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Investigating Adaptability, Cohesion, and Human Energy Fields in Family Interactions

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Abstract

Context: The study of family interactions has a long tradition within various disciplines and methodologies, but one area ignored is the investigation of the human energy fields (HEF). While the HEF concept has been around for centuries, only recently has it been explored.
Objective: Combining emotional expression, family processes, and HEF perspectives, this study was developed to investigate the relationship between emotional expression and HEF interactions in relation to reported and formally assessed family cohesion and adaptability.
Design: The methodology was designed to analyze self-report and observational data on 56 dyads and triads within two-parent families with a high school adolescent. Assessment instruments included FACES III, the Family Expressiveness Questionnaire (FEQ), the Affective Communications Test, the Emotional Self-Disclosure Scale, the Family Assessment Device, and an observational coding scheme for HEF. The data were analyzed with Pearson Correlations.
Results: The HEF codings were significantly correlated with family adaptability and cohesion in addition to parts of the family emotional expressiveness scales of the FEQ, ACT, ESDS, and FAD.
Conclusion: The inclusion of HEF assessment in research on family dynamics helps identify aspects of family interactions that previously have been ignored but hold promise of adding to our understanding of family dynamics and have important implications in family therapy.

Key words: Human Energy Fields, Adaptability, Cohesion, Family Interactions

Introduction

The issue of dysfunctional family communications has played an important role in the areas of family research and family therapy because of the early work of people who identified the significance of interactive elements and patterns between family members. The study of interactions within families has a long and rich tradition, with important contributions from several different disciplines and methodological approaches (Whitchurch & Hendrixson, 1999). Some of the early work by Watzlawick, Beavin, and Jackson (1967), in particular, identified the

impact of embedded messages and the problems such communications create within families, such as the impact of paradoxical messages on schizophrenia.

One of the methods that had been particularly helpful in advancing our understanding of interactive processes has been observational research. For example, while topics and methods of communication have long been recognized as an important part of the research on marital couples, details of interactions and patterns of communications lately have been recognized through observational work for the critical role they play. Gottman and associates, for example, have begun to identify the importance of interaction and communication patterns, both verbal and emotional, on the happiness and success of couples staying together (Carrere, Buehlman, Gottman, Coan, & Ruckstuhl, 2000; Gottman, 1994). While the early work looked at general communication, it was only when detailed and intricate patterns were identified that researchers began to understand the crucial role such patterns had on many areas of a couple's relationship. Interestingly enough, it was primarily through observational methodology that such patterns were identified because most couples were not sufficiently aware of their own patterns to describe them through self-report.

For example, Gottman (1994) refers to some negative interactions as unregulated hostile-avoidant patterns. Behavioral observations of facial expressions note discrepancies between verbal communication and facial expression. In this case, the wife may be saying that she understands the husband is trying to invest in this conversation and that she ***KNOWS*** that he is trying. However, her face denotes unpleasantness, blame and accusation. This kind of inconsistency is based on blame and judgment, often including "you always" and "you never" statements. "You always sit here and don't say anything!" "You never help with the laundry, the dishes, putting the kids to bed, etc." "You always watch TV when I need your help." Such justifications on the part of the wife and the consequent reactive behaviors on the part of the husband (either withdrawing or becoming silent) play out interactive patterns that tend to be disruptive to a satisfactory relationship and are challenging for couples to see and change.

In the area of parent-adolescent interactions, again the styles of interaction and communication were identified through observational research as important elements of good relationships, especially when adolescents felt sufficiently comfortable to talk to parents about sensitive topics (Fox, 1986). Looking at families where youth were involved in the juvenile justice system compared to those who were not, Alexander and associates identified how positive feedback cycles of family communication patterns were beneficial in families while defensive patterns tended to be destructive and associated with problematic outcomes, such as juvenile delinquency (Alexander, Newell, Robbins & Turner, 1995; Alexander & Parsons, 1973; Sexton & Alexander, 2000).

Affective qualities as are important in understanding problem behaviors in a small but significant group of families. For example, as indicated above, there is a relationship between negative feedback or cycles and juvenile delinquency (Sexton & Alexander, 2000). There also is a long history of research relating to the intensity and paradoxical expression of emotions to schizophrenic behavior (Goldstein, 1981), especially with regard to predicting relapse rates (Hahlweg et al., 1989). In addition, avoidance of conflict and expression of emotions were common characteristics found in families with psychosomatic problems, especially with enmeshed and disengaged families, as well as families who had difficulty adapting to new situations or difficult circumstances (Minuchin, Rosman, & Baker, 1978). On the positive side, more open disclosure between family members occurs with greater frequency when there is perceived parental affection (Snoek & Rothblum, 1979).

Family adaptability and cohesion are factors that have been found important in family interaction research, especially with problematic outcomes for adolescents (Minuchin et al, 1978). Researchers have used such family measures to predict membership for adolescents at-risk for dropping out of school (Lagana, 2004); better psychological adjustment (Morimoto & Sharma, 2004); better school engagement (Annunziata, Hogue, Faw, & Liddle, 2006); and fewer problems reported by the mother in a family (Dreman, 2003). Other research found that family expressiveness and conflict avoidance were significantly associated with cohesion and adaptability, suggesting that these are important elements in the model of family functioning (Schrodt, 2005). In a review of the research on youth and families, Furstenberg (2000) suggested that a more integrated and holistic approach be taken by researchers to understand how families achieve success at different ages of family members as well as after shorter and longer durations of the family system. He also strongly urged the inclusion of both individual variables as well as measures of the family context.

More recently, scholars also have called for expanding conceptualizations of transformative processes in family research to include a broader view of and richer perspective of adult and family interactions to create a more dynamic model with a broader perspective (Amoto, 2007; Fincham, Stanley, & Beach, 2007; Hill, 2007; Howe, 2007; Karney, 2007).

One area of investigation that would broaden the family interactions perspective would be the inclusion of the investigation of human energy fields, commonly labeled HEFs (Leigh, 2004). The concept of energy fields in conventional science was introduced conceptually in the West by Michael Faraday in the 1840s (Sheldrake, 2003), although energy concepts and practices such as the meridian systems have existed for over 5,000 years in the East and for several centuries in the West (Brennan, 1987). Increasingly, a variety of disciplines have been working with concepts of energy, including biology (Burr, 1972; Pearce, 2002), physics (Edelman, 2000; Goswami, 1993; Walker, 2000), physiology (Wallace, 1993) psychology (Gallo, 1999; Schwartz & Russek, 1999), child development (Leigh, Metzker, & Hilton, 1999; Metzker & Leigh, 2004), and different approaches of energetic healing interventions (Brennan, 1987; Benor, 2002; Gresham & Nichols, 2002). Increasingly, focus on the HEF has been included in recent scientific investigations in all of these disciplines (Leigh & Cendese, 2007).

For most scholars in this area, HEFs are composed of what are described as subtle energies, which often can be felt and seen when one is naturally sensitive or learns to be sensitive to them. In this case, biological energy (bioenergy) is not only electromagnetic (Brown, 1999), but also is believed to be the organizing force that holds the chemical and biological processes in place within living organisms rather than the chemical holding the energetics in place (Burr, 1972). This subtle energy, which is perceived by these sensitive people to have many different frequencies or levels of sublteness, is composed of three primary and interconnected elements: the aura, which is the bioenergy surrounding and interpenetrating the body, the meridians or energy lines inside the body, and the chakras or energy transformers of the body (Brennan, 1987; Karagulla & Kunz, 1989).

While the HEF has been overlooked and ignored for a long time within western science, more recently such factors have begun to be explored and expanded by pioneering medical researchers (Becker & Selden, 1985; Orloff, 2000; Shealy & Myss, 1993). The US National Institutes of Health have been funding research in this area for a decade. A number of journals now include clinical reports and studies of the HEF, such as the Journal of Alternative and Complimentary Medicine, Alternative Therapies in Health and Medicine, Explore and the IJHC. There are also numerous professional organizations for people who are bioenergy therapy

practitioners and researchers, such as the International Society for the Study of Subtle Energies and Energy Medicine (ISSSEEM), the Association for Comprehensive Energy Psychology (ACEP), and a group of such organizations has come together as The Council for Healing.

Researchers of the HEF are talking about a basic element of which every living thing is composed. Rather than the physical aspect of the organism creating and holding these energies in place, Burr (1972), from his extensive biological work at Yale University on plants and humans, was among the first to argue that it is the energy that holds the biological mechanisms in place, as it organizes and regulates them. Bioenergy is fundamental to our being, and in fact also contributes to the organization, structures and functions of all aspects of the world around, including ourselves (Burr, 1972; Gaydos, 2004; McTaggart, 2002). It has also been proposed that energy, information, and consciousness all are synonymous (Brown, 1999; Collinge, 1998; Edelman, 2000; Gotswami, 1993, 2001; Radin, 1997; Sheldrake, 1995; Walker, 2000). Thus, energy appears not only to hold information, but rather it is information, in contrast to being some inanimate element that simply exists. Schwartz and Russek (1999) argue that energy also contains memory, even extending the mind of the individual into a collective consciousness through 'morphic fields' (Sheldrake, 2003, p. 263). Through these energy mechanisms, information is shared from many levels of subtle energy in and around the individual and may give rise to therapeutic techniques helpful to the person (Brennan, 1987; Gresham & Nichols, 2002).

Although there is increasing investigation of energy fields, there has been little systematic research that has focused on adolescents or family interactions (Leigh, 2004). White (1993) outlines some developmental issues in children corresponding to the seven chakras, but she provides no empirical support for her conclusions. Kunz (1991) also discusses aspects of development in relation to energy fields, but again there is no empirical work to support the observations. In contrast, Wilbur (2000) describes different aspects of the self, along with aspects of consciousness, yet suggests without any supportive data that the infant is identified almost solely with its body. There is other research by Metzker and Leigh (2000) suggesting that there is a great deal going on in the human energy field of infants and young children, including the use of the HEF to interact with adults and objects in their environment. There is some research to suggest that the energy fields of adolescents are different than those of typical adults (Leigh & Korotkov, 2001; Leigh et al., 2004). However, the focus of this research was on individual fields rather than a study of communication between individuals.

There is no previous research that focuses on the interaction of HEFs within a family (Leigh, 2004). Yet, given what we know about families and HEFs, there is a strong possibility that such interactions play an important role within families and provide some useful information beyond the more conventional ways of assessing family communication through verbal and nonverbal behaviors.

Objectives

This study was developed to investigate interaction at different levels between adolescents and their parents, combining family systems theory, observed family interactions, and HEF perspectives,. Based on the research summarized above, this investigation included a triangulation of different elements (affective expression, human energy fields, and family functioning) using the methods of self-report and observational study. In this research, connections and interactions that were included as subjects of study extended beyond the traditional focus on behavioral, social and physical phenomena, to include observations on the

sharing of subtle energy information and interactions, even though family members were not consciously aware of such connections and exchanges.

The present investigation also attempted to extend the previous family interaction research. Communication and affective interactions were observed in both dyadic and triadic settings. Self-reports from each family member were included, connecting self-report and observational data. Finally, different observable interactions were correlated with subjective experiences of both parents and adolescents in relation to affective expression, subjective expressiveness, self-reported family functioning, and the interactions within the energy fields of the three family members.

Methods

Procedures and Participants

While conducting research in a natural setting has many advantages, it was necessary to conduct this study in a laboratory setting. The procedures were fairly complicated, and consistency was important across the observations of families for validity purposes (Lindahl, 2001). We were cognizant of the possibility that some people might act differently from their normal patterns of behavior in such a setting, while others may be fairly comfortable or less impacted by the physical context. Such a setting, however, offered the advantage of allowing the research to be conducted under controlled conditions and in a consistent manner, an advantage that took precedence over other setting considerations. We found that the conversations held by many of these families became quite intense and appeared natural, supporting the decision to use the laboratory setting.

The current study was designed to look at interactional differences in two-parent families with an adolescent (age 14-18). The procedure was set up to observe a parent-adolescent dyad as well as a triad under two conditions. The first condition was the discussion of fun times the family had had together in the past. The adolescent and one parent (randomly selected) began the discussion while the second parent was asked to complete an additional questionnaire in a different room. After 8-10 minutes of discussion, the parent who completed the questionnaire was reintroduced into the room to join the discussion, which continued for another 8-10 minutes. Then the other parent was asked to leave the room to complete the same questionnaire while the second adolescent-parent dyad began a discussion of difficult or challenging times the family had experienced in the past. After completing the questionnaire, the parent would reenter the room to participate in the discussion of challenging times as part of a triad. In each case, the family was asked to make a short list and then pick one or more topics to discuss for the 16-20 minutes total time under each condition. Although the dyads were different under the two conditions, this procedure allowed for coding of dyads and triads under each of the two conditions. Thus, all four cells (fun vs. challenging; dyad vs. triad) were coded for the HEF with all 56 families. While mothers or fathers began the fun or challenging time discussions, which one began each family discussion was randomly determined by the flip of a coin with each family.

The families were identified from a list of high school students living in the local community who were selected using a table of random numbers. Potential participants were telephoned, told about the study, and asked if they were interested in participating. Families were told about the procedures and given a small amount of money ($30 per family) to cover any expenses they might incur. This allowed for a more random sample than usually is the case in such studies.

The participation rate of those called was 34.8 %, which is relatively high, given the time involvement and the need to come to the university lab in order to participate in the project.

There were 52 two-parent families who participated in the study. This sample of families included 42 Caucasian (79%), two African American (4%), five Hispanic (11%), one Asian-American family (2%), and two families of mixed heritage (5%). The families were about half middle class and half working class. Eighty three percent were in their first marriage, 14% were remarried, and 3% were separated (attending with their spouses). The mean age of the mother was 42 with 94% of them employed, over half having attended some college. The mean age of fathers was 43, with 96% employed and having attended some college on average. The mean age of the adolescents was 15 years and in the 10^{th} grade. Just over half of the adolescents were females (56%). The sample was not analyzed separately for male and female adolescents because of the small number of families in the study. In any case, gender of adolescents has not generally been found to be a significant factor in studies of family adaptability or cohesion.

Questionnaires

Each family member completed a questionnaire with basic demographic data, a question about how close they felt to the participating adolescent or parents, and four standardized instruments. One instrument was used for assessment of the dependent variables (adaptability and cohesion) and the other four instruments for the independent variables (detailed below).

1. The dependent measure for family cohesion and adaptability was based on the FACES III measure, which has been extensively used for assessment of these two prominent aspects of family functioning (Olson et al., 1982). FACES III contains 20 items, 10 to measure cohesion and 10 to measure adaptability. It uses a five point scale of “almost never,” “once in a while,” “sometimes,” “frequently,” and “almost always” for each of the items. This instrument includes such items as “Family members ask each other for help,” (Cohesion) and “In solving problems, the children’s suggestions are followed” (Adaptability). Both scales have achieved solid validity in research. The Cronbach Alphas (a common statistic for analyzing reliability of scales and subscales) for mothers in this sample were ,79 and .76; for fathers the Alphas were .82 and .73 respectively.

2. The Family Expressiveness Questionnaire (FEQ) is designed to measure a family’s overall emotional expressive environment (Halberstadt, 1986). It consists of 40 written scenarios using a nine-point scale, from 'not at all frequently' to 'very frequently.' The measure contains ten items in each of four subscales that represent the affect dimensions of positive (P) and nonpositive or negative (N), crossed by the power dimensions of dominant (D) and nondominant or submissive (S). These two aspects (positive vs. nonpositive and dominant vs. submissive) were used, as they represent “two of the dimensions most discussed by nonverbal researchers” (Halberstadt, 1986, p. 828). The items included such scenarios as “Showing forgiveness to someone who broke a favorite possession,” and “Showing contempt for another’s actions.” Halberstadt (1986) provides good validation for this questionnaire. The Cronbach Alphas in this sample for adolescents were .80, .82, .78, and .78 respectively. For mothers, the Alphas were .79, .79, .84, and .73. The Alphas for fathers were .87, .88, .86, and .72 respectively.

3. The Affective Communication Test (ACT) is a self-report measure of individual differences in affective expressiveness (Friedman, Prince, Riggio, & DiMatteo, 1980). This instrument consists of 13 items with a nine-point scale indicating the extent to which each statement is true or false as it applies to the respondent ('not at all true' to 'very true'). The items in this measure included statements such as, “When I hear good dance music, I can hardly keep still,” and “I can easily

express emotion over the telephone." The authors provide validity support for the measure. The Cronbach Alphas for this sample were .74 for adolescents, .71 for mothers, and .74 for fathers.

4. The Emotional Self-Disclosure Scale (ESDS) was designed "to assess how willing people are to discuss specific emotions with different disclosure recipients" (Snell, Miller, & Belk, 1988, p. 59). This measure uses a five-point Likert scale from 'not at all willing' to 'totally willing.' The measure consists of 40 items, which cover eight distinct emotions, using five items for each scale. These emotions include depression, happiness, jealousy, anxiety, anger, calmness, apathy and fear. The authors provide evidence for validity with this measure. For adolescents in this sample, the subscale Cronbach Alphas were .85, .86, .80, .84, .86, .86, .86, and .92 respectively. The Alpha scores for mothers were .83, .83, .79, .77, .75, .86, .86, and .88 for the eight subscales. For fathers, the Alpha scores were .84, .87, .76, .78, .87, .87, .90, and .95 respectively.

5. The Family Assessment Device (FAD) is a measure developed to describe structural and organizational properties and patterns of transactions within families (Epstein, Baldwin, & Bishop, 1983). This is a 48-item instrument that uses a four-point scale of 'strongly agree,' 'agree,' 'disagree,' and 'strongly disagree.' The 48 items are used to measure seven subscales: problem solving, communication, roles, affective responsiveness, affective involvement, behavioral control, and general functioning. Items used in this scale include such questions as "Planning family activities is difficult because we misunderstand each other," and "When someone is upset, other family members know why." There is evidence for validity with this measure from the original research. The Cronbach Alphas with this sample for adolescents were .87, .77, .69, .71, .76, .73, and .71 for the seven subscales. The Alphas for mothers were .79, .76, .72, .72, .84, .78, and .76 respectively. For fathers, the Alpha scores were .86, .71, .84, .76, .74, .70, and .76 respectively.

While dyads were engaged in discussions, the other parent was asked to complete another questionnaire that included three additional short scales. These three scales included the Parent-Adolescent Communication Scale (Barnes & Olson, 1982), the Family Adaptation and Cohesion Evaluation Scale, (FACES III) measure (Olson, Portner, & Bell, 1982) of family cohesion and adaptability, and a series of 12 questions that asked how much each parent talks with the participating adolescent about different topics.

Observational Coding

In addition to the questionnaires, an observational coding was conducted. All of the coding was completed from videotaped sessions using trained coders. The coding form focused on interactions in HEF between the participants in dyads and triads during the positive and challenging discussions. This form was developed from the work by Leigh et al. (1999) on young children and the work by Karagulla and Kunz (1989) with adults. From the work by Metzker & Leigh (2004), it was clear that coding of energy fields could be completed from either live observation or videotape, as the HEF is visible under both conditions of viewing and there are no apparent difference in the observational outcomes between the two methods in our experience. In this study, the observations were made from videotapes, since the family interactions were completed as part of an earlier study. This also allowed us to review the videos if there were any questions about the interactions, thereby precluding loss of any HEF data. Three-minute segments (minutes four through six of the interactions) were used to code the interactions between all triads and dyads under both positive and challenging conditions. This part of the video was chosen in order to code the family once they were well into the discussions in order to get as natural a segment of the family interaction as possible within a laboratory setting. Coding was done without any sound so that the verbal interactions did not influence the HEF coding.

With the observational coding system, at least an 80% average agreement by the raters was achieved (81.3%) with training of coders, which is an acceptable minimum for observational research (Bakeman & Gottman, 1997). The Kappa score for agreement was .79 ($p<.001$). During the training, problems in consistency were identified and reviewed in order to achieve the accepted minimum agreement. For the HEF coding, community professionals who already were experienced in seeing energy fields were found and trained for the specific coding required in this study, in order to have them understand this exact scheme and make sure they had a common understanding and could make consistent assessments. Although people who already were able to see energy were used as coders in this study, others argue that this skill can be taught easily (Andrews, 1996; Smith, 1997).

The initial part of the coding focused on the energy field of the adolescent and first parent. This section contained seven factors for each person. These included the transparency of the light (less, moderately, or highly transparent); the observable light density of the field (high density that is thick and compact, moderate density, and low density that is thin or filmy); the width of the field most immediately around the body (up to 6", 6-12", and over 12"); the amount of energy flow (inactive, moderately active, active, or vacillating/combination); the velocity of the energy field (erratic, slow movement, moderate movement, or fast movement); any specific illuminations in the field or the body (at particular chakras, energy centers, in the front of the body, and in analogous positions in the back of the body); and any dark places in the field or body (at particular chakras, in the front of the body, and in the back of the body). The second part of the coding for the first period began to identify interactions with the parent, any energy connections they observed, and a place to describe how the energy interactions looked.

The second observation period began by analyzing the same seven individual characteristics as above for the second parent who had entered the room after completing the questionnaires. Then the coders examined any energy connections between the adolescent and second parent. In addition, coders describe changes in energy connections between the adolescent and the first parent that may have occurred (compared to the interval when the second parent had left the room, followed by the energy connections between the two parents.

During the third period, the first parent went out of the room and the dyad of the second parent and the adolescent had switched topics to challenging situations the family has experienced. Here, the coders again described any changes in energy connections between the adolescent and second parent.

In the final period, coders described any differences in energy connections between the adolescent and second parent after the first parent once again returned to the room. In addition, any changes in connections were described between the adolescent and first parent or the two parents under this final condition.

In addition, coders are asked to code six aspects about the three fields overall. Minuchin (1974) argues that families are most functional when they are balanced in terms of their connection, rather than overly close with little separation between them (enmeshed) or when they have little connection between them (disengaged). His work with family systems suggests that fewer problems or symptoms occur with adolescents, such as anorexia, within more balanced family relationships. Minuchin also found family functioning improved when the strongest connection (coalition) was between the parents rather than between a parent and adolescent. Using Minuchin's view of family systems, coders were asked to rate the overall quality of connections in terms of the energy being static or dynamic; the overall strength of the connections (possible

closeness); where the strongest connection lies (possible coalitions); what the strongest connection looks like; and whether the fields overall could be described as enmeshed, balanced, or disengaged (priority of coalition).

After the coding was completed, an average for the three participants was calculated for the amount of light, the amount of density, the amount of energy flow, the amount of velocity, the average of field strength, the average of quality, and whether the fields tended to be balanced or not balanced (disengaged or enmeshed).

Data Analysis

The two subscales of adaptability and cohesion from the FACES III measure were combined into total scores after reverse scoring of the appropriate questions so that all were in the positive direction. Given the approach used by Minuchin (1974) of balanced families being the strongest with both cohesion and adaptability, these scores were modified so that the middle score was at one end of the linear scale and the two extremes at the other end. This was accomplished by rescoring these variables in such a way that the mean was used as the high score with both extreme low and high scores equaling each other at the low end. This allowed us to use linear statistics to look at the relationships between the independent and dependent variables. In addition, the intent here was to look at an approximation of "family" cohesion and "family" adaptability. Thus, the score for the mother and the score for the father were added together and divided by two in order to get an estimate "family" score for adaptability and cohesion, one of the ways to estimate "family" perspective (Nelson & Allred, 2005; Sayers & McGrath, 2004).

Individual items within the standardized self-report instruments of the independent variables were combined for a total score (ACT) and for each of the subscales (FEQ, ESDS, FAD) within each measure along with a check of each scale and subscale for reliability. Pearson correlations then were run for each scale or subscale with the two dependent variables of adaptability and cohesion. Given so many variables and small number of families (n=56), further analysis was not attempted because of the complicating factor with multicolinearity.

Results

Quantitative Analysis

The results of the Pearson correlations for each of the dependent variables are shown in Table 1 for both adaptability and cohesion. As can be seen, there were elements from each person's perspective that were related significantly to family adaptability. For mothers, two FAD scales had significant correlations: problem solving and general functioning. For fathers, significant correlations were found for self-reported positive dominance and submissive from the FEQ, the total ACT score, the happiness and jealousy subscales from the ESDS, and the problem solving, affective responsiveness, and behavior control subscales from the FAD. Fathers also had the greatest variety of influence in terms of the number of different subscales that were related to reported adaptability as well as the strength of the correlations.

With adolescents, the perceived happiness subscales on the ESDS for mothers and for fathers were related to adaptability. Strength of the HEFs, the average density, and the average velocity of energy from the observational coding system were significantly correlated with family adaptability. One of the interesting aspects of the energy field measures has to do with their strength of the correlations as well, similar to the father's responses and yet observational measures in contrast to self-report measures, similar to the dependent variable.

Table 1: Pearson Correlations Between Independent and the Dependent Variables of Family Adaptability and Cohesion

Variable:	Adaptability	Cohesion
Mother: Positive Dominance – FEQ	.18	.33*
Mother: Positive Submissive – FEQ	.08	.24
Mother: Negative Dominance – FEQ	-.03	-.35*
Mother: Negative Submissive – FEQ	-.01	-.09
Mother: ACT	.15	.05
Mother: Depression – ESDS	-.15	-.04
Mother: Happiness – ESDS	.20	.12
Mother: Jealousy – ESDS	-.13	-.14
Mother: Anxiety – ESDS	-.16	-.09
Mother: Anger – ESDS	-.24	-.10
Mother: Calm– ESDS	-.13	-.09
Mother: Apathy – ESDS	-.16	-.10
Mother: Fear – ESDS	-.16	-.07
Mother: Problem Solving – FAD	.32*	.26
Mother: Communication – FAD	.01	.06
Mother: Roles – FAD	.02	.07
Mother: Affective Response – FAD	.17	.42**
Mother: Affective Involvement – FAD	.22	.46**
Mother: Behavior Control – FAD	.04	.24
Mother: General Functioning – FAD	.31*	.19
Father: Positive Dominance – FEQ	.46**	.28*
Father: Positive Submissive – FEQ	.42**	.31*
Father: Negative Dominance – FEQ	-.08	-.18
Father: Negative Submissive – FEQ	-.15	-.22
Father: ACT	.41**	.07
Father: Depression – ESDS	-.10	-.04
Father: Happiness – ESDS	.40**	.10
Father: Jealousy – ESDS	-.30*	-.14
Mother: Anxiety – ESDS	-.13	-.02
Father: Anger – ESDS	-.04	-.09
Father: Calm– ESDS	.19	.03
Father: Apathy – ESDS	-.07	-.06
Father: Fear – ESDS	-.07	-.05
Father: Problem Solving – FAD	.35*	.52**
Father: Communication – FAD	.20	.42**
Father: Roles – FAD	.15	.24
Father: Affective Response – FAD	.39**	.48**
Father: Affective Involvement – FAD	.26	.46**
Father: Behavior Control – FAD	.28*	.10
Father: General Functioning – FAD	.09	.18

Table 1 (Continued)

Adolescent: Positive Dominance – FEQ	**.06**	**.01**
Adolescent: Positive Submissive – FEQ	**-.12**	**-.05**
Adolescent: Negative Dominance – FEQ	**-.02**	**-.29***
Adolescent: Negative Submissive – FEQ	**-.17**	**-.20**
Adolescent: ACT	**.08**	**.13**
Adolescent: Depression of Mother – ESDS	**-.08**	**-.06**
Adolescent: Happiness of Mother – ESDS	**.32***	**.01**
Adolescent: Jealousy of Mother – ESDS	**-.05**	**-.06**
Adolescent: Anxiety of Mother – ESDS	**-.02**	**-.02**
Adolescent: Anger of Mother – ESDS	**-.10**	**-.10**
Adolescent: Calm of Mother – ESDS	**.14**	**.06**
Adolescent: Apathy of Mother – ESDS	**-.01**	**-.15**
Adolescent: Fear of Mother – ESDS	**-.07**	**-.01**
Adolescent: Depression of Father – ESDS	**-.05**	**-.07**
Adolescent: Happiness of Father – ESDS	**.33***	**.04**
Adolescent: Jealousy of Father – ESDS	**-.18**	**-.20**
Adolescent: Anxiety of Father – ESDS	**-.10**	**-.04**
Adolescent: Anger of Father – ESDS	**-.02**	**-.07**
Adolescent: Calm of Father – ESDS	**.10**	**.23**
Adolescent: Apathy of Father – ESDS	**-.08**	**-.24**
Adolescent: Fear of Father – ESDS	**-.17**	**-.05**
Adolescent: Problem Solving – FAD	**.04**	**.24**
Adolescent: Communication – FAD	**.01**	**.01**
Adolescent: Roles – FAD	**.04**	**.04**
Adolescent: Affective Response – FAD	**.21**	**.32***
Adolescent: Affective Involvement – FAD	**.24**	**.26**
Adolescent: Behavior Control – FAD	**.12**	**.25**
Adolescent: General Functioning – FAD	**.07**	**.05**
Strength of HEFs	**.36****	**.18**
Quality of HEFs	**.09**	**.32***
Coalitions in the HEFs	**.10**	**.28***
Balance of Fields	**.18**	**.03**
Average Amount of Light	**.24**	**.36****
Average Density	**.43****	**.01**
Average Velocity of Energy	**.38****	**.25**
Average Flow of Energy	**.13**	**.19**

*p<.05 **p<.01

There were fifteen variables that had significant simple correlations with parental reporting of family cohesion. Again, as can be seen on Table 1, correlations with cohesion were demonstrated for the factors of mothers' reports of positive dominance and negative dominance from the FEQ, as well as affective responsiveness and involvement from the FAD; father's reports of positive dominance and positive submissive from the FEQ, problem solving,

communication, affective response and involvement from the FAD; and adolescent negative dominance and affective response from the FAD, along with identified energetic quality, coalitions, average amount of light. In this case, the strongest correlations occur with mother and father self-report scales and one of the observational measures of the energy fields.

Qualitative Analysis

The results of the quantitative analysis provide some useful information about factors that are related to adaptability and cohesion within a family. There are other aspects about the family, however, which also appear to be important and useful information that are not seen in the quantitative results. This is especially true regarding dynamics of family interactions assessed in the energy fields.

As a part of the observational study of the energy fields of parents and adolescents during their discussion of positive and challenging situations, observers were asked to identify what they saw in terms of changes when the second parent entered the discussion, moving from a dyadic interaction to one of triads. In many cases, there was a reaction in the energy field that is not typically observed physically. For example, when the father entered into discussions, sometimes the mother's field would change, and in other cases the change took place with the adolescent's field. This was particularly true when the HEF also indicated that an energetic coalition was present between the mother and adolescent.

In one case, the mother's field "became more guarded," with the field changing from a more open, interactive field to one that was more disengaged and closed down, moving away from the adolescent and the father. In another case, the fields between a father and son are active and interacting, but both fields pull back and close down more when the mother enters the room. In this case, the energetic coalition seemed to occur with the father and son. There are several other examples of such responses, especially when the entering parent had pretty "strong" energy.

Another interesting pattern that occurred in several cases was the energetic "reaching out" from one family member to another. In this case, an adolescent would become more energized by the connection, as if she/he were energetically connecting to one parent through the other parent. While such a coalition has been identified by others either from self-report, discussion, or observation, the energetic connections provide a different "picture" of the interactions. For example, one adolescent seemed to be calmed energetically by such a connection, although it was not as observable physically. In another case, the 4^{th} chakra (heart chakra) dilated when a parent entered the room. Observers also reported energy shifts, with the fields changing to "spiky" or a dramatic decrease in energy when topics changed to more challenging situations. In other cases, energy connections seemed to be sent from an adolescent to a parent during challenging topic discussions, again as if they are trying to make some type of connection during difficult times, although such an attempt was not visible in ordinary physical interactions.

When energetic connections occurred, they most often were described coming from the area of the 4^{th} (or heart) chakra, an average of 51% of the time with fathers and 63% of the time with mothers. This area of the field typically is associated with caring connections and interactive relationships. The second most frequent area was around the 3^{rd} chakra (29% with one parent and 12% with the other), which typically is identified with issues of power and self-identity. Thus, most of the time the connections are coming from one of two areas in the field. Such observations help us see other aspects of family interactions that typically are not included in our understanding of family patterns.

One other area that seems useful to include has to do with the connections or lack of connections between the parents in two-parent families. In some cases, there was little to no connection, or even a withdrawal when the other parent entered a room as described above. At other times, however, there were strong connections that seemed very harmonious between the parents. For example, an observer described a "strong, rose pink chord at the 4th chakra" that occurred between the parents when the second parent entered the room. In another case, the observer described a "melding together of the auric fields, again with a rose cord at the 4th chakra, appearing very 'harmonious' between the two adults. In another instance, the observer described a figure-8 shaped energy connecting the heads and shoulders of a couple that again was described as pink and turquoise. One observer described a blue ring connecting the 4th chakras of the two parents. In these cases, the parents seemed to have the strongest connection in the family, an important aspect of family dynamics with adolescents. All of these connections also occurred in families when parents reported at least moderate connections. Such HEF observations also may suggest distinctions between families who reported higher connections and did not demonstrate them from those who reported higher connections and did demonstrate such connections energetically.

Discussion

These observational descriptions add an element that could be very useful in expanding our view and understanding of family dynamics and interactions. This would be true not only for family research, but they could be especially effective in the applied settings, such as working with family members in therapeutic situations.

This project was developed as an investigation of factors that are related to parental reports of family adaptability and family cohesion within two-parent families with high school age adolescents. Several points stand out in terms of the results of this investigation. First, it is clear that different perspectives are important in understanding family adaptability and cohesion, even if the reports are based only on the parents' perspective. For both adaptability and cohesion, all perspectives, including the HEF observations, had some significant relationships to the dependent variables of family adaptability and cohesion. With each dependent variable, different independent variables often were important, although fathers' reports of the FEQ positive dominance and the FAD subscales of problem solving and affective response were related to both dependent variables.

Adaptability and cohesion

It appears that reported adaptability and cohesion are complex phenomena, related to different perceptions of what is occurring socially in the family as well as to aspects of the energy fields. Styles and types of expression seem to be important here, as measured by four different instruments, with a spectrum of different subscales. Each of the four instruments was significantly correlated with the two dependent variables, although the ACT measure did not have consistently strong correlations with either adaptability or cohesion. For adaptability, the ESDS subscales for happiness (both fathers' reports and adolescents' reports of mothers and fathers) demonstrated significant correlations. For the parents, the FEQ (fathers' views of positive dominance and submissive) and the FAD (problem solving, affective response, and general functioning) were the strongest subscales associated with adaptability. In addition, different HEF variables were related to adaptability (strength, density, and velocity) compared to cohesion.

When looking at adaptability, the reported happiness of the father (from his point of view) and the happiness of the mother (from the adolescent's point of view) seem to be consistent elements that correlate with the ability of families to work with change. Whether it is the perspective of people being happy that makes it easier to deal with change in a balanced manner, or whether dealing with change in a balanced manner creates an environment where parents are happier is not clear from this investigation, given that all the data were collected at one point in time. It also may not be unusual that it is the parent's happiness that is correlated with parental reports of adaptability, although it is interesting that the view of mothers' happiness associated with this correlation comes from the adolescent. Still, if the adolescents' perspective of adaptability were included as part of the family data coding, the set of variables may be different from those showing significance in the current group. This same issue would apply to the coding of family cohesion as well.

With cohesion, the FEQ (three of the four subscales, depending on the member of the family) and FAD (especially affective response, which was included from all three family members) were the strongest subscales. In contrast to adaptability, the HEF variables that had significant partial correlations were the identification of coalitions along with the quality and average light in the fields. In terms of the energy field observations, it was in fact the average amount of light in the fields that had the strongest correlation with cohesion, an interesting idea to pursue in relation to how energy connections and the amount of light may be closely tied to each other.

For family cohesion, it is the father's participation that is very important in the analysis, both in terms of problem solving, communication, affective responsiveness, and affective involvement. Again, it is interesting that both of these are from the father's point of view. His own sense of involvement may be an important issue for both parents in finding a balanced cohesion in the family.

Affective involvement and power

One other point raised in this study highlights factors related to aspects of affective involvement and power in families as conceptualized by Halberstadt, (1986). Clearly, the issue of a positive dominant atmosphere is important for both adaptability (from the father's perspective) and for cohesion (from the mother's perspective). In contrast, it was the negative dominance subscale from the adolescent's point of view that had a significant correlation with cohesion. Other factors also were strongly correlated with this dependent variable, though such a finding could be modified if the adolescent's perspective of family cohesion were included in the analysis. Still, this atmosphere around affect and power seem to be a consistently significant element in our understanding of both family adaptability and family cohesion.

HEFs and family adaptability and cohesion

One of the main questions in this study was whether the inclusion of HEF observations added anything of significance to the research on family adaptability and cohesion. From the quantitative analysis alone, it is clear that including HEF can add a significant element to the research. In both models, three of the significant variables were from the energy field observations, usually with very strong significance. With adaptability, the average density and the strength of the fields were correlated very strongly. These two factors add their own contributions to the overall model separate from all the other variables. With cohesion, the average quality and average light also had significant correlations to the dependent variable. When the energy fields of family members were viewed as more dynamic and had greater light, families tended to have more balanced cohesion. Given the difference in methodology with energy field observations from the self-report questionnaires, which are more closely related to the dependent variable measures, such contributions are even more significant.

This research suggests that as the fields are more open, flowing and dynamic, there is also a greater feeling of closeness that occurs between mothers and adolescents. When fields are more closed down and protective, it is most likely that family members have difficulty adapting in a balanced manner or feeling like they have a balanced connection within the system. While there probably is not always a direct causal relationship here, it may well be an aspect of how one feels a connection, particularly associated with an energetic connection in families, which may be very important in such family dynamics as adaptability and cohesion. Many aspects of family interactions also may be significantly related to family adaptability and cohesion, but this set of family interactions, including the energetic aspects, seem to be very important in understanding the dynamics of family change and connections. Thus, the question of whether human energy fields assessments are an important factor when investigating family adaptability and family cohesion would be answered in the affirmative based on the current investigation. These aspects of the energy fields provide an important contribution in the study of adaptability and cohesion in family research.

Qualitative observations in family dynamics

In addition to the quantitative assessments, it appears that qualitative aspects of the HEF dynamics also offer additional perspectives that can be important both in the research of and application to family settings. Including energetic connections and changes may well pinpoint further elements of family interactions, relationships, and dynamics that have thus far been overlooked and may provide a unique contribution in family research. In addition, there are applications of HEF analysis in applied settings that could be important in understanding and working with families.

Application to family therapy of HEF observations

There seem to be some important human energy field aspects about families that could be useful in a family therapy setting. First, paying attention to the energy connections could provide useful information about coalitions, reactions to specific verbal and nonverbal exchanges, and how family members relate to each other in general. This can be especially useful because most people are not consciously aware of their energy fields and therefore may be less inclined or able to hide or try to change such connections and interactions. In this way, such information may provide a very candid view of the family relationships and dynamics. It also could provide very important information about families that one would not access through any other means or measures. Of course, as with any assessment, observation of energy field interactions would require confirmation over time, as with any family data. It may, however, also provide a triangulation of information that can be confirming of other assessment and information gathered.

When one begins to pay attention to energy field dynamics, it is useful to see how social connections are made, and what HEF reactions occur when family members make comments or either pull away or reach out energetically to another family member. The energy field dynamics provide an important source of information that is typically not accessed consciously or intentionally by most family therapists. Many therapists get a “feel” for some things going on in families, which may well be a part of the energy field dynamic, but they may not be accessing the information in a conscious or intentional manner. This may be a useful skill for therapists to study and begin accessing in a more systematic way.

While many people do not have the innate gift to perceive the energy fields, many can begin accessing the information simply by paying attention to it. Energy fields are vibrational information that is more subtle than the physical, yet some people "feel" as physical sensations or emotional resonations the same vibrational information that others "see." Thus, the information is not dependent on being able to see the fields, but rather learning to pay attention to the information at whatever level is most available to individual professionals.

Some suggest that seeing the field is a skill that can be taught (Andrews, 1996; Brennan, 1987; Smith, 1997), although we have not included this process in the current study. In the process of developing the procedures for this and related research (Leigh et al., 1999; Metzker & Leigh, 2004), we certainly have honed the skills of those who observed the HEFs in accessing this subtle information in a more precise and consistent manner. It appears quite likely that family therapists could increase their HEF perception skills, much as they acquire other therapeutic skills, such as paying closer attention to nonverbal communication and underlying meanings in communication.

In addition to elements of subtle energy fields identified in this research project, there appear to be many other related aspects that may have direct application to the therapeutic process. Such elements include understanding when people are energetically present or absent in a session, or when and under what therapeutic circumstances people disconnect from or energetically leave (energetically absent themselves) from the setting, even while remaining present physically. It also could be useful to pay attention to what people are doing energetically that may be different or even in conflict with what they are saying and doing physically. Finally, it may be useful to begin to see where people are holding energetic experiences in the field or body, or sharing some of that during interactions that could help clarify other family member's experiences in the therapy setting.

The current project was a pilot study to see how emotional expression and human energy fields were related to reporting of closeness by parents and adolescents within families. This investigation provides useful observations and ideas to stimulate further research on the HEF. In addition, there seems to be some utility of energy field assessments beginning to infiltrate the family therapy setting to provide addition information and insights about family members and family dynamics that would assist in the family therapy process.

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