

DAVID H. OLSON *University of Minnesota*LAURA WALDVOGEL AND MOLLY SCHLIEFF *PREPARE/ENRICH*

Circumplex Model of Marital and Family Systems: An Update

This article provides an overview of the Circumplex Model and how it was developed and describes the three major dimensions (cohesion, flexibility, and communication) and how they were used to create the model. There are three major hypotheses and two assessments (FACES IV and the Clinical Rating Scale) used to test the hypotheses. The model is useful for describing couple and family systems and for plotting how they change over time. The model is also used to describe other systems such as parenting and classroom settings. Personal use of the model is described and future directions and challenges for the model presented.

BRIEF OVERVIEW OF CIRCUMPLEX MODEL

The Circumplex Model was initially designed to capture the curvilinear dimensions of cohesion and flexibility. These two dimensions were discovered in the late 1970s by conceptual clustering more than 200 concepts in the marriage and family field (Olson, Sprenkle, & Russell, 1979). Although most concepts in the family field are linear (meaning the higher the score, the better), a basic discovery was that cohesion and flexibility are curvilinear (very high and very low are problematic). A third

dimension, communication, was also identified and is considered a linear and facilitating dimension related to the model.

The Circumplex Model (Figure 1) has two dimensions of cohesion and flexibility, and each dimension has five levels. The three central levels of cohesion and flexibility are referred to as “balanced” and the lowest and highest levels as “unbalanced.” Combining the two dimensions orthogonal to each other resulted in nine balanced types (balanced on both dimensions), 12 midrange types (balanced on one dimension and unbalanced on the other), and four unbalanced types (unbalanced on both dimensions).

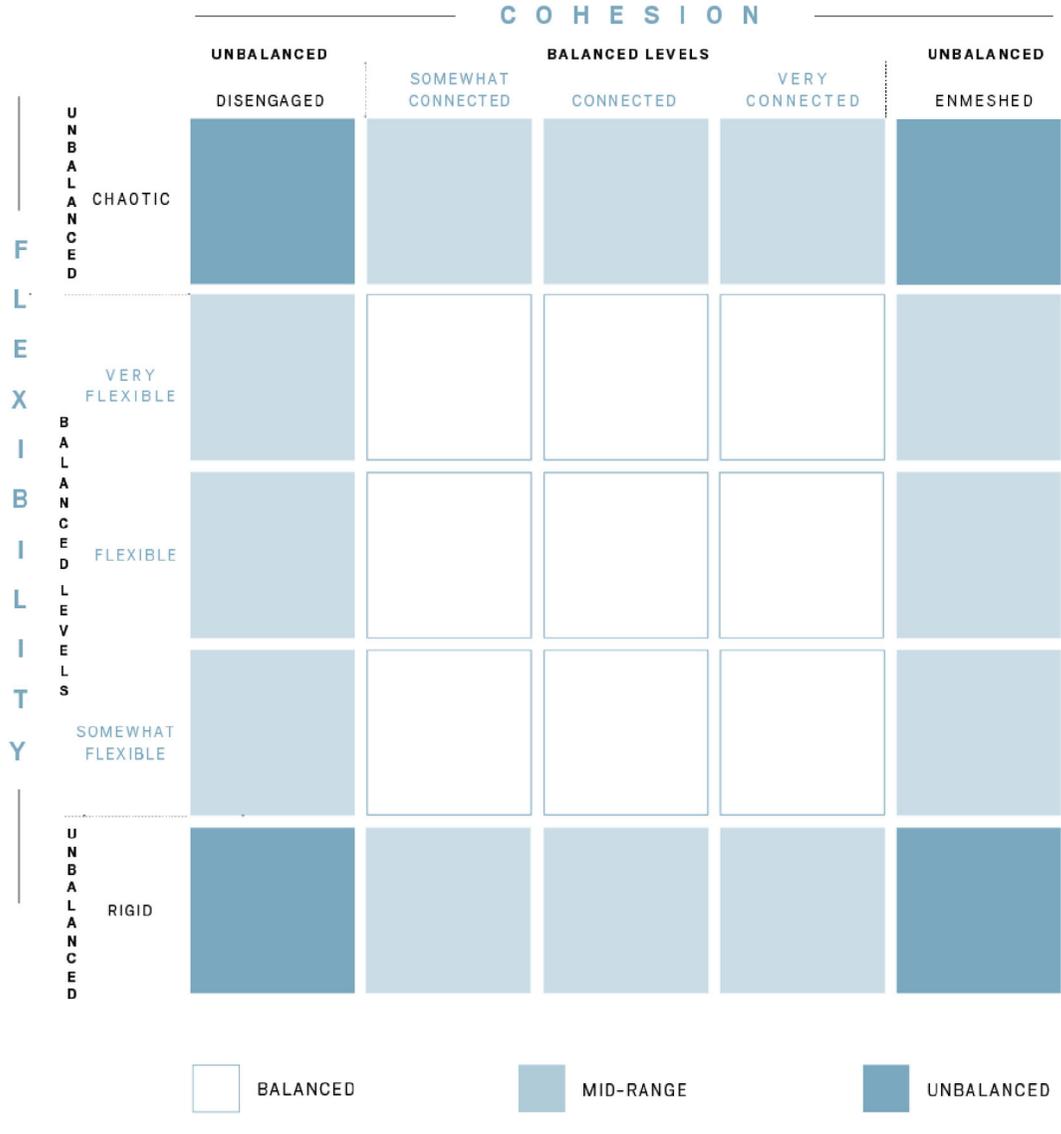
There are three major hypotheses derived from the Circumplex Model. First, balanced couples and families tend to be more functional (happy and successful) than unbalanced systems. Second, balanced couples and families have more positive communication than unbalanced systems. Third, balanced couples and families will more effectively modify their levels of cohesion and flexibility to deal with stress and development change, as compared to unbalanced systems.

The studies testing these hypotheses have mainly utilized the Family Adaptability & Cohesion Evaluation Scales (FACES) self-report measure of cohesion and flexibility. A few studies utilized the observational assessment called the Clinical Rating Scale (CRS). More than 1,200 studies have been done on the Circumplex Model using the self-report family assessment called FACES (Kouneski, 2000; Waldvogel

Department of Family Social Science, University of Minnesota, 977 Summit Avenue, St. Paul, MN 55105 (dholson977@gmail.com).

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FIGURE 1. CIRCUMPLEX MODEL OF MARITAL AND FAMILY SYSTEMS.



& Schlieff, 2018), making it one of the most researched family models.

HISTORICAL DEVELOPMENT OF THE CIRCUMPLEX MODEL

Discovery of Three Dimensions

The initial discovery of the three dimensions used with the Circumplex Model—cohesion, flexibility (initially called adaptability), and communication—was by the first author,

who was teaching a graduate seminar in marital and family therapy. After listing more than 200 concepts in the marital and family therapy field, they clustered into the three dimensions of cohesion, flexibility, and communication. The three dimensions were discovered by clustering of concepts rather than empirical clustering. Some of the family professionals who created these terms are listed in Table 1.

While cohesion, flexibility, and communication have been conceptually and operationally

Table 1. *Theoretical models using cohesion, flexibility and communication*

	Cohesion	Flexibility	Communication
Beavers & Hampson (1990)	Stylistic dimension	Adaptability	Affect
Benjamin (1977)	Affiliation	Interdependence	
Epstein et al. (1993)	Affective involvement	Behavior control	Communication affective responsiveness
Gottman (1994)	Validation	Contrasting	
Kantor & Lehr (1975)	Affect	Power	
Leary (1975)	Affection hostility	Dominance submission	
Leff & Vaughn (1985)	Distance	Problem solving	
Parsons & Bales (1955)	Expressive role	Instrumental role	
Reiss (1981)	Coordination	Closure	
Walsh & Olson (1989)	Connectedness	Flexibility	Communication

defined in different ways (Doherty & Hovander, 1990), one constant has been consensus on the importance and value of the three dimensions. It is interesting that many family theorists have independently concluded that the dimensions were critical for understanding and treating marital and family systems.

Discovery of Curvilinear Dimensions and Balance

A second discovery, that cohesion and flexibility are curvilinear, occurred when the first author listed the concepts by various family professionals within a given dimension. Family theorists had different concepts for very low, moderate, and very high cohesion (Table 2).

A consistent and surprising finding by these theorists was that problem families tended to be either very high or very low on cohesion. Hence, the discovery that too much or too little cohesion was problematic for families. Conversely, we hypothesized and found that most healthy families tended to be in the middle range of cohesion. This led to creation of the concept of balance, in that too much or too little cohesion and flexibility was problematic for couples and families, and balancing between the extremes was healthier.

CREATING CIRCUMPLEX MODEL AND THREE DIMENSIONS

The Circumplex Model was created conceptually rather than empirically. The two curvilinear circumplex dimensions of cohesion and flexibility (initially called adaptability) were put together in an orthogonal model. Five levels

of cohesion and flexibility were defined such that the very low and very high extremes were called "unbalanced," and the three central cells, "balanced." The 5 × 5 model resulted in 25 boxes in which the nine central cells were labeled "balanced," 12 cells were balanced on one dimension and unbalanced on the second dimension, and there were four unbalanced cells.

Although attempts were made conceptually to define communication in a curvilinear manner and to integrate communication as a third circumplex dimension, it became too confusing conceptually and empirically. The decision was made to keep communication as a linear dimension and consider it a facilitating dimension in moving couples and families on the two other dimensions.

Cohesion (Togetherness)

Cohesion is defined as the emotional bonding that couple and family members have toward one another. Within the Circumplex Model, some of the specific concepts or variables that can be used to define and assess cohesion are emotional bonding, boundaries, coalitions, time, space, friends, decision making and interests, and recreation. Cohesion focuses on how systems balance separateness versus togetherness.

In the model's balanced area, cohesive families are able to strike equilibrium between both separateness and togetherness. Individuals are able to be both independent from and connected to their families. Couples and families who present for therapy services often fall into one of the extremes or unbalanced areas of too much separateness and/or togetherness.

Table 2. Cohesion Dimension and Related Concepts

Author(s)	Very Low Cohesion	Balanced Cohesion	Very High Cohesion
Bowen (1960)	Emotional Divorce	Differentiated	Emotional Fusion
Hess & Handel (1959)	Separateness		Connectedness
Kantor & Lehr (1975)			Bonding
Reiss (1971)	Distance Sensitive	Environment Sensitive	Consensus Sensitive
Rosenblatt & Titus (1976)	Apartness		Togetherness
Stierlin (1974)	Centrifugal force Expelling		Centripetal force Binding
Wynne (1958)	Pseudo-hostility	Mutuality	Pseudo-mutuality

When cohesion levels are very high (enmeshed systems), there is too much consensus or emotional closeness within the family and too little independence. At the other extreme (disengaged systems), family members have a high level of independence with limited attachment or commitment to the family.

Extremely high levels of cohesion (enmeshed) and extremely low levels of cohesion (disengaged) are hypothesized to be problematic for individual and relationship development in the long run. In contrast, relationships with moderate scores are able to balance being separate and together in a more functional way (i.e., better communication, more satisfied with the relationship).

Flexibility

Flexibility is the amount of change in its leadership, role relationships, and relationship rules. The specific concepts used to operationalize flexibility include leadership (e.g., control, discipline), negotiation styles, role relationships, and relationship rules. Flexibility focuses on how systems balance stability with change.

Extremely high levels of flexibility (chaotic) and extremely low levels of flexibility (rigid) are hypothesized to be problematic for individuals and relationship development if they remain at these levels for a lengthy duration. Relationships that have moderate scores (structured and flexible) are able to balance change and stability in a more functional way.

Communication

Communication is the third dimension in the Circumplex Model and is considered a facilitating dimension, which means that good communication helps couples and families alter their levels of cohesion and flexibility

to better deal with developmental or situational demands. Couple and family communication is assessed by focusing on the group with regard to listening skills, speaking skills, self-disclosure, clarity, continuity tracking, and respect and regard. Listening skills include empathy and active listening. Speaking skills include speaking for oneself and not for others. Self-disclosure relates to sharing feelings about oneself and the relationship. Tracking refers to staying on topic, and respect and regard refer to the affective aspects of communication. Several studies have investigated communication and problem-solving skills in couples and families and have found that systems balanced on cohesion and flexibility tend to have very good communication, whereas systems unbalanced on these dimensions tend to have poor communication (Olson, 2000).

HYPOTHESES DERIVED FROM THE CIRCUMPLEX MODEL

One value of a theoretical model is that hypotheses can be deduced from the model and tested in order to evaluate and further develop the model. These hypotheses were described in the original paper on the Circumplex Model (Olson, Sprenkle, & Russell, 1979).

H₁: Couples and families with balanced types will generally function more adequately across the family life cycle than unbalanced types. An important aspect of the Circumplex Model is the concept of balance. Individuals and family systems need to balance their separateness versus togetherness on cohesion and their level of stability versus change on flexibility. Even though a balanced family system is placed at the four central levels of the model, these families do not always operate in a "moderate" manner. Being balanced means that a family system

can experience extremes on the dimension when appropriate, as in times of trauma or stress, but they do not typically function at these extremes for long periods.

H_{1a}: If a family's expectations or cultural norms support more extreme patterns, the family can function well if those unbalanced styles fit within their cultural norms. Cultural norms need to be seriously considered when assessing family dynamics. What might appear to an outsider to be an “enmeshed” family, might be viewed by an insider as normative and appropriate behavior for their family. So unbalanced types of family systems are not necessarily dysfunctional, especially if the family norms support these more extreme styles. For example, a specific ethnic group (e.g., Hmong, Hispanic) or religious group (e.g., Amish, Mormon) might have cultural norms that support these more extreme behavior patterns on cohesion (overly connected) and flexibility (rigid).

H₂: Positive communication skills will enable balanced types of couples and families to change their levels of cohesion and flexibility. In general, positive communication skills are viewed as helping family systems facilitate and maintain a more balanced relationship on the two dimensions. Conversely, poor communication impedes movement in unbalanced systems and increases the likelihood that these systems will remain extreme.

H₃: Couples and families will modify their levels of cohesion and/or flexibility to effectively deal with situational stress and developmental changes across the family life cycle. This hypothesis deals with the capacity of the family system to change (second-order change) in order to deal with stress or to accommodate changes in family members' development and expectations. The Circumplex Model is dynamic in that it assumes that couples and families will change levels of cohesion and flexibility, and thus family system type, and it is hypothesized that change is beneficial to the maintenance and improvement of couple and family functioning.

When one family member's needs or preferences change, the family system can either resist change or facilitate change. For example, if a stay-at-home dad decides to join the workforce again after his kids are in school, this may lead him to seek more independence and autonomy from the family. The level of closeness he had with his wife and children may shift.

The previous stay-at-home dad may prefer some changes in other family members to deal with his decreased responsibility for parenting and home duties. If his wife and children are unwilling to understand or assist with this desired change, the marriage and parent-child relationships may suffer from stress and dissatisfaction.

Another common example of changing expectations occurs when a child reaches adolescence and wants more freedom, independence, and power in the family system. These pressures to change the family system by one member can facilitate change in the family dynamics or the family can resist any change, which can create more stress.

ASSESSMENT TOOLS: FACES AND CRS

FACES is a self-report assessment for measuring the dimensions of cohesion and flexibility. Two major limitations of the first three versions of FACES were that they did not tap the extreme high or low levels of cohesion or flexibility, and they did not effectively assess curvilinearity. This led to the development of FACES IV, which is able to assess all aspects of the Circumplex Model more effectively.

FACES IV

The FACES IV instrument (Olson, 2011) was developed to tap the full range of the cohesion and flexibility dimensions and is able to measure the curvilinear dimensions of cohesion and flexibility. FACES IV has high levels of reliability and validity, and it is able to discriminate between healthy and unhealthy couples and families (Olson, 2011). In creating FACES IV, work was done to develop items specifically to tap the high and low extremes (unbalanced) of the two dimensions (Tiesel, 1994). These items were then added to the moderately worded items of the previous versions of FACES in an attempt to develop scales that tapped the full theoretical range of the dimensions (Gorall, 2002).

There are six scales in FACES IV with two balanced scales (balanced cohesion and balanced flexibility) and four unbalanced scales for high and low cohesion (disengaged and enmeshed) and high and low flexibility (rigid and chaotic). These six scales provide a more comprehensive picture of a couple and family system and provide a dimension score for

plotting onto the Circumplex Model. Last, a ratio score for cohesion and flexibility and a total score assesses the level of curvilinearity.

Family Communication Scale. Family communication is the third dimension of the Circumplex Model. It is considered a facilitating dimension because it helps couples and families change their level of cohesion and flexibility to deal with ongoing issues.

Family Satisfaction Scale. Family satisfaction has been added to the FACES IV scales as an additional scale. This scale measures the satisfaction of all three dimensions of FACES IV (cohesion, flexibility, and communication) and serves as a very important outcome measure. The indicators of satisfaction for cohesion were emotional bonding, coalitions, time, space, friends, and interests. For flexibility, the indicators were leadership style, negotiation style, role relationship, and relationship rules. For communication, the indicators were speaking and listening skills, empathy, and negotiation skills. The final scale has been found in several studies to have high reliability and validity.

Clinical Rating Scale

The CRS was initially developed in 1980 to operationalize the dimensions of the three dimensions of the Circumplex Model. This observational scale describes specific indicators for each level of the three dimensions. The current CRS was modified several times, and the latest version has been used in a variety of studies (Olson, 2001). It is designed for use by therapists and researchers for rating couple and family systems on the basis of clinical interviews or research observations of their interaction.

The CRS does tap the full continuum of the cohesion and flexibility dimensions and studies using the CRS have found a curvilinear relationship with family functioning (Thomas & Olson, 1993, Thomas & Ozechowski, 2000). About 10 studies using the CRS have found strong support for the major hypothesis of the Circumplex Model, that balanced families function more adequately than unbalanced families (Olson, 2011). Research has also shown that the scale produces the same factor structure when raters using the CRS scale are researchers or therapists (Lee, Jager, Whiting, & Kwantes, 2000).

VALIDATING HYPOTHESES FROM THE CIRCUMPLEX MODEL

Since 1980, various researchers have validated the Circumplex Model on a wide variety of topics. Most of these 525 studies have used the self-report scale called Family Adaptability and Cohesion Evaluation Scales (FACES I, II, and III), where higher scores on cohesion and flexibility on FACES represent balanced couples and families. This means that there is a linear relationship between healthy functioning and scores on the earlier versions of FACES (Olson, 2000). Of the three hypotheses proposed in the original Circumplex Model, the first, regarding balanced and unbalanced couples and families, is the most studied and most often supported.

In terms of topics investigated in the 525 studies, the most frequent were family theory and assessment (22%), families with special problems (16%), family dynamics (15%), marital and family therapy (12%), physical health (11%), development (10%), and sexuality (9%).

Hypothesis 1: Balanced Versus Unbalanced Couples and Families

The central hypothesis derived from the model is that balanced couples and families function more adequately than unbalanced couples and families. Most of the 525 studies (Kouneski, 2000; Olson, 2000) have supported this major hypothesis. These studies have generally compared couples and families experiencing a variety of emotional problems and symptoms to nonclinical families.

Hypothesis 2: Balanced Couples or Families and Communication

Another hypothesis of the Circumplex Model is that balanced couples and families have more positive communication skills than unbalanced families. Communication can be measured at both the marital and the family level. In a national survey of 21,501 married couples who took the ENRICH couple inventory, it was found that the happiest marriages were balanced on cohesion and flexibility and had very good communication (Olson, Olson-Sigg, & Larson, 2008). In a review of more than 20 studies of couples and families, Kouneski (2000) found that most of them provided strong support for the hypothesis that balanced couples and

families had more positive communication than those who were unbalanced.

Hypothesis 3: Changes in Levels of Cohesion and Flexibility to Deal With Stress

The Circumplex Model allows for the integration of systems theory and family developmental theory. Most of the studies assessing change over time have been done with couples and families in therapy were pre-test and post-test revealed that couples changed to become more balanced at post-test (Kouneski, 2000; Olson, 2011). In the next section, we provide a case study of how they changed their relationship over a few years to deal with developmental issues (Figure 2).

CHANGES IN COUPLE AND FAMILY SYSTEMS OVER TIME

The Circumplex Model is dynamic in that it assumes that changes can and do occur in the couple and family types over time. Families can move in any direction that the situation, stage of family life cycle, or socialization of family members may require. The model can be used to illustrate developmental change of a couple as they progress from dating to marriage; to pregnancy, childbirth, and child rearing; to raising and launching adolescents; and to moving into life as a couple again. It can also be used to illustrate how a family moves through the model in times of high stress or managing a traumatic event.

Figure 2 illustrates the changes one young couple experienced in a period of 7–8 years from dating to having their first child to when the child was 4 years old. During their dating period (1), the couple had a very flexible and very connected relationship. They felt close (very connected) and had a very flexible style in terms of leadership and decision making. Since dating moved them toward marriage, they have become increasingly close and are trying out different ways of operating as a couple in terms of flexibility.

During the first year of marriage (2), the newlywed couple was best described as flexible or overly connected. They were generally flexible because they were still getting organized in terms of their roles and leadership. Being in love and enjoying spending maximum time together, they were still in the “honeymoon” phase and were emotionally enmeshed.

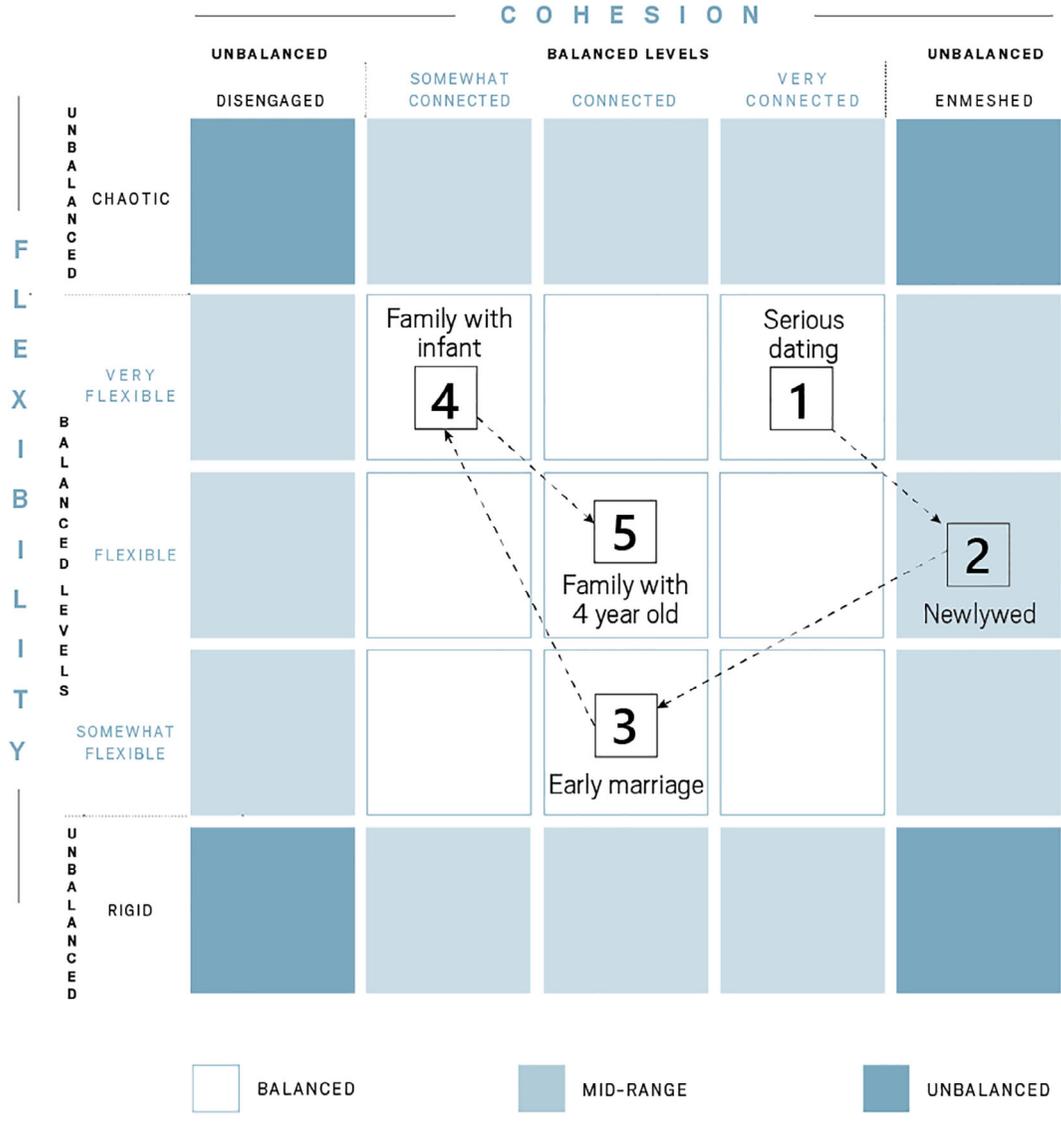
By the end of their second year of marriage (3), the so-called honeymoon effect had worn off, and the couple became somewhat flexible or connected. Each person’s excitement with the other was not as great as it had been, and their togetherness became more balanced as each got more into his or her individual life. They also developed more routines in their roles and lifestyle and became somewhat flexible.

During the third year of marriage, the couple had a baby (4). The infant dramatically changed the couple relationship as they became a very flexible or somewhat connected family. Change was high at the time, and the couple was forced to adapt to the new challenges of parenting. Their life was in relative turmoil because they were up each night to feed and attend to the baby. The infant’s unpredictable behavior often created chaos, and it was very difficult for the couple to keep to a fixed routine; hence, they became a very flexible family. The baby’s presence initially increased the sense of bonding between husband and wife, who felt united in their goal of rearing their child. As time went on, the infant took a great deal of the mother’s time and energy, and the couple found it difficult to spend time to stay connected as a couple. While the mother and infant were very close, the couple became somewhat connected.

By the time the child was 4 years old, life stabilized for the family (5). They are now functioning as a flexible or connected family and experiencing very few changes. Formerly a dual-career couple, they shifted toward more traditional gender roles, with the mother staying at home, but she returned to work part-time. While the husband spent little time with the infant, he has been more focused on his job and seeking a promotion. Both their closeness and flexibility have dropped a level and life has become more manageable for both of them.

In summary, this case study of developmental changes in the family system over time illustrates how the Circumplex Model can help map changes, thereby integrating system theory and family development theory. More specifically, this example illustrates how a couple’s relationship can change from dating and across the early stages of marriage. The changes can occur gradually over months or more rapidly after the birth of a child. These changes often occur without specific planning. However, couples can negotiate the type of relationship they want and can be more proactive in creating the type of

FIGURE 2. LIFE-CYCLE CHANGES.



relationship they both prefer. These changes in a couple or family system are a snapshot of the changes that occur in couple or family levels of cohesion and flexibility over the family life cycle.

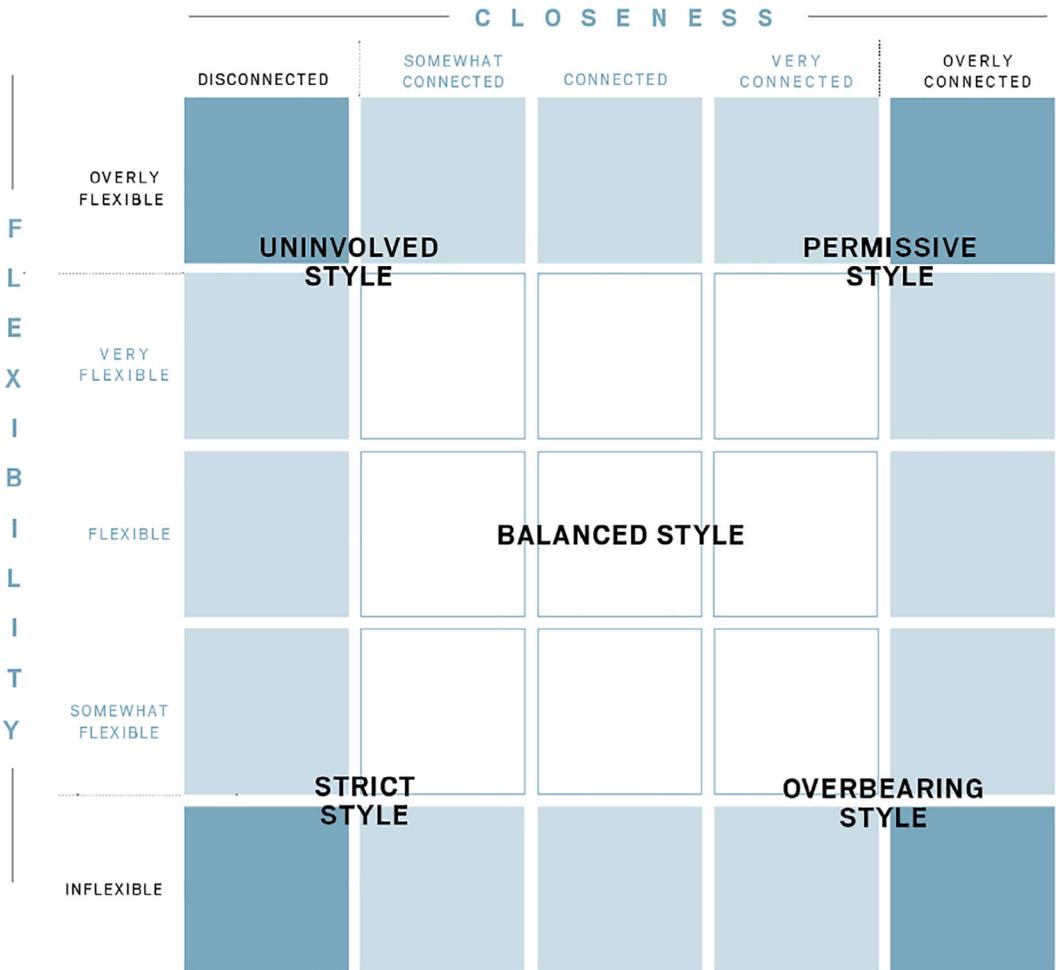
FIVE PARENTING STYLES BASED ON THE CIRCUMPLEX MODEL

One of the values of a theoretical model is to make conceptual comparisons to other related

models. Diana Baumrind (1995) identified four styles of parenting: democratic (authoritative), authoritarian, permissive, and rejecting (Figure 3). She also identified specific outcomes in children’s behavior for each of these styles.

Using the Circumplex Model, the comparison revealed the same four styles as described by Baumrind (1995), as well as a new fifth style called “uninvolved,” not included in her four styles. The five styles as defined and used in the

FIGURE 3. FIVE PARENTING STYLES.



Balanced Style Healthy level of parenting, Closeness and Flexibility
 Permissive Style Very Connected and Very Flexible parenting
 Overbearing Style Very Connected and Inflexible parenting
 Strict Style Disconnected and Inflexible parenting
 Uninvolved Style Disconnected and Very Flexible parenting

parenting version of the Circumplex Model: balanced, permissive, overbearing, strict, and uninvolved.

The balanced style of parenting, often called “democratic,” is what Baumrind (1995) called the authoritative style. This style has age-appropriate parenting and independence is encouraged. Discipline tends to be consistent and fair. Parenting is warm and nurturing without being overindulgent. The permissive

style, the same name as used by Baumrind, allows children a wide range of freedom and choice. Parents have a hard time saying no, creating boundaries, and enforcing rules. There is a high emotional connection to the child and responsiveness to the child’s needs. This style is often related to children becoming demanding and self-focused. The overbearing style, also called authoritarian by Baumrind and others, is the opposite of permissive. There are high

levels of parental control and high expectations. Children tend to have more anxiety, lower self-esteem, and lower achievement as compared to children raised with other parenting styles. The strict style, which Baumrind called “rejecting,” demands order but with little emotional connection. Children often feel uncared for and tend to have higher levels of rebellion and substance abuse. In the uninvolved style, which Baumrind did not include, children are given a great deal of freedom of choice with few rules or boundaries. There is low emotional connection to and demands placed on the child. Children experiencing this style often feel isolated and uncared for by their parents. In summary, these five styles of parenting derived from the Circumplex Model reveal a similarity to other parenting theorists like Baumrind.

OTHER APPLICATIONS OF THE CIRCUMPLEX MODEL

Classroom Styles

One of the values of a theoretical model is that it can potentially be applied in other settings. In addition to use of the Circumplex Model to represent five parenting styles, it has also been used to describe classroom settings. Marian Fish and Elizabeth Dane (2000) used the Clinical Rating Scale from the Circumplex Model to develop the Classroom Systems Observation Scale. Their assessment focused on classroom cohesion, flexibility, and communication. Their studies replicated the findings from couples and families that balanced classrooms had more positive outcomes for children.

Leadership Styles

The application of the Circumplex Model to leadership styles of business teams was done by a group headed by Robert Watson (2000), which developed leadership styles by revising FACES items to apply to a work setting. The five leadership styles they found were balanced, permissive, micromanaging, controlling, and uninvolved. Their exploratory work found that the leadership styles they found were very similar to what was discovered with the Circumplex Model for families. Also, balanced work groups were found to be more productive and satisfied with work.

RECENT STUDIES USING FACES IV

Kouneski’s (2000) review of research on the Circumplex Model found that most studies used the self-report instruments FACES II and III. Both provided a linear measure of cohesion and flexibility so that a high score indicated the most balanced and a low score the least balanced. Since Kouneski’s (2000) article on the Circumplex Model using FACES IV, at least 50 more studies and applications of the model have been published; these are summarized by Laura Waldvogel and Molly Schlieff (2018). Their review found that the studies were almost equally spread across the following categories: types of families, physical health, family counseling, stages of family life cycle, ethnicity, family theory, and families with special problems.

Several novel types of families have been studied with the use of FACES IV, and one of these studies captured the era of today: millennial families. Rebecca Ristow (2015) studied millennial families and their perceptions on cohesion, flexibility, satisfaction, and communication. The families described themselves as having balanced levels of cohesion and flexibility (Ristow, 2015). Families also described healthy boundaries in their familial units. Because of their balanced flexibility, the families showed signs of egalitarian leadership and a democratic approach to decision making. Roles were shared, and there was fluid change when necessary in their family.

The Circumplex Model has also been utilized to assess families dealing with physical health difficulties. Pereira and Teixeira (2013) found FACES IV to be valid when assessing Portuguese families with parents having cancer. Their study found that in a parental cancer situation, adult children caregivers with lower educational levels seemed to have more problems dealing with unbalanced systems (i.e., enmeshed and chaotic). However, adult children caregivers and their parents with higher education levels were shown to be more balanced than those with lower education.

The Circumplex Model can be used assess different family types related to individual development. A study by Everri, Mancini, and Fruggeri (2016) found six family types described from the viewpoint of adolescents: rigidly balanced, flexibly oscillating, flexibly chaotic, cohesively disorganized, rigidly disengaged, and chaotically disengaged. They found that the families did not differ in terms of

adolescent age, gender, and family structure, but they did differ in the extent to which the various styles had different behavioral outcomes.

There are several international studies that have studied the family in different countries of varying ethnicity, education, and religion. Three international studies validated FACES IV with specific ethnic groups, including Hungarian, Romanian, and Greek families. The study by Mirnics, Vargha, Toth, and Bagdy (2010) included 249 Hungarian couples and found similar family types as found in earlier Circumplex Model studies. Studying 1,359 young Romanian family members, Cornelia Rada (2017) found similar family profiles to those in the research in the United States. The Greek version of FACES IV was found to be valid and reliable and useful in understanding underlying family dynamics in Greece (Koutra, Triliva, Roumeliotaki, Lionis, & Vgontzas, 2012). These studies and many more are described on the FACES IV website (www.facesiv.com) under "Research studies."

For international studies using FACES IV, it is highly recommended that they obtain a large-enough database (several hundred respondents) so that they can renorm cohesion and flexibility. This renorming will change the centroid of the Circumplex Model, thereby making the findings more accurate for that culture. More details on this process is described in the *FACES IV Manual*, available on the FACES IV website.

Immigrant families have also been studied using FACES IV to assess level of cohesion in relationship to trauma. The study by Singh, Lundy, Vidal de Haymes, and Caridad (2011) looked at 122 Mexican immigrant men and women living in a Mexican community in the Midwestern United States. This study identified the positive role the family can play in trauma prevention for immigrant families (Singh et al., 2011). Immigration created movement and adjustment within the family system, and it also appeared to create greater cohesion in the families.

Religion was also used as a specific societal context for understanding families and their dynamics. Michael Messina (2008) researched the relationship among nine religion variables and family variables assessed by FACES IV. Among 152 Christian participants, Messina (2008) found that seven of the religiosity scales were positively related to family cohesion, five of those seven were positively related to

communication, and none was related to family flexibility.

Several studies were done with families experiencing a wide assortment of challenges, from alcoholism to eating disorders. One study by Tafa et al. (2016) measured family functioning in families with female adolescents who have eating disorders. Their study found that adolescents and their parents differ in their perception of family functioning. More specifically, adolescents with anorexia perceived their family as highly disengaged, rigid, and with poor communication, whereas parents tended to describe the family as more balanced on cohesion and flexibility with good communication.

PERSONAL USE OF CIRCUMPLEX MODEL

There are a variety of ways that the Circumplex Model can help a person or couple better understand and improve their relationship. One option is to purchase FACES IV and take the assessment, score it, and plot the results (www.facesiv.com). The simplified version of the Circumplex Model is called the Couple and Family Map, and it is built into the PREPARE/ENRICH couple assessment and program (www.prepare-enrich.com) or the *Couple Checkup* book and program (www.couplecheckup.com). Once the assessment is complete, results can reveal how each person perceives the relationship.

The model can also be used to demonstrate how a relationship has changed over time. An assumption of the Circumplex Model is that relationships change, and plotting key events in the relationship (e.g., birth of a child, car accident, illness, loss of job) often reveals elasticity or resiliency in the relationship. The Circumplex Model can also reveal where a couple or family is in terms of cohesion and flexibility and help them think about where they would like to be in the future (i.e., setting goals).

THEORETICAL CONTRIBUTIONS OF THE CIRCUMPLEX MODEL

The Circumplex Model provides a variety of benefits to family professionals (Olson et al., 2008). First, the model identifies three significant dimensions that conceptually summarize many family concepts. Second, the two dimensions of cohesion and flexibility were hypothesized to be curvilinear, not linear. The curvilinear discovery led to the important

concept of balance. Putting the five levels of cohesion and flexibility together created a descriptive model identifying 25 types of couple and family systems. It is also a dynamic model, able to illustrate change in systems over time.

The Circumplex Model also helped to create testable hypotheses. To test them, assessment scales were developed on the basis of the conceptual and operational definitions of the concepts. This resulted in an improved self-report assessment, FACES IV, and an observational assessment, the Clinical Rating Scale (CRS).

The Circumplex Model, its historical roots, basic concepts, and dimensions are grounded in systems theory. The Circumplex Model's dimensions are systemic and thus have been applied to understanding couple and family systems, as well as parenting styles, classrooms, work groups, and other ongoing systems.

The model has also been used with diverse couple and family systems in terms of ethnicity, race, marital status (married), living arrangement (cohabitating), family structure (single parent, stepfamilies), sexual orientation (gay and lesbian couples), stage of family life cycle (parenting to empty nest), and social class and educational levels. Changes that couples and families experience developmentally and in reaction to stressors can also be illustrated using the model.

FUTURE DIRECTIONS

Many of the studies from the years 2000–2018 have been with families from other countries. Many of these international studies have focused on translating and validating FACES IV and determining the value of the assessment for their specific setting. These international studies have not focused as much on testing the three major hypotheses as on assessing the reliability and validity of FACES IV in an international context. Hopefully, future international studies can focus more on testing the hypotheses with a variety of family problems.

A limitation of many of the studies in the United States is that they are conducted mainly with Caucasian, Christian, middle-class families. Future studies should focus on families from a wider variety of ethnic groups, religious orientations, and social classes. Future studies need to also include more family members rather than just studying one person in a relationship,

which will reveal the complexity of couple and family systems.

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