Measuring Differentiation of Self

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Bowen theory contains eight interlocking concepts which can be used to predict the ways in which a family will respond to environmental pressure. As one of these eight concepts, differentiation of self pertains to an individual and is the main construct of the theory. As of this writing, it is not possible to measure the other seven concepts but many attempts have been made at measuring differentiation of self. Aside from the clinical evidence from Bowen's NIMH research project and subsequent anecdotal evidence, these instruments represent the state of the art of Bowen theory as a verifiable science.

While Bowen outlined a theoretical scale for differentiation of self ranging from 0 and 100, he based an individual's score on clinical observations and interviews with an individual over many months along with external variables such as the functioning of the person around him. Bowen (1978) describes the difficulty in quantifying the scale,

The scale is most important as a theoretical concept for understanding the total human phenomenon and as a reliable instrument for making an overall evaluation of the course of a life, and accurate predictions about the possible future life directions of a person. It is not possible to do day to day or week to week evaluations of scale levels because of the wide shifts in the functional level of pseudo-self in low-scale people. A compliment can raise the functioning level of self and criticism can lower it. It is possible to do reasonably accurate general estimations from information that covers months or years. (p. 475)

As stated, the definition of differentiation of self as a concept for "understanding the total human phenomenon" is quite broad. As with the other concepts in the theory, it was intended more to generate hypotheses for the development of theory than to point to a precisely measurable construct. Despite the broad multivariate and longitudinal nature of the theoretical construct, the attempts at measuring differentiation of self which achieved significant validity in both American and international populations.

Psychometric Instruments for Differentiation of Self

The most widely used instrument today is the Differentiation of Self Scale (DSI) (Skowron & Friedlander, 1998), which was later revised as the DSI-R (Skowron & Schmitt, 2003). The DSI-R includes four dimensions: emotional reactivity, I-position, fusion and emotional cut-off. The DSI was examined by Bowen experts for theoretical validity, validated for construct validity with other scales of differentiation, and had internal validity of .88 using Cronbach's alpha (Miller, Anderson, & Keala, 2004). It has been found to be reliable in samples within the United States (Jankowski &

Hooper, 2012) and as we shall discuss later, it has been translated into several languages to test its concept of differentiation across cultures. As of this writing, the DSI-R is the most widely used, and most psychometrically validated instrument which measures differentiation of self (Sloan & Dierendonck, 2016).

In a study on the moderating effect of self-construal (i.e. self-image) on the relationship between differentiation of self using the short-form DSI-SF (Drake, Murdock, Marszalek, & Carolyn, 2015), and well-being in US college students (Ross & Murdock, 2014), it was found that there is a "relationship between differentiation of self and well-being such that high levels of independent self-construal serve as a buffer to psychological symptoms for those with low levels of differentiation of self" (p. 487). In a study on American college women, Gushue & Constantine (2003) used the DSI to find that "individualism," or the ability to define self, and "collectivism," or the ability to draw on others for support while maintaining self, are positively related to less emotional reactivity and less fusion. Based on this finding, the authors suggest that "for some African American women, a cultural belief in the fundamental equality and similarity of human beings is positively related to efforts to define a self" (2003).

In many studies, differentiation of self has been found to be a partial predictor of psychological distress in American populations (Charles, 2001; Bartle-Haring & Probst, 2004; Murdock & Gore, 2004; Skowron, Stanley, & Shapiro, 2009; Krycak, Murdock, & Marszalek, 2012). Some studies on Bowen theory look at marital satisfaction as measurable an outcome (Miller, Anderson, & Keala, 2004; Hardy, Soloski, Ratcliffe, Anderson, & Willoughby, 2015). Marital satisfaction is often described in terms similar to differentiation of self, such as resilience in the face of stress, or general level of reactivity to emotional problems in the marriage. Hardy et al (2015) found that the quality of relationship with the family of origin is positively correlated with marital outcomes in American samples. Similarly, Priest (2015) found that the concept of differentiation could explain the positive correlation between early abuse/violence in the family of origin and distress in committed romantic relationships among samples of American individuals with Generalized Anxiety Disorder.

Bowen and scholars of his theory affirm that in systems-oriented therapy, a therapist will only be as effective as they have managed to become within their own family of origin (Bowen, 1978; Kerr & Bowen, 1988; Titelman, 1998/2013). One study on differentiation of self in the therapist and therapy outcomes measured two factors; client's perception of therapeutic alliance; and psychological well-being (Bartle-Haring, Shannon, Bowers, & Holowacz, 2016). It was found that the effect on differentiation found there to be a significant relationship between differentiation in the therapist and positive outcomes, but in the opposite direction expected. Interestingly, while the therapists level of differentiation decreased (as measured by suggestion of triangulation and cutoff through the DSI), the quality of the therapeutic bond as reported by the client increased. However, the authors of the study interpreted the client's favorable perception of the subjective *alliance* to be a positive outcome and counter to Bowen's notions of differentiation making a therapist "more effective," which may or may not be correct. Bowen's position on the therapeutic relationship

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differed from individual modalities in that the "coach" is mean to stay outside the couple's transference by guiding them to work out their problems for themselves (Titelman, 1998/2013, p. 31). Therefore, it is possible that the lesser differentiated a therapist is, the more likely they are to form a comfortable-feeling yet unhealthy bond with the client which is in line with Bowen's notion of increased triangulation in poorly differentiated individuals (Titelman, 1998/2013, p. 33).

The Level of Differentiation of Self Scale (LDSS) (Haber, 1993) is a self-report inventory which is found to correlate with psychological wellbeing. The Personal Authority in the Family System Questionnaire, or PAFS-Q, (Bray, Williamson, & Malone, 1984) doesn't necessarily measure Bowen's concept of differentiation but measures Williamson's closely related concept of personal authority (Miller, Anderson, & Keala, 2004). The Chabot Emotional Differentiation Scale (CED) (Licht & Chabot, 2006) takes a different approach by measuring an individual's ability to think while under emotional stress. Chabot claims that "although Bowen (1978) described both interpersonal and intrapsychic aspects of differentiation, a strict reading of his (1978) work indicates that the essence of his theory lies in its intrapsychic rather than the interpersonal component of his work" (p. 177). While other measures attempt to measure differentiation in terms of definition as a unique psychological self from family, the CED focuses on the physiological ability to engage the thinking system over the emotional system in what Chabot calls intrapsychic differentiation. That is, how much an individual can think clearly in an emotionally charged situation, a concept that may be more portable across ethic boundaries. Subsequent validity studies have found the CED to be portable across ethnic boundaries (Karasik, p. 2004; Reynolds & Chabot, 2006). Chabot writes that "Although interpersonal measures of differentiation are unable to appropriately characterize development in non-Western cultures, identity development is considered a universal process that should be validly measured using measures of intrapsychic differentiation" (p. 175).

A relatively unique concept of Bowen Theory is the consideration of genetic inheritance through the multigenerational transmission process (Bowen, 1978; Kerr & Bowen, 1988). Klever (2005) conducted a longitudinal study that uses the Nuclear Family Functioning Scale (NFFS) to measure nuclear family functioning, and the Multigenerational Family Functioning Questionnaire (MFFQ) to assess "preponderance and severity of symptoms" (p. 258) across each generation by questioning each member of the family about all symptoms in all other members of the family. It has been found in the Kansas City, Missouri sample that "in a correlation analysis of the first five years of this twenty-year study, multigenerational functioning, especially nuclear family of origin functioning, was associated with nuclear family functioning" (p. 253). In other words, symptomology of the multigenerational unit was passed on to the current generational unit.

Cultural Portability of Differentiation of Self

Because Bowen aimed to define behavioral systems universal to all life, it is important for research to challenge the validity of differentiation of self across ethnic and cultural boundaries. Unfortunately, research in this area is limited or confusing. Skowron & Friedlander (1998) have

called for cross-cultural validation of the DSI, and there have been several variants which show some validity and temporal reliability but tend to require further verification with more representative samples.

The DSI-R was translated into the DSI-T for use in Turkey and found reliable but with some differences to Western populations (Isik & Bulduk, 2015). While Turkish culture is traditionally considered collectivistic, the country is in economic transition and shows aspects of individualism and collectivism in family structures. Families tend toward individualism as socioeconomic status increases, but overall tend to value emotional interdependence but economic independence. Despite this difference, one qualitative study on MFT training in Turkey revealed that students found the family systems-oriented training to be highly applicable to their collectivistic upbringing (Guvensel, Dixon, Parker, McDonald, & O'Hara, 2015).

Some items from the DSI-R were excluded from the DSI-T for lack of a proper translation, for example one which used the term "emotional roller-coaster" (p. 109), where there is no equivalent term for "roller-coaster" in the Turkish culture. Differentiation levels in Turkish sample were about the same as US samples, while internal validity was the same as non-English-speaking countries but lower than US samples. Gender differences were the same as in US samples, which showed women being more emotionally involved in relationships than men and found it more difficult to take an "I" position. The convenience sample used was of middle and higher socioeconomic statuses which tend to be more similar to US samples in individualism (Isik & Bulduk, 2015).

The DSI was translated directly into Hebrew for use in Israeli populations (Peleg-Popko, 2002). The Hebrew vision was found to be sensitive to somatization and psychological distress among a population of 20-year-old college students, with internal validity matching US samples. This 2002 study did not focus on cultural or ethnic differences in the population but focused on the portability of the translated instrument more or less as-is from the English version. The Hebrew version was then updated with the additions to the fusion scale in the DSI-R and tested to predict marital satisfaction in a randomized population sample (Peleg, 2008). A negative correlation was found between differentiation and somatic symptoms and social anxiety had a positive correlation with somatic symptoms, indicating that differentiation should be considered when examining the cause of somatic symptoms there. As with US samples, significant gender differences were found. Men were found to be more emotionally cutoff and women were found to have higher marital satisfaction, emotional reactivity, and fusion with others. Men's marital satisfaction increased over time while women's marital satisfaction decreased over time, and marital satisfaction overall was moderated by differentiation of self with a Pearson coefficient of .39. Little attention was paid to gender and cultural influences on the study, for example varying views on marital satisfaction or the social concept of marriage in general.

A Korean version of the DSI-R was used to compare differentiation of self and family functioning across three cultural groups (Kim, et al., 2015). Korean families have particular cultural tendencies in family relationships which indicate poor differentiation from the perspective of Bowen

theory but that are viewed as favorable in Korean culture. For example, sons usually have very close relationships with their mother. A daughter-in-law feeling pressured and controlled by the mother with then have conflict with her husband, the son. One previous study using the DSI-R had shown a positive correlation between differentiation and family functioning in South Koreans (Chung & Gale, 2009). The new Korean instrument (Kim, et al., 2015) was first confirmed using multigroup confirmatory analysis to ensure that the instrument itself was stable across language and ethnic barriers. It was then administered to three groups: South Koreans living in South Korea, South Koreans living in the United States, and White Americans living in the United States. Higher differentiation of self was found as a significant predictor of family functioning, family communication, and family satisfaction in all groups. Further, these correlations were stable however long the South Koreans had lived in the United States. One interesting finding of this study was that South Koreans who had moved to the United States had higher family satisfaction than both of the other two groups. Kim et al. (2015) write, "although more corroborating research is necessary, these results suggest that BFST's concept of di?erentiation of self, family communication, and family satisfaction can all be used reliably by family researchers and family therapists as culturally respectful indicators of healthy family functioning" (p. 81).

Overall, the South Korean groups had higher differentiation and higher family satisfaction than the US group. Bowen wrote that less differentiated people were more reactive to family requests for individuality or togetherness (Bowen, 1978). The finding that South Koreans can be more differentiated and happier with their family suggests that higher differentiation cannot simply be equated to higher individualism, which is consistent with Bowen & Kerr's (1988) reminder that differentiation as a general biological concept and differentiation of self as a human concept operate at a level below than culture.

The DSI-R was translated to be culturally-sensitive to Chinese populations (Lam & Chan-So, 2015). The C-DSI is the first instrument for measuring emotional maturity for Chinese people and was tested for external validity using the General Contentment Scale which is a well-established tool in Hong Kong. This translation was carried out in similar fashion to the Turkish and Korean instruments, with a graduate student translating to the native language and an English-speaking person back-translating it to English before revisions. The C-DSI was found to be valid in the small and mostly female student population, but it revealed inconsistencies in some of the items which could be improved through qualitative research to find items more appropriate for indigenous populations. The study also found a potential division in the fusion subscale between "fusion with others" and "fusion with families" (p. 95), a result echoed in a study in Philippine communities (Tuason & Friedlander, 2000). This same C-DSI study points to a need for further validation studies in China as well as in within the varying communities within China.

Barriers to Cross-Cultural Portability of Differentiation of Self

Though the efforts listed above pertain to porting the DSI-R to non-Western cultures, common theoretical misunderstandings can create barriers for cross-cultural assessment of the construct.

Differentiation is often conflated with psychological variables, which disconnects the term from its original biological context. Differentiation of self represents a flexible integration, or "dynamic equilibrium" (Kerr & Bowen, 1988, p. 65) between the poles of the individuality and togetherness life forces. One marker of confusion of the construct is the association with sociocultural tendencies such as divides individualistic and collectivistic cultures, despite the fact that the differentiation of self was created to describe a process that operates at a level below culture.

An example study that confuses the concept measured the portability of "family differentiation" in Italian and British adolescents in transition (Manzi, Vignoles, Regalia, & Scabini, 2006). The authors defined family differentiation as the two distinct constructs of "cohesion" and "enmeshment" (p. 673) which can easily be mistaken for Bowen's differentiation of self but are actually incomparable. "Enmeshment" is a common psychological term which most closely resembles Bowen's concept of emotional fusion, a term which opposes Bowen's definition of differentiation. A subsequent study (Lam & Chan-So, 2015) made the incorrect equation of Manzi et al's (2006) "family differentiation" with Bowen's differentiation, resulting in the questionable assumption that Bowen's construct is not valid in Italy. This assumption contradicts Reynolds & Chabot's (2004) study on intrapsychic differentiation (i.e. unconscious emotional reactivity) in Italian families using the relatively portable CED instrument. Another cross-cultural study by Hung (2006) on Asian American families lumps "individuation" and Bowen's "differentiation" into the same concept (pp. 226-227). While not actually affecting the outcome of their own study, the authors left the door open to subsequent reviewers making the incorrect assumption that differentiation of self is not valid among Asian American families.

Because current measures of differentiation originate in Western and mostly American society, it will be important to validate them in other, particularly collectivist cultures. However, measuring differentiation of self using interpersonal and socio-cultural variables and ignoring physiological, intrapsychic variables that contribute to the ability to choose between thinking and feeling as anxiety rises in the group (Kerr & Bowen, 1988) can cause confusion on the meaning of the concept. Therefore, in the future it may be more fruitful to adhere strictly to the original biological basis for differentiation when authoring new instruments intended to work across cultural boundaries. There also appears to be a common pattern of confusing differentiation of self with related but dissimilar concepts, which in some cases can skew the understanding of subsequent reviewers.

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