therapist empathy may not contribute to client counseling progress, it may help retain the client in counseling (34).

Because therapist empathy determination in counseling research has involved the use of various empathy scales and measurement forms, Kurtz and Grummon (112) utilized six different empathy measures in their study of counseling outcomes. Thirty-one counselors and 26 clients were tape recorded while participating in counseling sessions. The results indicated poor and nonsignificant correlations between client perceived empathy as measured after the third and final session using the Barrett-Lennard Relationship Inventory. Based on this finding, the authors suggested that if empathic understanding is well established in the first counseling session, it tends to remain until counseling is completed. This point was also evidenced in a study conducted by Altmann (33).

In a more recent study, Free et al. (113) used the Barrett-Lennard Relationship Inventory to research therapist empathy levels

and counseling outcome. The Barrett-Lennard instrument was administered to 59 clients, 13 therapists and the therapists' two clinical supervisors during the third and sixth sessions over 12 weeks of counseling. The level of agreement on therapist empathy from the three different perspectives was quite high but nonsignificant. The highest correlation was between the clients' rating of their therapists and the therapists' self-reported empathy levels. These results provide insight as to why clients may continue or terminate counseling and to counseling outcomes. If the therapist experiences and expresses empathy to the client and the client perceives this empathic understanding, then empathy may play an integral role in successful counseling outcome (23, 32, 113).

Because of Rogers' contention that empathy can be attained either through experiential and/or educational processes, several programs have since been developed to improve counselor empathy levels (5, 15, 114). Gladstein and Feldstein (114) have pointed out that these programs need to concentrate more on the counselor's affective state. They have suggested the use of films to increase therapists' awareness of the affective part of the empathic process in the early stages of counseling.

Empathy in Education

In the field of education, Rogers (30) theorized that student learning is increased when the educator truly comprehends the student's perspective of his individual learning situation. It is important that "the teacher has the ability to understand the

student's reactions from the inside" and that students should be "simply understood from their own point of view" (p. 112). Carkhuff and Berenson (27) noted that the "core dimensions" which can promote constructive human interaction are empathic understanding, genuineness, positive regard and concreteness. Based on Rogers' theory (30) that empathy is crucial to effective teacher-student relations, studies have been conducted to determine the importance of empathy and its effects within the scope of education (35-39, 115).

An early study by Dixon and Morse (35) showed that teachers perceived to be more empathic by their students were also considered better teachers by both students and supervisors. Robinson and Robinson (36) conducted a study on 91 sixth graders to determine if the students could perceive teacher empathy; and if so, did it affect student achievement. The authors found a significant increase in language arts in the students who perceived their teachers as having higher empathy and warmth levels. In researching student perception of teacher empathy and student motivation, Waxman (37) found significant results. He concluded that "students' perceptions of their teachers' empathy affect their motivation and supports the notion that effective teachers need to be empathic" (p. 490).

Aspy (115), in his study of 120 third grade students, found that children instructed by teachers with higher condition levels of empathy, congruence, and positive regard achieved significantly more over an academic year than the students of lower condition teachers. However, a later study conducted by Aspy and Roebuck (116) showed that

while teacher positive regard was significantly correlated with increased cognitive function in their students, empathy was not.

An empathy study was conducted on 40 second grade students and their counselors by Wiggins (38). The students, who were in need of academic and behavioral counseling, were counseled by 20 novice counselors over four sessions. The third session was taped and rated using the Carkhuff scale. According to both a six week and four month evaluation, all of the children improved substantially. But, the children who worked with counselors that scored high on the Carkhuff Empathy Scale made significantly greater improvements than the children counseled by lower empathy counselors. Similar results were reported by Stoffer (39).

The research literature appears to support the contention that empathy is a vital interpersonal skill in teacher-student interactions. And, Rogers (29) later emphasized that empathy "is possibly the most potent and certainly one of the most potent factors in bringing about change and learning" (p. 3). Based on the evidence in the literature, programs have been specifically designed to increase teacher empathy (5, 40-43). Warner (40) studied the effects of a videotape program about simulated student-teacher interaction on teacher sensitivity. He found there was a significant improvement in teacher empathy scores after viewing the video as compared to a control group. It was also found that there was no correlation between teacher empathy scores (measured by a modified Carkhuff empathy scale) and age or teaching experience. Other studies have

also shown significant improvements in educator empathic ability after completion of structured training programs (41-43).

Empathy in Medicine

There is growing acceptance that affective interpersonal skills should complement a physician's technical knowledge in the field of medicine and patient care (26, 44-48). After reviewing the literature, DiMatteo (26) concluded that the physician's ability to develop rapport and demonstrate genuine interest and empathy toward the patient is related to therapeutic outcome and patient satisfaction. These findings were confirmed in Stewart's study (49) of patient-physician interactions in a family practice setting. Ben-Sira (44) also showed that patient satisfaction with medical care was strongly correlated with the doctor's affective behavior.

In an observational study of 800 doctor-patient interactions in a pediatric clinic, Korsch and Negrete (47) found that the physician's inability to establish empathy and rapport with the patient impeded effective communication and resulted in patient dissatisfaction. It was also shown that a warm and friendly attitude demonstrated by the doctor towards the patient increased the patient's level of active participation and communication in the relationship. Duffy et al. (117) discovered, in their study of physicians' communications skills, that only 35 percent of the medical officers in a general medical clinic could identify their patients' emotional feelings concerning their illnesses. The residents and interns openly admitted they

experienced discomfort in discussing psychosocial problems with their patients.

In response to the heightened concern about physicians' communication and empathic abilities, medical schools have incorporated various types of interpersonal skills programs into their curricula. It is reported that 68 percent of all medical schools in the United States provide coursework in this area (46). The majority of the schools direct their interpersonal skills programs toward preclinical students; and, don't reinforce the skills throughout the clinical years (46, 118). A study by Engler et al. (119) showed that medical students can significantly increase their empathic interpersonal skills through a structured educational program. But when tested one year later, there was a significant decrease in the students' communication skills. Elizur and Rosenheim (120), however, showed that a structured psychiatric group experience increased the students' empathy levels which were retained six months after completing the course. Others suggest that evaluation and reinforcement of interpersonal skills after course completion should be considered vital components of this type of program (46, 118, 119).

Some authors have explored personality characteristics of medical students to determine if empathy is an inherent attribute (120-122). Streit-Forest (121) found that students who selected a medical career based on humanistic values and had more positive attitudes towards physician-patient relationships, had significantly higher empathy scores (measured by Hogan's self report empathy scale) than students who chose a medical career for other reasons. Kupfer et al. (122)

suggested that "an empathic individual, one who is sensitive to the needs and values of others, would be likely to possess interpersonal skills necessary in establishing effective communication between physician and patient" (p. 507). A study by Elizur and Rosenheim (120) showed that medical students' empathy scores were greater than those of nonmedical undergraduate students but less than those of graduate students specializing in the psychosocial helping professions. These studies demonstrate that although many medical students may have empathic personalities, interpersonal skills courses should constitute an important part of the medical school curricula.

Even though an empathic personality is considered a desirable quality in the field of medicine, there is evidence that empathy and affective interpersonal skills can be notably improved through educational programs (48, 119, 120, 123, 124). Weihs and Chapados (123) used Carkhuff's Developmental Helping Model to teach specific interviewing skills to first year medical students. Once the students had mastered the basic principles, they spent the following eight weeks interviewing patients and applying the newly acquired interpersonal skills. The students who completed the course had significantly more advanced interpersonal skills than a control group. Similar results were shown in other studies on structured communication skills training programs (48, 120, 124).

Diseker and Michielutte (50) found, to the contrary, no difference in medical students' empathy scores after completion of an interpersonal skills program. The same finding was also reported by

Wise and Page (125) in an empathy study of occupational therapy students before and after clinical experience. Self-report empathy scales were used to measure empathy in the studies by Diseker and Michielutte (50) and Wise and Page (125). The studies conducted by Weihs and Chapados (123), Engler et al. (119) and Elizur and Rosenheim (120) used trained observer rating scales as empathy measures. A similar disagreement of results was found in Forsyth's study (52) of nurse-patient relationships. It was found that while only 50 percent of the nurses reported themselves as highly empathic (measured by Hogan scale), 98 percent of the patients perceived their nurses as highly empathic (measured by Barrett-Lennard Relationship Inventory).

Jarski et al. (45) has pointed out that Hogan's scale measures empathy as a trait; and thus, it doesn't apply to the behavioral measurement of physician-patient interaction. Their study showed there was no significant correlation between Hogan's empathy scale and three behavior based empathy instruments. There was a significant correlation between the three behavioral measures of empathy. However, Hornblow and colleagues' study (126), using Hogan's scale as an empathy measure, demonstrated a significant correlation between the medical students' self-report empathy scores and their empathy levels as perceived by their peers. Similar results were also reported by Christiansen (127) in his study of empathy and occupational therapy students.

Based on the varying results shown in the studies using different empathy scales, Gladstein (3) has asserted that it is important to distinguish between the various types of empathy scales, what they are

measuring and in which context. Hogan (12) has argued that innate or trait empathy probably would not be affected by empathic skills or interpersonal training programs while situational empathy would be relatively simple to change and improve. Based on this assumption, he stated that the expression and communication of empathy in a helping relationship is more pertinent than the helper's innate empathic ability.

To determine if medical students' empathy levels change with time and experience, researchers have measured students' empathy levels before and after medical school (48, 125). Poole and Sanson-Fisher (48) conducted a cross-sectional exploration of first and final year medical students and post-graduate psychiatrists with at least four years of experience. As measured by Traux and Carkhuff's Accurate Empathy Scale, the first and final year students' empathy levels did not differ. The experienced psychiatrists scored significantly higher than both groups of medical students; but, their empathy scores were below the minimum facilitative level set by Traux and Carkhuff. In a longitudinal study, Diseker and Michielutte (50) found a significant decline in medical students' empathy scores after finishing medical school as compared to the beginning of medical school. However, Carney and Mitchell (51) found, in a study on patient satisfaction, that third year medical students were rated significantly higher by patients on their interpersonal skills than first year students. The patients indicated they could detect differences in the students' communication skills and attitudes. The patients' perceptions also correlated with faculty observations of the students.

The research literature demonstrates that empathic interpersonal skills are an integral element of helping relationships in medicine (26, 48, 123). Self-report measures of empathy may not characterize how empathy is expressed or perceived in a situational setting. As such, it is crucial to distinguish between the types of empathy measures, how they are used and within which setting (3).

Empathy in Nursing

Empathy has long been acknowledged as playing a vital role in constructive nurse-patient relationships (15, 52, 54, 55, 128). However, there has been some question concerning nurses' actual ability to empathize with their patients and thus provide a beneficial helping environment (55, 128). Stotland and Sherman (15) tested the hypothesis that high empathy nursing students would spend more time helping their patients than low empathy nursing students. The authors asserted that the students who scored higher on the Fantasy-Empathy Scale were more capable of imaginatively placing themselves in their patients' situation and thus were better able to help relieve their patients' discomfort. Initially, the highly empathic students were found to spend significantly less time in their patients' rooms and more time interacting with staff and patients in the hallways. However, toward the end of the eight week observation period, the highly empathic students increased their time in their patients' rooms by 55 percentage points. The authors theorized that the high empathy nursing students initially stayed away from the patients' rooms because it may have been too emotionally arousing and thus

distressful. And, this anxiety caused them to interact with and gain support from others in the hallway. Then, after an initial period of seeking support and guidance, they felt comfortable enough to approach and help their patients. Others have also reported that highly empathic individuals are more easily emotionally aroused (13, 77, 78).

Hills and Knowles (128) observed 47 nurses of varying experience and education levels in a simulated nurse-patient interaction. The nurses' responses to the simulated situations were scored on the Empathy and Respect Scales developed by Carkhuff. The nurses' average empathy scores were below the minimum facilitative level set by Carkhuff. Only 10 percent of the nurses scored above this level. However, nurses that had previously participated in a supervised interpersonal skills program had significantly higher empathy scores than nurses who had not. LaMonica et al. (55) also found low empathy scores (measured by the Carkhuff Scale) in a group of nurses. But, their empathy scores were significantly increased after attending a Staff Development Empathy Program. In contrast to these studies, Forsyth (52) found that the empathy scores (measured by the Hogan scale) of 70 nurses, with varying experiential and educational backgrounds, were in the middle to upper range of possible empathy scores.

In a study of nursing care and the aged, Bagshaw and Adams (56) reported that nurses' levels of empathy, attitudes toward the elderly and ideologic orientation were critical variables in the care and well-being of the elderly in long term facilities. Three hundred and sixty-three nurses and nursing aides in seven nursing homes answered

questionnaires consisting of demographic data, attitudes toward the elderly, treatment orientation - custodial versus therapeutic -, and a self-report empathy scale (LaMonica Empathy Construct Rating Scale). The authors found a significant difference between empathy levels of the registered nurses, practical nurses and nurses' aides. The registered nurses were more empathic, less custodial and had fewer negative attitudes towards the aged than practical nurses and nurses' aides. There was also a significant positive correlation between empathy and a therapeutic viewpoint toward the treatment of elderly people. Thus, the more educated nurses were more empathic and had a more positive helping perspective towards their patients. Significantly higher empathy scores in the more educated nurses were also found in a study by Forsyth (52). Mynatt's study (129), however, found no differences in empathy levels of nursing students with varying education levels.

Evidence indicates that empathy may vary with different experience levels (52, 57). Forsyth's research (52) on empathy in nursing demonstrated that there was a negative correlation between length of professional practice and empathy. In an observational study of nursing home staff, Pennington and Pierce (57) found that staff members with experience levels of one to five years were more empathic than workers with six to ten years of experience. And, younger staff members were more empathic than older staff. The authors suggested that the more experienced staff members may have been encountering either boredom or burnout in their jobs. A significant relationship between lower empathy levels in nursing

students and increased work experience was also reported in Mynatt's study (129).

The nursing research literature presented here depicts how different empathy measures are used in a variety of nursing situations and thus show diverse results. Gagan (54) has argued that the assessment of empathy by empathy scales developed in the psychological context may not truly represent nurses' empathic abilities in the nurse-patient relationship. Based on the lack of agreement on an operational definition of empathy in the field of nursing, Clay (130) developed a nursing empathic skills program. This schedule was tested and found to be valid and reliable in the training and assessment of empathy skills in the nursing context. LaMonica et al. (55) has also developed a nursing specific empathy training program which is based on a previously tested human relations paradigm. With expanded studies, these programs may provide a common base for future empathy research in the nursing profession.

Empathy in Clinical Dietetics

Clinical dietitians spend a major portion of their time involved in patient care and nutritional counseling (59, 60). Nutritional counseling is described by Mason et al. (58) as helping clients with dietetic problems to develop healthy nutritional behaviors by increasing their knowledge, desire to change, attitudes, and problem-solving abilities. And, to be an effective nutritional counselor, dietitians should have a strong background in both nutrition concepts and human behavior (58). It has been noted that

the nutrition counseling process is comparable to that used in psychological counseling (131). Therefore, nutrition counseling is defined as a unique combination of psychological and educational principles applied to the science of nutrition and foods within a medical context (58, 61, 62).

It is generally recognized in the field of dietetics that the nutrition counselor should establish rapport and a sincere trusting relationship with the client before obtaining a diet history (62, 132-134). Young (132) stated that gaining sufficient nutritional information is dependent on the interviewer's ability to listen, empathize and understand the client's needs and attitudes. Open and free communication - a vital aspect of nutrition counseling - is also a product of the counselor-client relationship built on mutual respect and acceptance (133-134).

According to Snetselaar (61), the nutrition counselor's position encompasses diverse roles ranging from nutrition expert to empathizer. An empathic dietetic counselor must develop a warm, genuine and trusting relationship with the client as the ultimate goal is to facilitate the client's dietary compliance. An effective dietary counselor should be highly capable of engaging in a helping relationship with the client and thus help the client adopt nutritional behaviors which contribute to health and wellness. Snetselaar et al. (135) contend that practicing dietitians should be skilled in behavioral counseling and facilitating clients' dietary compliance. Based on this assumption, the authors developed a workshop specifically designed for dietitians to gain these abilities.

The results suggested that the dietitians who completed all phases of the workshop improved their knowledge, attitudes and counseling abilities.

A study by Glanz (136) on dietitian effectiveness and patient compliance showed that dietitians who scored higher on a "people index" used more "influence strategies" on their clients as compared to their lower "people index" counterparts. They also had increased patient interaction, patient satisfaction, and patients with positive health attitudes. The author concluded dietitians could develop more effective interpersonal and communication skills through both educational and experiential means. A program to modify dietitians' attitudes towards patient counseling was constructed by Biltz and Derelian (137). The program consisted of eight two-hour sessions focusing on educational experiences specifically designed to elicit appropriate client behaviors and counseling outcomes. Thirty dietitians participated in the course and ninety dietitians acted as a control group. The dietitians that participated in the program had significantly more positive attitudes concerning client counseling and the educational process used in nutritional counseling than the control group.

To determine if dietitians actually achieve an empathic, warm and trusting relationship with their patients, Danish et al. (138) observed upper level undergraduate nutrition students conducting nutrition counseling interviews. The authors found that the student counselors spent only an average of five and a half minutes developing rapport with their clients. Half of the counselors' responses

consisted of closed questions; and, leading questions comprised 80 percent of the students' communication efforts with the clients. Attempts by the students to identify the clients' emotions and thus empathize with their clients were lacking. Another study showed that closed questions were found to not only be disliked by clients but also did not elicit constructive client behavior (139). Counselor use of affective responses - efforts to identify the clients feelings - built more rapport and trust with the client. Affective responses were considered more worthwhile by the client and helped contribute to productive client behavior.

LaQuatra and Danish (140) researched the effects of a helping skills program on students' counseling abilities. Participants that completed the program used significantly more affective and less self-referent responses than the control group. Thus, future dietitians gained vital empathic communication skills, which are crucial to their effectiveness as nutritional counselors, by participating in a structured educational program. A dietetics course which incorporated a counseling skills program into a diet therapy class was studied by Lowenstein et al. (141). The authors also looked at the dietetic students' personality style and ability to empathize. At the conclusion of the course, the students exhibited higher levels of understanding, empathy and the ability to perceive the emotions of others when compared to the beginning of the course. Lowenstein et al. (141) concluded that teaching a combined diet therapy and applied counseling skills course is more effective than the traditional

separate method of educating dietetic students to be empathic nutrition counselors.

In reviewing the literature, empathy within individuals' personalities appears to develop differently dependent on their unique family and social interactions and experiences. Since dietetics demands a relatively high degree of patient care and counseling, individuals who select and enter this profession may display more empathic behavior than seen in the general population. Their inclination towards a career in a helping profession may have evolved from a familial and/or social background which may have facilitated increased empathic abilities and helping behaviors.

In summary, the literature presented suggests the importance of empathy in dietitians' helping skills and nutritional counseling abilities. However, there is limited research on dietitians' levels of empathy and acquisition of empathic dietetic counseling techniques. The psychology, education, medicine and nursing research studies cited suggest that empathic interpersonal skills may be affected by experiential and/or educational processes. And, highly empathic helping professionals may contribute more beneficially to constructive and positive patient therapy outcomes.

CHAPTER III

METHODS

Research Objective

The major purpose of this research was to measure empathy in clinical dietitians and dietetic interns. These data were used to determine if empathy levels of clinical dietitians are affected by experience and/or education. Empathy is recognized as a valuable skill in the helping professions and, in this case, clinical dietetics and nutritional counseling. The information gained from this study is needed to assess the relevance of incorporating more empathic skills and communication training programs into dietetic and continuing education.

Research Design

Instrument

Data were collected by an instrument consisting of two parts. The first part was the Davis Interpersonal Reactivity Index (IRI) (65) (Appendix A)--a self-report questionnaire concerning one's emotions. It is designed to measure four distinct aspects of the empathic process. The Davis IRI consists of four subscales each containing seven statements for a total of 28 items. The statements are randomly ordered and nine of the questions are reversed scored to reduce response bias. The four subscales are as follows:

- 1) THE FANTASY SCALE (FS) - reflects the tendency of an

individual to imaginatively place oneself into a fictional context (books, movies, daydreams, etc.).

2) THE PERSPECTIVE-TAKING SCALE (PT) - reflects the ability to place oneself in another person's "shoes" in real life situations.

3) THE EMPATHIC CONCERN SCALE (ES) - reflects an individual's tendency to experience feelings of warmth, compassion and concern when observing another individual involved in a negative situation.

4) THE PERSONAL DISTRESS SCALE (PD) - reflects an individual's tendency to experience feelings of anxiety, apprehension and discomfort when observing another person in a negative situation.

The participants responded to the statements by indicating on a five point scale: A, B, C, D, E, how well they felt each statement described them. The statements are not identified by their component subscale; therefore, the respondents are unaware of what the statements are actually measuring. A numerical score is determined by converting the A, B, C, D, E scale to 1, 2, 3, 4, 5, respectively. The responses are then averaged for each subscale and multiplied by seven, which provides a total score for each subscale.

The second part of the instrument was a sixteen item personal and professional characteristics questionnaire (Appendix A). It concerned the respondent's age, sex, number of persons in their household, job position and characteristics, amount of hours worked per week, amount of time spent in direct patient contact, work experience, educational background, job/internship satisfaction and the percent ideal amount of time the clinical dietitian or dietetic intern believes should be spent in direct patient contact.

Instrument Distribution

To survey both professionals in training (dietetic interns) and clinical dietitians with varying levels of experience, the instruments were mailed to 26 randomly selected clinical or general dietetic internships in the continental United States. The 26 internships consisted of 195 dietetic interns and 315 clinical dietitians for a total of 510 eligible participants.

The Dietetic Internship Director of each selected internship was contacted by telephone to explain the research project, determine the level of interest and the number of instruments to be forwarded. Each packet subsequently mailed to the Dietetic Internship Director contained an instructional letter to the Internship Director (Appendix B) and the instruments, each with an attached introductory letter to the clinical dietitians (Appendix B) and dietetic interns (Appendix B). The introductory letters briefly explained the study and the procedures and expressed gratitude for participation. To insure anonymity and confidentiality, plain white envelopes were provided for each respondent. A self-addressed, stamped return envelope was also enclosed in the packet. The sealed envelopes were collectively mailed by the respective Internship Director to the researchers. Some participants elected to mail their instruments directly to the researchers.

The dietetic interns were requested to provide their names and permanent addresses for a possible follow-up longitudinal empathy study. The clinical dietitians, however, participated on an

anonymous basis. The instruments were tracked by code numbers for administrative purposes such as follow-up and determination of institution response rate.

Responses to the Davis IRI were tabulated to determine a numerical score for each subscale. The personal and professional characteristics questions were numerically coded for statistical analysis.

Participants

The participants consisted of two groups: 168 dietetic interns and 221 clinical dietitians. Of the possible 510 eligible subjects, 389 responded (76 percent response rate). Two of the 26 dietetic internships did not participate while 13 (50 percent) had a 100 percent response rate. For the purposes of this study, clinical dietitians were defined as dietitians who spend at least 80 percent of their full- or part-time work in patient care. The dietetic interns had an 86 percent response rate while the clinical dietitians had a 70 percent response rate. Four clinical dietitians were disqualified because their instruments were incomplete, thus our sample consisted of 385 participants (56 percent clinical dietitians and 44 percent dietetic interns).

Pilot Study

A pilot study was conducted to determine if the instrument directions were easily interpreted and if the content was clear. Eighteen local dietitians of varying experience levels and job

positions were selected to participate. Thirteen dietitians responded (72 percent response rate) and their responses were not included in the results of the present study. Minor modifications were made in the directions and format of the personal and professional characteristics questionnaire. The Davis IRI was not adjusted because of its previously researched reliability and validity (65, 79-82).

Instrument Administration

The packets were mailed to the 26 dietetic internships during 12-18 September, 1986. Follow-up information was sent, approximately four weeks after the initial mailings, to each Internship Director who either had not responded or whose response was less than 100 percent. A letter requesting participation (Appendix C) was sent to the Internship Director who had not responded. A follow-up packet was sent to the Internship Director whose response was less than 100 percent. The follow-up packet consisted of a letter to the Dietetic Internship Director (Appendix C) thanking them for their participation, showing the number of instruments sent and received, and a request for the Internship Director to verify the number of dietetic interns and clinical dietitians in their institution. The verification numbers were used to insure correctness of records and to determine an accurate institution response rate. The Dietetic Internship Director was also asked to encourage the nonparticipants to complete either the instrument or a short form (Appendix C) requesting a reason for nonresponse. Additional instruments, short forms and plain white envelopes were also enclosed in the follow-up packet.

Five individuals who elected not to participate returned the nonresponse form. The two reasons for nonresponse were the questionnaire did not apply and the questionnaire was too repetitious.

Data Analysis

The data were statistically analyzed using Pearson's correlation coefficients, one-way analysis of variance, and Student's t-test. The significance level was set at $p < 0.05$.

CHAPTER IV

RESULTS AND DISCUSSION

The 385 participants included 168 dietetic interns (mean age = 24.9 years, range 21-64 years) and 217 clinical dietitians (mean age = 35.4 years, range 22-74 years). As shown in Table 1, there was a highly significant difference in the ages of dietetic interns and clinical dietitians. The clinical dietitians' mean older age was an expected result. The mean experience level of dietitians was 9.6 years. Two of the participants (clinical dietitians) in the study were male.

The mean fantasy scores for clinical dietitians and dietetic interns were 22.53 and 24.65 (Table 1), respectively. Out of a possible range of scores from a low of 7 to a high of 35, these scores are slightly above the median of 21. The mean perspective-taking scores for dietitians and interns were 26.18 and 26.22. The mean empathic concern scores were 28.20 and 29.06, respectively. These are in the upper range of possible scores. The mean personal distress scores were 18.21 and 18.11, which are below the median.

The dietetic interns scored significantly higher on the fantasy ($p < 0.0005$) and empathic concern ($p < 0.05$) scales than the clinical dietitians (Table 1). Thus, the dietetic interns reported themselves as more likely to imaginatively place themselves into fictional situations such as books, movies and daydreams. And, they have a greater tendency to experience feelings of warmth and compassion when observing others in negative situations. This result could reflect,

Table 1. Comparisons of empathy subscale scores and ages of clinical dietitians and dietetic interns*

Variables	Clinical Dietitians ^a	Dietetic Interns ^b
Age	35.43±10.83 ^c	24.89±5.63 ^{###}
Personal Distress	18.21± 8.45	18.11±9.12
Perspective-Taking	26.18± 4.14	26.22±4.11
Empathic Concern	28.20± 4.37	29.06±4.03 [#]
Fantasy	22.53± 5.76	24.65±5.76 ^{##}
*Mean±SD	^a n=217	
[#] p<0.05	^b n=168	
^{##} p<0.0005	^c n=210	
^{###} p<0.0001		

the interns' younger age, and thus an inexperienced and more idealistic viewpoint of their personal and professional environment. The older dietitians have observed and encountered more life experiences and thus they are less apt to be as emotionally involved in either real life or fictional situations as the interns.

In developing the Interpersonal Reactivity Index (IRI), Davis (65) adapted the fantasy items from Stotland's (15) Fantasy-Empathy scale. Our results appear to support Davis' (80) and Stotland and Sherman's (15) hypotheses that high fantasizers are more prone to emotional arousal and sensitivity to others. However, the similar mean personal distress scores of the two groups contradicts Stotland and Sherman's (15) suggestion that high scorers on the Fantasy-Empathy scale are more distressed by emotionally arousing situations than

individuals with lower scores. Davis' study (80) suggested that high scorers on the personal distress scale have a greater tendency to experience more feelings of fearfulness and uncertainty in interpersonal functioning. Individuals with high personal distress scores may not be well suited for the profession of clinical dietetics because of the high interpersonal demands of patient care and nutritional counseling. Thus, the personal distress results in this study may reflect a more stable empathy component - which is less likely to change with time or experience - of individuals who select and enter the dietetics profession.

The significantly higher mean score for empathic concern of the less experienced dietetic interns does not support Rogers' (22) contention that empathy could be gained experientially. However, the present study supports results found by others (50, 52, 57, 129). Diseker and Michielutte's study (50) showed a significant decline in medical students' empathy levels after they had completed medical school as compared to the beginning. Forsyth's study (52) showed that the more experienced nurses were less empathic. Pennington and Pierce (57) found, in their study of nursing home staff, that the nursing staff with 6-10 years experience were less empathic than the staff with 1-5 years experience. In fact, the nursing staff with 6-10 years experience were the least empathic of all the staff members with varying experience levels. They also found that the younger staff were more empathic than the older staff members. Mynatt's study (129) of nursing students showed a significant negative relationship between work experience and empathy levels.

An explanation for the clinical dietitians' lower mean empathic concern score is that increased work experience may influence the helping professional's attitudes and consideration towards his/her clients. Because of regular exposure to and interaction with clients and their physiological and socioemotional problems, helping professionals may become less sensitive to their clients' concerns. In nutritional counseling, the clinical dietitian helps the client to adopt more positive dietary behaviors by increasing their nutritional knowledge and problem-solving abilities in food selection and preparation. However, over time, the dietitian recognizes that facilitating clients' dietary compliance is often a difficult and frustrating task. And, these experiences may affect the dietitian's feelings towards his/her client and the nutritional counseling process. Pennington and Pierce (57) proposed boredom or burnout as an explanation for the lower empathy levels in the nursing staff with 6-10 years experience. The dietitians in the present study had a mean experience level of 9.6 years.

There was a highly significant negative correlation ($r=-0.2623$, $p<0.0001$) between age and the mean fantasy scale score of dietetic interns and clinical dietitians (Table 2). The mean fantasy score of clinical dietitians was significantly and negatively correlated ($r=-0.2314$, $p<0.0005$) with their experience levels (mean = 9.6 years, range 1-40 years). Dietetic interns were not included in this analysis because they were considered inexperienced in the profession. The mean personal distress, empathic concern and perspective-taking scores were not significantly correlated with age or experience.

Table 2. Pearson correlation coefficients between empathy subscale scores and selected variables of clinical dietitians and dietetic interns

Variables	Fantasy	Personal Distress	Empathic Concern	Perspective-Taking
Age ^a	-0.2623 ^{##}	-0.0149	-0.0800	0.0258
Experience ^b	-0.2314 [#]	0.0944	-0.0380	0.0216
Actual Direct Patient Contact ^c	-0.0685	-0.0440	-0.0596	-0.0299
Opinion of Ideal Direct Patient Contact ^d	-0.0071	-0.0480	0.0080	-0.0080

[#]p<0.0005

^an=379

^{##}p<0.0001

^bn=212 (dietitians only)

^cn=335

^dn=368

Actual direct patient contact and opinion of ideal direct patient contact were not significantly correlated with any of the mean scores on the Davis IRI for dietitians and interns.

Table 3 shows the mean scores of dietetic interns and clinical dietitians concerning satisfaction with patient contact and administrative duties in their job or internship, and their opinion of ideal percent direct patient contact. The mean scores for satisfaction with patient contact for dietitians and interns were 2.79 and 2.70, respectively. Out of a possible range of scores from a high of 1 to a low of 6, these scores are above the median of 3.5. The mean scores for satisfaction with administrative duties were 3.42 and

Table 3. Satisfaction scores for patient contact and administrative duties and opinion of ideal direct patient contact for clinical dietitians and dietetic interns*

Variables	Clinical Dietitians	Dietetic Interns
Satisfaction with Patient Contact (Scale: 1[high]-6[low])	2.79± 2.19 ^a	2.70± 2.50 ^b
Satisfaction with Administrative Duties (Scale: 1[high]-6[low])	3.42± 1.12 ^c	3.09± 1.16 ^{d#}
Opinion of Ideal Direct Patient Contact (percent time)	70.08±17.46 ^c	61.42±17.10 ^{e##}

*Mean±SD ^an=211

[#]p<0.05 ^bn=148

^{##}p<0.0001 ^cn=208

^dn=154

^en=160

3.09 for dietitians and interns, respectively, which are slightly above the median. Dietetic interns were significantly more satisfied ($p<0.05$) than the clinical dietitians with the administrative duties of the job/internship. However, there was no significant difference between the two groups in relation to satisfaction with the direct patient contact portion of their work. These results may reflect the fact that clinical dietitians have more administrative responsibilities than the dietetic interns. And, practicing dietitians may have more administrative-type pressures placed on them by their job and management staff. Also, the interns may view the administrative duties as essential learning in the internship.

The mean for opinion of ideal percent time spent in direct patient contact was 70.1 percent for clinical dietitians and 61.4 percent for dietetic interns. This was a highly significant difference ($p < 0.0001$). The author suggests that inexperience and thus, decreased levels of self-confidence and helping skills may play a role in dietetic interns preferring to spend less time in direct contact with the clients. Also, the interns' desire to interact less with clients may reflect the interns' higher mean empathic concern and fantasy score. Since interns have an increased tendency toward emotional arousal and sensitivity to others, a high level of client interaction may be too much of an emotional burden.

Of the 385 clinical dietitians and dietetic interns, 81 (21 percent) have a graduate degree. Two of the participants (clinical dietitians) have a doctorate degree. The majority of the graduate degrees are in food and nutrition or related fields (exercise physiology, public health, etc.). Others are in fields such as business, counseling, journalism and the arts (music, humanities, etc.). Those with a graduate degree scored significantly lower on the fantasy scale ($p < 0.005$), as determined by Student's t-test, than those without a graduate degree (Table 4). This finding may reflect the participants' age more than level of education. The 81 participants with a graduate degree included 75 (92 percent) clinical dietitians and 6 dietetic interns. The six interns were older (mean age = 38 years) than the average intern participant (mean age = 24.9 years).

Seventy two dietitians and interns had taken graduate courses in counseling, psychology and/or educational psychology. As evidenced by

Table 4. Comparison of empathy subscale scores of clinical dietitians and dietetic interns and selected education variables*

Group	Personal Distress	Perspective-Taking	Empathic Concern	Fantasy
With Graduate Degree ^a	17.52±5.15	26.52±4.09	28.30±3.79	21.74±5.38 ^{##}
Without Graduate Degree ^b	18.34±4.86	26.11±4.14	28.65±3.97	23.93±5.63

Have Taken Graduate Courses ^c	17.14±5.15 [#]	27.06±3.93 [#]	27.82±4.03 [#]	23.28±5.60
Have Not Taken Graduate Courses ^d	18.37±4.80	25.95±4.09	28.80±3.92	23.51±5.68

Have Attended Workshops ^e	17.78±4.85	26.42±4.33	28.61±4.32	22.97±5.53
Have Not Attended Workshops ^f	18.43±4.89	26.03±3.91	28.60±3.69	23.89±5.72

*Mean±SD	^a n=81	^d n=298		
[#] p<0.05	^b n=304	^e n=158		
^{##} p<0.005	^c n=72	^f n=217		

⁺The majority of the participants' graduate degrees are in nutrition and foods and related fields. The graduate courses and workshops are specifically in the areas of counseling, psychology or educational psychology.

Student's t-test, those who had completed graduate coursework in these areas scored significantly lower ($p<0.05$) on the personal distress and empathic concern scales and significantly higher ($p<0.05$) on the perspective-taking scale than the individuals who had not completed coursework (Table 4). There was no significant difference between mean fantasy scores for the two groups. Thus, participants who had

completed coursework of this type reported they experienced less feelings of warmth, compassion, anxiety and discomfort when observing others in a negative situation. Perhaps, the individuals who had attended courses in counseling and/or psychology have become more cognizant of their own emotions in interpersonal situations; and thus, they are more capable of controlling them when witnessing another person in a distressing context. The increased mean perspective-taking score of participants who had completed advanced psychology and/or counseling courses indicates they are more likely to cognitively take the role of another person. Davis' study (80) showed that higher perspective-taking scores were associated with better interpersonal functioning. Others have found that individuals who complete interpersonal skills and empathy training courses can significantly improve their interpersonal and empathic communication abilities (48, 119, 120, 123, 124, 140, 141).

These results may also reflect self-selection. The participants who had completed graduate coursework in the areas of counseling, psychology and educational psychology may be more concerned that study in these areas is an important aspect of their professional abilities as a dietitian. Therefore, their mean scores on the Davis IRI may indicate a predisposing interest in versus a result of completing courses in these fields. The findings in the present study suggest that academic courses in psychology, counseling and/or educational psychology may help dietitians to recognize and be more sensitive to their clients' feelings concerning their health and the nutritional . . . counseling process. In turn, an empathic dietitian may be better able

to facilitate his/her client's dietary compliance and thus, a beneficial therapeutic outcome.

There was no significant difference between mean scores on the Davis IRI for the participants who had and had not attended professional workshops in psychology, counseling and/or educational psychology. This finding contradicts the results of other studies that explored the effects of workshops on helping professionals' empathic abilities and interpersonal communication skills (40, 55, 128, 135, 137). A proposed explanation is that professional workshops may vary greatly in design, purpose and duration. In some of the studies that showed improved empathy levels and attitudes of health professionals after workshop attendance, the programs consisted of extended weekly sessions (55, 135, 137). Others were designed specifically to improve empathic communication skills (40, 128). Therefore, the objectives, design and length need to be considered when evaluating the success or failure of a professional empathy and communication skills workshop. Duration could also explain why attendance at academic courses in psychology, counseling and/or educational psychology affected empathy levels of the clinical dietitians and dietetic interns, while attendance at professional workshops did not.

Table 5 compares the mean IRI scores of participants in the present study to Davis' (65) female sample. The clinical dietitians and dietetic interns as a group scored significantly higher on all the IRI scales than Davis' sample of female undergraduate students who were enrolled in an introductory psychology course. These findings

Table 5. Comparison of empathy scores between clinical dietitians and dietetic interns and Davis' [†] female sample*

Subscales	Clinical Dietitians and Dietetic Interns ^a	Davis Female Sample ^b
Personal Distress	18.16±0.25	12.28±0.20 [#]
Perspective-Taking	26.19±0.21	17.96±0.17 [#]
Empathic Concern	28.57±0.20	21.67±0.16 [#]
Fantasy	23.47±0.28	18.57±0.23 [#]

[†]Source: Davis, M. H.: A multidimensional approach to individual differences in empathy. JSAS Catalog Selected Documents Psychol 10:85, 1980.

*Mean±SEM

[#]p<0.005

^an=385

^bn=582

indicate that individuals who have selected and are entering or are practicing in the helping profession of dietetics are significantly more empathic than a group of lower level undergraduate college students. Elizur and Rosenheim (120) found similar results in an empathy study of medical students. The medical students had higher empathy scores than a group of nonmedical undergraduate students. Christiansen (127), however, found no significant difference between the mean empathy scores of female occupational therapy and undergraduate college students.

The findings of the present study suggest that age, experience and educational background influence clinical dietitians' and dietetic

interns' empathy levels differently. It is important to remind the reader that the instrument used in this study - the Davis IRI - is a self-report empathy scale. Therefore, it may not reflect how a helping professional is perceived by his/her client in the health care setting. The Davis IRI indicates how the participant believes he/she would respond to a specific situation as described in the instrument. Jarski and coworkers (45) found that the Hogan self-report empathy scale was not correlated with three selected behavior-based empathy instruments. Forsyth's study (52) of nurse-patient relationships showed while only 50 percent of the nurses reported themselves as highly empathic (Hogan empathy scale), 98 percent of the nurses' patients perceived them to be highly empathic. In contrast, Hornblow (126) and Christiansen (127) found a significant correlation between medical and occupational therapy students' empathy scores (Hogan Scale) and their empathy levels as perceived by their peers.

In contrast to previously studied self-report empathy scales, the Davis IRI (65) was designed to measure empathy as a multidimensional construct. As such, it encompasses and represents various aspects of the empathic process versus other scales which measured empathy as a single entity. Although Davis (65, 79-81) and Davis et al. (82) have shown the IRI to be reliable and valid in various settings, the author has not found evidence in the literature that the Davis IRI has been used in empathy studies on health care students and professionals. Therefore, the results of this research should be considered preliminary and may serve as a baseline for further and more extensive studies.

CHAPTER V

SUMMARY, IMPLICATIONS AND RECOMMENDATIONS

Summary and Conclusions

One hundred and sixty eight dietetic interns (mean age = 24.9 years) and 217 clinical dietitians (mean age = 35.4 years) completed the Davis Interpersonal Reactivity Index (IRI) - a self-report empathy scale - and a personal and professional characteristics questionnaire. The Davis IRI was designed to measure four distinct aspects of the empathic process. The IRI consists of four subscales: fantasy, perspective-taking, empathic concern and personal distress. The personal and professional characteristics questionnaire consisted of sixteen items concerning the participants' age, sex, job position, number of hours worked per week, amount of time spent in direct patient contact, work experience, educational background, job/internship satisfaction and the ideal amount of time the clinical dietitians or dietetic intern believes should be spent in direct patient care. The data collected were analyzed to determine if the participants' empathy levels were influenced by experiential and/or educational parameters.

The dietetic interns scored significantly higher on the empathic concern and fantasy scales than the clinical dietitians. There was a highly significant negative correlation between fantasy and age for clinical dietitians and dietetic interns. For clinical dietitians, there was a highly significant negative correlation between their mean fantasy score and experience. There were no significant effects of

age or experience on the other subscales. These results suggest that empathic concern and fantasy decline with age and experience.

Clinical dietitians were significantly less satisfied than dietetic interns with the administrative duties of their job/internship. However, there was no significant difference between the two groups in relation to satisfaction with the patient contact portion of their work. The mean for opinion of ideal percent time spent in direct patient contact was 70.1 percent for clinical dietitians and 61.4 percent for dietetic interns, which was a highly significant difference. Thus, the clinical dietitians that participated in this study prefer to engage in fewer administrative duties and spend more time in direct contact with their clients.

For clinical dietitians and dietetic interns, those with a graduate degree scored significantly lower on the fantasy scale than those who did not have a graduate degree. Dietitians and interns who had completed graduate courses in psychology, counseling, and/or educational psychology had significantly lower mean scores on the personal distress and empathic concern scales and a significantly higher mean score on the perspective-taking scale than those who had not completed coursework in these areas. However, there was no difference in the mean fantasy scores of these two groups. There was no significant difference between the participants who had and had not attended workshops in psychology, counseling and/or educational psychology. These results indicate that academic coursework and professional continuing education programs may influence clinical dietitians' and dietetic interns' empathy levels differently.

Limitations

The Davis IRI is a self-report empathy scale and thus may not reflect how a clinical dietitian or dietetic intern is perceived by his/her client in the health care context. The findings of the present study may also reflect cohort effects. Individuals that entered the dietetics profession 20-30 years ago were raised in and exposed to a different sociocultural environment than those entering the profession today. Therefore, the different mean empathic concern and fantasy scores of clinical dietitians and dietetic interns may be a result of dissimilar societal and family influences.

Self-selection may have also played a role in the results. The dietitians in this study have elected to practice and remain in the field of clinical dietetics. Thus, the results do not represent dietitians who prefer to practice in other areas of dietetics such as administration, food service, management and research and dietitians who have moved out of the profession. For example, the dietitians that are extremely empathic may have found clinical dietetics too emotionally upsetting and thus entered another dietetic or nondietetic field. On the other hand, dietitians with lower empathy levels may have been less inclined toward helping behavior and also entered other dietetic or nondietetic fields. However, dietetic interns are at the beginning of their professional careers, therefore, they represent a more heterogeneous group than the clinical dietitians. As such, self-selection may have influenced the clinical dietitians and dietetic interns mean scores on the Davis IRI.

Implications

In reviewing the literature, the author has not found the Davis IRI used in empathy studies with health professionals and specifically dietitians. Therefore, the information gained from this study should be considered baseline for future research. The results of the present study indicate that individuals who enter and practice in the profession of dietetics are more empathic than undergraduate college students. Also, clinical dietitians' and dietetic interns' empathy levels may be influenced differently by a variety of factors. These factors include age, experience, cohort effects, self-selection, and completion of graduate coursework and/or professional workshops on counseling, psychology and educational psychology.

The results that showed that dietitians' and interns' empathy levels were not influenced by attendance at professional workshops on counseling, psychology and educational psychology indicate there is a need to study the educational objectives, design, evaluation and duration of these types of workshops. For example, are the workshops informational and/or participative? Are the workshops' specific educational objectives aimed at helping dietitians to become more empathic and effective nutritional counselors? Are the workshops evaluated to assess their success or failure and possible benefits to dietitians' counseling abilities? Do workshops need to consist of extended sessions to be of value in improving dietitians' empathic abilities? These types of issues in professional workshops and continuing education should be of concern to the dietetics profession.

Another finding of the present study suggests that dietetic interns prefer to spend less time than clinical dietitians in direct contact with their clients. To further explore this finding, dietetic education programs and internships should query dietetic students, interns and when feasible their instructor or observer on their concerns about direct patient contact and the nutritional counseling process. If lack of self-confidence and poor helping skills play a role, this issue should be addressed in the dietetic educational process.

It was also found that practicing clinical dietitians are less satisfied than dietetic interns with the administrative duties of their job/internship. This indicates that management staff should look closely at dietitians' job responsibilities to determine reasons for dietitians' dissatisfaction/satisfaction with the duties of their positions. Managements' ability to distinguish between dietitians who prefer patient contact versus administrative duties may help the dietitians be more effective and productive in their jobs by appropriately delineating responsibilities.

The implications of this study can also be addressed by focusing on each subscale of the Davis IRI as follows:

Fantasy. The results showed that the dietetic interns scored significantly higher on the fantasy scale than the clinical dietitians. This indicates that the dietetic interns are more prone to emotionality and sensitivity to others. This factor should be considered in undergraduate dietetic education and internship programs. Dietetic instructors need to acknowledge dietetic students'

and interns' heightened sensitivity to their clients' feelings related to their illnesses and nutritional intervention. Subsequently, appropriate teaching strategies should increase student/intern effectiveness. Therefore, dietetic education should be carefully designed and evaluated to include counseling skills courses which integrate the socioemotional aspects of clients' disease states into the nutritional care process.

Empathic Concern. The dietetic interns scored significantly higher on the empathic concern scale than clinical dietitians. This implies a need for management staff to monitor clinical dietitians effectiveness in patient care and nutritional counseling. Observation of clinical dietitians for possible signs and/or symptoms of boredom, burnout and decreased levels of warmth and compassion for the clients should be conducted on a routine basis. Explorations of dietitians' feelings and concerns about the patient care process should be conducted to determine if boredom, burnout and decreased sensitivity to clients are potential problems among experienced dietitians. If so, properly constructed and evaluated empathy related support programs should be implemented.

Perspective Taking. Dietitians and interns who had completed graduate courses in counseling, psychology and educational psychology scored significantly higher on the perspective-taking scale than those who had not completed coursework in these areas. Since high scorers on the perspective-taking scale are more likely to cognitively take the role of others, which is associated with higher levels of interpersonal functioning, this type of coursework should be

encouraged in both dietetics and continuing education. A dietitian who is less emotionally involved in the clients' health situation can be a more effective nutritional counselor and thus help facilitate a more positive therapeutic outcome.

Personal Distress. The lower mean personal distress scores of dietitians and interns who had completed graduate courses in counseling, psychology and educational psychology than those who had not completed coursework indicates they experience less anxiety and unease when witnessing others in distressing situations. Both dietetic students and practicing dietitians should be encouraged to take courses in these areas because a dietitian's apprehension and uncertainty when counseling clients can interfere with their effectiveness. Thus, dietitians learning how to overcome feelings of distress associated with their clients' health situation may aid dietitians in providing a more beneficial nutritional counseling environment.

Recommendations

Empathy in clinical dietitians and dietetic interns needs further and more extensive study. Longitudinal studies of dietitians' empathy levels, as they progress through their professional careers, may provide additional and more insightful information to that gained in cross-sectional studies. Additionally, exploratory studies of empathy levels of dietitians who work in various specialties of dietetics should be undertaken. Studies should also research the empathy levels of dietitians who have elected to make professional moves into fields

other than dietetics. The dietitians' reasons for selecting and practicing within the specific dietetic and nondietetic fields should be identified.

Comparison studies between dietitians' and interns' empathy levels as measure by the Davis IRI (self-report empathy scale) and as perceived (behavior-based empathy scale) by the client in the health care setting should be conducted. This type of study is warranted to determine if dietitians' and interns' empathy scores on the Davis IRI accurately reflect their empathic abilities in client interaction and the nutritional care/counseling processes.

For dietitians and dietetic interns who pursue graduate coursework or degrees in counseling, psychology and/or educational psychology, research should be undertaken on their empathy levels before and after completion of these courses. The studies should include the participants' motives for taking courses in these areas. Continuing education programs and professional workshops for dietitians and interns in counseling, psychology and educational psychology should be examined. First, they should be researched to determine what the educational objectives are attempting to achieve. The participants' empathy levels should be measured prior to and after attendance at the workshops. Workshops with varying designs, durations and evaluation procedures should be analyzed and compared to ascertain their effectiveness and if they affect dietitians' empathic abilities differently.

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APPENDIX A
INSTRUMENT

INTERPERSONAL REACTIVITY INDEX

The following statements inquire about your thoughts and feelings in a variety of situations. For each item, indicate on the scale: A, B, C, D, E. When you have decided on your answer, check the answer sheet next to the item in the appropriate box.

READ EACH ITEM CAREFULLY BEFORE RESPONDING. ANSWER AS HONESTLY AND AS ACCURATELY AS YOU CAN. THANK YOU!

ITEM	A Does not describe me well	B	C	D	E Describes me very well
1. I daydream and fantasize, with some regularity, about things that might happen to me.					
2. I often have tender, concerned feelings for people less fortunate than me.					
3. I sometimes find it difficult to see things from the "other guy's" point of view.					
4. Sometimes I don't feel very sorry for other people when they are having problems.					
5. I really get involved with the feelings of the characters in a novel.					
6. In emergency situations, I feel apprehensive and ill-at-ease.					
7. I am usually objective when I watch a movie or play and I don't often get completely caught up in it.					
8. I try to look at everybody's side of a disagreement before I make a decision.					
9. When I see someone being taken advantage of, I feel kind of protective towards them.					
10. I sometimes feel helpless when I am in the middle of a very emotional situation.					
11. I sometimes try to understand my friends better by imagining how things look from their perspective.					
12. Becoming extremely involved in a good book or movie is somewhat rare for me.					
13. When I see someone get hurt, I tend to remain calm.					

OVER

	Does not describe me well				Describes me very well
A	B	C	D	E	
14. Other people's misfortunes do not usually disturb me a great deal.					
15. If I'm sure I'm right about something, I don't waste much time listening to other people's arguments.					
16. After seeing a play or movie, I have felt as though I were one of the characters.					
17. Being in a tense emotional situation scares me.					
18. When I see someone being treated unfairly, I sometimes don't feel very much pity for them.					
19. I am usually pretty effective in dealing with emergencies.					
20. I am often quite touched by things that I see happen.					
21. I believe that there are two sides to every question and try to look at them both.					
22. I would describe myself as a pretty soft-hearted person.					
23. When I watch a good movie, I can very easily put myself in the place of a leading character.					
24. I tend to lose control during emergencies.					
25. When I'm upset at someone, I usually try to "put myself in his shoes" for a while.					
26. When I am reading an interesting story or novel, I imagine how I would feel if the events in the story were happening to me.					
27. When I see someone who badly needs help in an emergency, I go to pieces.					
28. Before criticizing somebody, I try to imagine how I would feel if I were in their place.					

PERSONAL DATA

Please answer the following 16 questions as accurately as possible. Please note that some of the questions apply only to dietitians and are indicated as such. Thank you!

1. AGE: _____
 2. SEX: _____ MALE
_____ FEMALE
 3. NUMBER OF PERSONS IN YOUR HOUSEHOLD OTHER THAN YOURSELF: _____
 4. PROFESSIONAL STATUS: _____ INTERN
_____ DIETITIAN
 5. DIETITIANS ONLY - LENGTH OF YEARS & MONTHS IN CLINICAL PRACTICE: (regardless of full or part-time work) _____
 6. DIETITIANS ONLY - MEMBERSHIP/REGISTRATION ROUTE: Combined
_____ APPROVED DIETETIC INTERNSHIP/MS DEGREE
_____ COORDINATED UNDERGRADUATE PROGRAM
_____ PREPLANNED SUPERVISED EXPERIENCE (3 yr)
_____ MASTERS DEGREE & WHICH 2 OF THE FOLLOWING: _____ teaching _____ research
_____ clinical experience
 7. DIETITIANS ONLY - WHAT IS YOUR PRESENT CLINICAL EMPHASIS: (all that apply)
_____ INPATIENT _____ OUTPATIENT
_____ BOTH IN AND OUTPATIENT
_____ GENERALIST
_____ SPECIALIST, SPECIFY _____
 8. PLEASE SPECIFY NUMBER OF HOURS THAT YOU WORK PER WEEK: _____
 9. NUMBER OF HOURS SPENT IN DIRECT PATIENT CONTACT PER WEEK: _____
 10. NUMBER OF YEARS AND MONTHS IN PRESENT POSITION: _____
 11. ARE YOU PRESENTLY ENROLLED IN GRADUATE SCHOOL? _____ YES _____ NO, IF YES, PLEASE SPECIFY: _____ MASTERS LEVEL _____ DOCTORATE LEVEL. CHECK AREA OF EMPHASIS BELOW.
 12. EDUCATION: PLEASE CHECK OR SPECIFY FOR EACH DEGREE RECEIVED
_____ MASTERS _____ DOCTORATE
AREA OF EMPHASIS:
FOOD AND NUTRITION _____
NUTRITIONAL BIOCHEMISTRY _____
INSTITUTIONAL MANAGEMENT _____
EDUCATION _____
FOOD TECHNOLOGY _____
BUSINESS _____
PUBLIC HEALTH _____
PSYCHOLOGY _____
OTHER (SPECIFY) _____
 13. HAVE YOU EVER TAKEN, BEYOND THE UNDERGRADUATE LEVEL, COURSES IN COUNSELING, PSYCHOLOGY, OR EDUCATIONAL PSYCHOLOGY? _____ YES _____ NO IF YES, # OF COURSES _____
 14. HAVE YOU EVER ATTENDED PROFESSIONAL SEMINARS OR WORKSHOPS ON COUNSELING, PSYCHOLOGY, OR EDUCATIONAL PSYCHOLOGY? _____ YES _____ NO IF YES, # OF WORKSHOPS OR SEMINARS ATTENDED _____
 15. HOW SATISFIED ARE YOU WITH THE FOLLOWING ASPECTS OF YOUR JOB/INTERNSHIP?
(Circle the number that best describes your answer)
	Extremely Satisfied	Very Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Very Dissatisfied	Extremely Dissatisfied
CASELOAD/PATIENT CONTACT	1	2	3	4	5	6
ADMINISTRATIVE DUTIES/PAPERWORK	1	2	3	4	5	6
16. IN YOUR OPINION, THE IDEAL CLINICAL DIETITIAN'S JOB WOULD CONSIST OF HOW MUCH % TIME SPENT IN DIRECT PATIENT CONTACT? _____

APPENDIX B
FORM LETTERS

15 September, 1986

Dear Dietetic Internship Director:

I am doing my thesis on empathy and the dietetic intern and clinical dietitian. For consistency in the study, we need clinical dietitians that spend at least 80 percent of their full or part-time work involved in patient care and all dietetic interns (regardless of percent time spent in patient care) to participate in this research project.

Please distribute the enclosed packets to all the dietetic interns and clinical dietitians as mentioned above. We are asking the dietetic interns to provide their names and permanent addresses so that we can contact them in the future for a follow-up longitudinal study. All of the respondents' answers will be kept completely confidential. Once the empathy scales and personal data sheets are completed and sealed in the provided envelopes, please put all the sealed envelopes in the enclosed addressed stamped envelope and place it in the mail by 3 October, 1986.

For your information, we will gladly send to your institution a copy of the findings and conclusions. We greatly appreciate your interest and time in participating in this study. Thank you.

Sincerely,

Elizabeth F. Spraggins, Graduate Student

Elizabeth A. Fox, Dietetic Internship
Director

15 September, 1986

Dear Fellow Dietitian:

I am doing my thesis on empathy and the dietetic intern and clinical dietitian. For consistency in the study, we need clinical dietitians that spend at least 80 percent of their full or part-time work involved in patient care and all dietetic interns (regardless of percent time spent in patient care) to participate in this research project.

We would greatly appreciate your help by giving us 15 minutes of your time to complete the attached empathy scale and personal data sheet. The questions may appear vague and repetitious; however, please answer all the questions. Your participation in this study is on an anonymous basis and your answers will be kept completely confidential. The identification number on the questionnaires is for administrative purposes only; and, your answers to the scale and personal data sheet will no longer be identifiable once the information has been accumulated.

To insure anonymity, place your completed empathy scale and personal data sheet in the provided envelope and seal it. Then, return the sealed envelope to the Dietetic Internship Director.

For your information, we will gladly send to your institution a copy of the findings and conclusions. Once again, we are very grateful for your time and effort in participating in this study. Thank you.

Sincerely,

Elizabeth F. Spraggins, Graduate Student

Elizabeth A. Fox, Dietetic Internship
Director

15 September, 1986

Dear Dietetic Intern:

I am doing my thesis on empathy and the dietetic intern and clinical dietitian. We would greatly appreciate your help by giving us 15 minutes of your time to complete the attached empathy scale and personal data sheet. The questions may appear vague and repetitious; however, please answer all the questions.

We are requesting that you provide your name and permanent address so that we can contact you in the future for a follow-up longitudinal study. Your answers will be kept completely confidential. The identification number on the questionnaires is for administrative purposes only.

NAME: _____

PERMANENT ADDRESS: _____

Once you have completed the empathy scale and personal data sheet, place them in the provided envelope and seal it. Then, return the sealed envelope to the Dietetic Internship Director.

For your information, we will gladly send to your institution a copy of the findings and conclusions. Once again, we are very grateful for your time and effort in participating in this study. Thank you.

Sincerely,

Elizabeth F. Spraggins, Graduate Student

Elizabeth A. Fox, Dietetic Internship
Director

APPENDIX C
FOLLOW-UP FORM LETTERS

15 October, 1986

Dear Dietetic Internship Director:

A few weeks ago, questionnaires were sent to you concerning empathy and clinical dietetics. Your facility was randomly selected from all the internships throughout the United States to participate in this study.

If your facility's interns and clinical dietitians have already completed the questionnaires and have returned them to us, we are very grateful. If not, please request that they complete and return them quickly. The dietetic interns and dietitians cooperation in providing information for this study is important to the profession of dietetics. And each questionnaire is highly relevant to the data analysis.

If by chance, you did not receive the questionnaires or they were misplaced, we'll be happy to send you another packet. If this is the case, please call me immediately collect (806) 742-3060 and we'll get your packet in the mail the same day.

Once again, we are very appreciative of your time and interest by participating in this research project.

Sincerely,

Elizabeth F. Spraggins
Graduate Student

Elizabeth A. Fox, Ph.D., R.D.
Dietetic Internship Director

16 October, 1986

Dear Dietetic Internship Director:

We thank you for your help and cooperation in our empathy study. We are writing to you again because of the importance of this study to the profession of dietetics and because of the importance of each eligible person's opinion and data to the analyses.

In checking the returns we have found that not all questionnaires have been returned.

We sent _____ questionnaires for interns, we received _____.

We sent _____ questionnaires for dietitians, we received _____.

Do these above numbers correspond with the actual number of eligible participants in your facility? If not, please specify the correct number of eligible participants below.

_____ Interns _____ Dietitians (80% of either full or part-time work in patient care)

The missing questionnaires were numbered:

Interns _____ Dietitians _____

Would you please encourage nonparticipants to return a questionnaire and data sheet? If they are not willing to participate, would you then ask that they fill out and return the enclosed short form which requests the reason for nonparticipation. This follow-up is necessary to determine response percentages and to understand the bases for nonparticipation.

If it would be helpful to you for us to correspond directly with the supervising clinical dietitian (regarding dietitian response), please provide her name, phone number and mailing address.

In the event the questionnaires have been misplaced, replacements are enclosed for your convenience. We very much appreciate your assistance in this study. Please return this letter to us.

Sincerely,

Elizabeth F. Spraggins
Graduate Student

Elizabeth A. Fox, Ph.D., R.D.
Dietetic Internship Director

15 October, 1986

Dear Clinical Dietitian/Dietetic Intern:

A few weeks ago, we sent your facility questionnaires concerning empathy and requested your response. To properly summarize the data, we would like to determine your reason for not responding. If you are not planning to complete and return the questionnaire (you still may do so), please provide your reason for not participating:

_____ did not have time

_____ did not think it applied to me

_____ didn't think I qualified for 80% time spent in patient care

_____ other, please specify _____

Best Wishes,

Elizabeth F. Spraggins
Graduate Student

Elizabeth A. Fox, Ph.D., R.D.
Dietetic Internship Director

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Disagree (Permission not granted)

Agree (Permission granted)

Student's signature

Ihabut Fletcher Spraggins

Student's signature

Date

27 April 1987

Date

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