

EXPLORING THE USEFULNESS OF THE HAND TEST IN ASSESSING MARITAL
SATISFACTION

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Abstract

Marital counseling is one of the most sought after forms of psychotherapy. Professionals in this field express a need for a brief marital satisfaction questionnaire as part of their assessment battery. This study explores the usefulness of a projective technique, known as the Hand Test, in assessing marital satisfaction. The Hand Test demonstrates sound psychometric properties in categorizing human behavior as socially adaptive or maladaptive, but has never been used to assess marital satisfaction. The author hypothesized that the more adaptive, constructive responses a participant provided on the Hand Test, the higher that person would score on a marital satisfaction questionnaire. The researcher also explored the inverse, whether or not as maladaptive responses increased, respective marital satisfaction scores decreased. A total of 12 legally married couples residing in the Pacific Northwest participated in the study. Participants completed the Hand Test, Prepare Enrich Marital Satisfaction Questionnaire (EMS), as well as a brief demographic questionnaire created by the author. The author used a simple linear regression to determine whether the Hand Test could predict marital satisfaction when paired with the EMS. The author failed to find the hypotheses supported $F(1,18) = .053, p > .05. R^2 = .003$; possible explanations for these results include a small sample size leading to low power. Despite a lack of statistical significance, the author explored alternatives and advantages to using the Hand Test with married couples, as well as other exploratory statistics. Future directions include replicating the present study with a larger, more diverse sample to determine whether or not low power impacted the present study.

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Chapter One: Introduction to Marital Satisfaction

Bradbury, Fincham, and Beach (2008) reported that at any point in time nearly 20 percent of couples find themselves in distress. Marital issues rank among the chief complaints for persons seeking counseling (Bradbury, Johnson, Lawrence, & Rogge, 1998; Veroff, Kulka, & Douvan, 1981). Couples in the United States tend to wait an additional six years from the first signs of marital distress before seeking counseling (Bradbury et al., 1998; Gottman & Gottman, 1999). The emotional turmoil at this stage is often too extensive for repair (Bradbury et al., 1998; Gottman & Gottman, 1999). Researchers identified a need for brief behavioral assessments to assess urgently struggling marriages (Bradbury et al., 1998). Clinical assessments (or tests) provide therapists with a snapshot of current levels of marital satisfaction in a given marriage, as well as supplement the therapeutic process (Bradbury et al., 1998). However, to understand the assessments most useful in identifying levels of marital satisfaction, we must review the evolution of marital satisfaction and its role in couples and marital counseling.

The clinical presentation of marital satisfaction is known to vary between couples (Bradbury et al., 1998; Gurman, 2008). Previous forms of marital therapy have been described in many unflattering ways (Gottman & Gottman, 1999; Gurman, 2008). Methods of understanding and/or improving marital satisfaction span decades of literature (Gurman, 2008). Early approaches to marital counseling stem from theories of individual psychotherapy (Dalglish et al., 2015; Gottman & Krokoff, 1989; Gurman, 2008). More modern approaches to marital counseling view the marriage as the patient, not the individuals. Although there is no debating that individual behavior can impact a

relationship (Buehlman, Gottman, & Katz, 1992; Gurman, 2008; Krokoff, 1985; Satir, 1964). Past experiences shape peoples' behavior and their perceptions of the world (Gottman & Krokoff, 1989; Gurman, 2008). It is therefore unsurprising that psychodynamic theories have contributed greatly to the evolution of marriage counseling (Gurman, 2008). Gottman Method Couples Therapy (GMCT) poured over psychodynamic theory in order to understand family of origin issues, as well as other germane relationships playing out in the present (Gottman & Gottman, 1999). Helping professionals began factoring the role of formative events and the stories people construct about their lives (Buehlman et al., 1992; Hall, 2006; Satir, 1964). Such narratives are thought to begin during childhood and carry meaning about distinct traumas or other strong emotions (Buehlman et al., 1992; Gurman, 2008; Hall, 2006; Satir, 1964; Wyatt, 1999). Commonly, personal narratives and their dynamics come to life in our romantic relationships and can become a primary source of conflict (Buehlman et al., 1992; Gurman, 2008; Hall, 2006; Satir, 1964; Wyatt, 1999).

Marriage counseling prompts couples to think beyond their recurring conflicts in order to explore how their interactions might maintain or exacerbate relational and family issues (Gurman, 2008). Behavior theory is another example of an individual counseling theory adapted for couples (Gottman, Markman, & Notarius, 1977; Gurman, 2008; Weiss, 1975; Weiss, 1980). Empirical evidence suggested that the most effecticious change is communicating about problem behaviors rather than trying to change the perception of a person (Gottman & Porterfield, 1981; Gottman et al., 1976; Gurman, 2008; Wyatt, 1999). Murstein, Cerreto, and MacDonald (1977) held a unique interest in the behavior of couples. The researchers labeled a phenomenon known as accounting

behaviors that were a common trait among struggling couples (Murstein et al., 1977). The implication was that when couples were functioning well they were not as focused on their partner's behavior (Anderson, Guerrero, & Jones, 2006; Murstein et al., 1977). Murstein et al. (1977) also noticed that when issue occurred within a healthy relationship, those couples had methods in place to remedy the situation. Researchers have since shifted their conception of conflict within a marriage. The goal is never to absolve the relationship of conflict, but to refine the way one approaches conflict. Moreover help couples establish behaviors to help navigate the individual and the marriage through challenging times (Gottman & Krokoff, 1989; Wile, 1981; Wile, 1993). Although there is expansive knowledge and literature on marital counseling and assessment, only literature in the realms of conflict resolution and communication are reviewed below. The author narrowed the focus of this study to how conflict resolution and communication can be assessed using the Hand Test.

Conflict Resolution

Conflict is a common feature of marriage (Bradbury, Fincham, & Beach, 2000). The way that conflict is conceptualized and managed in couples' therapy has transformed momentarily over the past few decades (Gurman, 2008). Clinicians once favored inviting conflict and anger into couples' therapy. Therapists once coached couples to openly voice their distress and disappointment towards one another with few groundrules (Bach & Wyden, 1968). The authors even introduced foam bats into couples' therapy sessions and allowed partners to strike one another during conflict discussions (Bach & Wyden, 1968). Their reasoning was that when partners vented their anger towards one another it was like restoring balance in the marriage (Bach & Wyden, 1968).

Interestingly, Gottman and Krokoff (1989) found some support for this theory. The researchers found in one study that when married women found opportunities to express their anger during conflicts, marital satisfaction tended to improve over time (Gottman & Krokoff, 1989). The same could not be confirmed for married men in the study (Gottman & Krokoff, 1989). In fact, married men presenting as defensive, stubborn, or withdrawn during conflicts were more likely to experience marital dissatisfaction over time (Gottman & Krokoff, 1989). Gottman and Silver (1995) later categorized such traits the Four Horsemen of the Apocalypse (i.e. criticism, defensiveness, contempt, and stonewalling) due to their overwhelming ability to predict divorce in marriages where they were present.

Therapists today choose counseling methods geared towards improved relational health and communication (Carrere & Gottman, 1999; Gurman, 2008; Haley, 1976; Shands, 1978; Sluzki & Ransom, 1976). Moving couples towards health involved reimagining the mission of marital therapy (Gurman, 2008). Couples counseling was once dominated by behavioral psychology. The approach was pragmatic; therapy was centered on providing couples with tools to improve their problem solving (Gurman, 2008). The therapist also provided psychoeducation to help couples understand the rationale behind implementing these new skills (Gurman, 2008). Behavioral couples therapy later expanded its scope as it taught couples to focus on the self as well as the partner in order to enhance overall satisfaction, acceptance, and understanding (Christensen, Jacobson, & Babcock, 1995; Gottman & Gottman, 1999; Gurman, 2008). The idea was that greater self-understanding would prompt insight into behavioral

tendencies that perpetuate conflicts (Christensen, Jacobson, & Babcock, 1995; Gottman & Gottman, 1999; Gurman, 2008).

American psychiatrist Murray Bowen (1974a) proposed there were varying levels of maturity in a relationship. The author examined relationships, addressing anxiety and other complex behaviors that cause distress (Bowen, 1993; Bowen, 1974 a; Bowen, 1974b). Bowen developed Systems Theory and in an oversimplified example of systems therapy, a couple and therapist might work together to maintain the vital aspects of ones personhood whilst remaining connected to the world of their loved ones (Bowen, 1993; Bowen, 1974a; Bowen, 1974b; Gottman, 1979). Years later another researcher, Dr. John Gottman, found that negative affect and reciprocity could distinguish satisfied from unsatisfied couples (Gottman 1982; 1979). Gottman credited Bowen's research on emotional awareness and regulation as a marked development in the examination of marital satisfaction (Bowen, 1993; Bowen, 1974a; Bowen, 1974b; Gottman, 1982; Gottman, 1979; Gurman, 2008).

Dr. John Gottman and Dr. Julie Schwartz Gottman (1999) continued the development of marital satisfaction research with their unique approach to couples therapy. Gottman Method Couples Therapy (GMCT) is a comprehensive approach that synthesizes research from affective, behavioral, cognitive, existential, and psychodynamic schools of thought (Gottman & Notarius, 2000; Gottman & Gottman, 1999; Gottman & Krokoff, 1989). GMCT educates couples on how to create a safe relationship by restoring mutual respect, intimacy, friendship, love, and positive affect (Gottman & Silver, 1995). The overarching goal of GMCT is to help couples gain awareness of the emotions and negative interactional patterns brought into the

relationship (Gottman & Gottman, 1999; Levenson & Gottman, 1985). For instance, couples are educated on how to replace any of the Four Horsemen present in the relationship with their antidotes: complaining without blame, taking responsibility, building a culture of appreciation, and implementing self-soothing (Gottman & Silver, 1995). The antidotes are thought to assist couples in carrying out conflict discussions in a manner that preserves the integrity of the relationship (Gottman & Silver, 1995). The goal of therapy is not to eliminate conflict, as all couples come with their own perpetual issues (Gottman & Silver, 1995). The focus instead is to help couples talk constructively about their issues while maintaining intimacy, interest, and respect (Gottman, 1976; Gottman, 1993a; Gottman, 1993b; Gottman & Krokoff, 1989; Gottman & Silver, 1995). When tempers inevitably flare, however, its not necessarily the end. Bakeman and Gottman (1997) identified that angry exchanges were present in satisfied marriages as often as in unsatisfied marriages. The actual predictor of divorce was the escalation of anger and negativity (Bakeman & Gottman, 1997). Indices of marital satisfaction may change depending on the theoretical orientation of the therapist. However, most professionals seem in agreement that the ability to engage in difficult conversations while maintaining safety, respect, acceptance, and admiration for one's partner is paramount (Gottman & Gottman, 1999; Gottman & Notarius, 2000; Gottman & Silver, 1995). If married couples engage in conflict discussions within these parameters, their marital satisfaction is likely to increase over time (Gottman & Gottman, 1999; Gottman & Notarius, 2000; Gottman & Silver, 1995).

Communication

Communication issues remain one of the largest reasons why couples seek counseling (Geiss & O’Leary, 1981; Gurman, 2008; Whisman, Dixon, & Johnson, 1997). Researchers confirmed that how couples communicate and how they view their communication impacts the course of their relationship and the satisfaction within their marriage (Amatea & Fabrick, 1981; Houser, Konstam, & Ham, 1990; Moffit, Spence, & Goldney, 1986; Satir, 1964). Houck and Daniel (1994) found that couples were mostly satisfied with their communication, although women tended to rate the quality of the communication lower than their respective partner. These findings upheld research from decades prior asserting that the wider the discrepancy between how spouses view their communication the more likely that relationship is to fail (Houck & Daniel, 1994; Satir, 1964).

Understanding the relationship between communication and marital satisfaction stemmed from the work of two systems theorists. Lederer and Jackson (1968) premised that successful relationships involved constant reciprocation of positive behaviors. The authors organized therapy around the creation of a contract between partners that more positive behaviors would be exchanged (Lederer & Jackson, 1968). Lederer and Jackson (1968) thought that if couples agreed to exchange more positive behaviors than negative, their disagreements would eventually dissipate. Unfortunately, this was not always the case and failed to address the deeper causes of marital dissatisfaction (Lederer & Jackson, 1968). The idea of reciprocity, however, remained a prominent topic of psychological literature (Caughlin & Huston, 2002; Fincham, 2003; Gottman, 1979; Gottman, 1980; Gottman, 1982; Gottman & Krokoff, 1989; Gottman & Porterfield, 1981).

In terms of reciprocating behavior, decades of research led Dr. John Gottman to identify two couple types: (1) those that manage their disagreements, maintain affection and humor while discussing them, and soothe one another while deescalating the conflict, and (2) couples that fixate on their issues (Gottman, 1976; Gottman, 1979; Gottman, 1980; Gottman, 1993a; Gottman & Gottman, 1999; Gottman & Krokoff, 1989; Gottman & Silver, 1995; Gottman et al., 1977). Couples therapy is a unique experience; in marital therapy both partners are present and conversation can easily escalate (Gottman, 1998). When a partner feels attacked in or outside of therapy, their partner often feels similarly (Gottman & Notarius, 2000; Gottman, 1998). Gottman (1993) later discovered through his research that empathy and effective communication involves partners experiencing and then finding ways to soothe each other's pain.

Considering what matters in a relationship, it appears The Hand Test (a projective technique) might be useful in assessing conflict and communication issues within a marriage. The Hand Test possesses specific scoring protocol for communication tendencies (Wagner, 1962). The instrument also significantly differentiated constructive communicators from those whose communication styles might hurt, intimidate, or criticize others (Wagner, 1962). Alternatively, the Hand Test could indicate levels of warmth, empathy, and constructiveness when administered to married couples. It is reasonable, therefore, to address a research gap that has left married couples out of the Hand Test literature.

The Hand Test

Humans and other mammals are known to contrast in hand and brain development (Bricklin, Piotrowski, & Wagner, 1962; Marzke & Shackley, 1986; Lewis, 1977; Napier,

1965). The evolutionary process contributed to the development of human intelligence, behavior, and motor functioning (Bricklin et al., 1962; Marzke & Shackley, 1986; Napier, 1965). Humans therefore are thought to have developed the usefulness of their hands from sources of mobility to mechanisms of function and expression (Bricklin et al., 1962; Marzke & Shackley, 1986; Lewis, 1977; Napier, 1965). Discovering the connection between human hands and behavior held profound implications for psychological research (Bricklin et al., 1962). It became possible to assume that the way one uses their hands reflects their emotional and behavioral tendencies (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983). Bricklin et al. (1962) therefore designed a projective assessment centered on the human hands in order to advance the literature on human adjustment and behavioral inclination.

Edwin E. Wagner, PhD. and colleagues (1962) developed the Hand Test in order to assess human behavioral inclinations; specifically acting out and aggressive behavior. The authors emphasized that the Hand Test is a tool for understanding human behavioral trends and is not intended as a personality assessment (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983). The Hand Test is a brief and semi-structured instrument requiring approximately twelve to fifteen minutes for administering and scoring (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983). Assessment stimuli consists of ten cards shown in standardized succession to the subject (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983). Examinees then verbalize their associations to the examiner after viewing each card (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983). Participants are instructed to provide as many responses as possible for each card (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983). Nine test cards display hands drawn in simple, various poses (Bricklin et

al., 1962; Wagner, 1962; Wagner, 1983). The final test card is left blank (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983). Here the subject is instructed to imagine and then describe a hand and what it might be doing (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983). In such, the participant has projected an association between external stimuli and their internal world (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983).

Three decades of researchers found the Hand Test to be a psychometrically sound instrument (McGiboney & Carter, 1982; Panek & Stoner, 1979; Sivec, 1994; Stoner & Lundquist, 1980; Waehler, Rasch, Sivec, & Hilsenroth, 1992; Wagner, 1983; Wagner, Maloney, & Wilson, 1981). The authors collected psychometric data in a variety of settings to support its efficacy (McGiboney & Carter, 1982; Panek & Stoner, 1979; Rand & Wagner, 1973; Sivec, 1994; Stoner & Lundquist, 1980; Waehler, Rasch, Sivec, & Hilsenroth, 1992; Wagner, 1983; Wagner, Maloney, & Wilson, 1981). Test populations have included: prison inmates, police officers, non-clinical, non acting-out psychiatric patients, child control groups, psychiatric inpatient adolescents, paroled recidivist and non-recidivist criminal offenders, patients with schizophrenia, epileptic persons and so forth (Bricklin et al., 1962; Clemence, Hilsenroth, Sivec, Rasch, & Waehler, 1998; Haramis & Wagner, 1980; Rand & Wagner, 1973; Sivec, 1994; Wagner & Hawkins, 1964). The Hand Test was found to be a valid and reliable tool in assessing action tendencies of participants within these populations (Bricklin et al., 1962). Studies have also supported the stability of participant responses across time in several settings, which will be explored later in this study (McGiboney & Carter, 1982; Panek & Stoner, 1979; Sivec, 1994; Wagner, 1983).

Scaling and scoring of the Hand Test. Hand Test results can be interpreted either quantitatively or qualitatively (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983). Classification of the responses are at the discretion of the test administrator (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983). Only quantitative responses are examined in the present study, meaning evidence for the hypotheses are inferred through measurement of two variables that produce numeric results (Field, 2013).

The Interpersonal Tendencies (INT) scoring category was designed to describe how an individual tends to interact with others. Each response indicating interpersonal interaction can be scored under one of the following categories:

- Affection (AFF); “Comforting hand of a friend”
- Dependence (DEP); “Asking for change”
- Communication (COM); “Talking with your hands”
- Exhibition (EXH); “Showing off an engagement ring”
- Direction (DIR); “Giving an order”
- Aggression (AGG); “Punching somebody in the face”

Additional categories have demonstrated how individuals tend to interact with their environment and whether or not they possess any maladaptive behavioral tendencies. In terms of how an individual interacts with the Environment (ENV), participant responses are categorized as either:

- Acquisition (ACQ); “Reaching for something”
- Active (ACT); “Throwing a ball”
- Passive (PAS); “Hand is resting on their lap”

Maladaptive tendencies (MAL) are classified as either:

- Tension (TEN); “A fist curled in anger”
- Crippled (CRIP); “The hand is all cut up”
- Fear (FEAR); “The hand is trembling”

These categories are indicative of behavioral tendencies that are detrimental to achieving shared goals (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983). Test developers also included a scale for responses that may indicate behavioral inclinations of Withdrawal (WITH) (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983). Such behaviors include: Description (DES), Bizarre (BIZ), and Failure (FAIL) responses (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983). DES responses have indicated a detached quality of interpersonal behavior (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983). For instance, reporting “That’s just a left hand.” BIZ responses is based on responses that indicate possible psychotic processes. An individual providing a BIZ response might fail to recognize the drawing as a hand and instead respond with: “That’s a black bug.” FAIL responses are purposed for failure to respond to test stimuli (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983; Wagner & Hawkins, 1964). The more participant responses reflect AFF, COM, and DEP the less likely that individual is seen to behave aggressively (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983; Wagner & Hawkins, 1964). These responses are viewed by the authors as more environmentally adaptive responses than DIR and AGG responses, or responses that fall within the MAL or WITH categories (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983; Wagner & Hawkins, 1964). Responses scored as AGG or DIR, however, tend to indicate a general disregard for cooperation and/or collaboration with others (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983; Wagner & Hawkins, 1964). Examples of an AGG response have included

a hand that is “slapping” or “punching” another person or object (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983; Wagner & Hawkins, 1964). A DIR response is exemplified as one that seems to influence another person, such as pointing out directions or conducting an orchestra (Wagner, 1983; Wagner, 1962; Bricklin, Piotrowski, & Wagner, 1962). DIR responses have also indicated that the individual views others more as objects than as human beings (Wagner, 1983; Wagner, 1962; Bricklin, Piotrowski, & Wagner, 1962).

The Acting Out Ratio (AOR) is computed to identify tendencies to act on feelings of aggression (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983). The ratio is calculated by subtraction of the sum of responses in the categories of FEAR, AFF, COM, and DEP from the sum of AGG and DIR responses (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983).

Future aggressive behavior. Bricklin et al. (1962) were especially concerned with whether or not a psychometric instrument could predict future aggressive behavior (Wagner, 1962). Bricklin et al. (1962) referred to aggressive behavior in the literature as acting-out. Acting-out was operationally defined as behavior that captured the attention of others (i.e. police, court, school authorities, guidance clinics psychiatrists, etc.) through means of aggressive behavior (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983). Since then the Hand Test demonstrated reliability in assessing a spectrum of behavioral tendencies ranging from adaptive (e.g., behavior conducive to interpersonal harmony) to maladaptive behavior (Bricklin et al., 1962; Wagner, 1962). The degree of maladaptive behavior is quantified within the assessment by what is known as the AOR (Bricklin et al., 1962; Wagner, 1962).

Several researchers have confirmed the effectiveness of AORs in predicting future aggressive behavior (Bricklin et al., 1962; Sivec, 1994; Wagner, 1962; Wagner, 1983; Wagner & Hawkins, 1964). Researchers noticed that as socially dominant responses began to outweigh those reflecting harmony and cooperation, individuals were more likely to behave in a destructive manner (Bricklin et al., 1962; Wagner, 1962; Wagner, 1983; Wagner & Hawkins, 1964). Bricklin et al. (1962) examined adults' average number of responses in each scoring category in both acting out populations (e.g., prison inmates and aggressive hospital patients) and non-acting-out populations (e.g., non-acting-out hospital patients and other adult clinical settings). The authors (1962) found that for acting-out populations the mean values of AGG and DIR responses were higher than the average number of responses found in the FEAR, AFF, COM, and DEP categories. Similarly, adult inmates and hospital patients with a history of aggressive behavior provided an average of 1.42 and 3.18 AGG responses. AFF responses for the same study averaged at .51 and 1.47 for inmates and hospital patients, respectively. Thus, their socially constructive responses were on average lower than their aggressive responses (Bricklin et al., 1962). AFF responses for the control group, however, averaged at 2.40 (Bricklin et al., 1962; Wagner, 1963; Wagner, 1983). AGG and DIR responses on average were higher for inmate and hospital populations in comparison to the number of responses from non-acting-out participants (Bricklin et al., 1962; Wagner, 1963; Wagner, 1983).

Current Research

Research involving the Hand Test has spanned four decades in countries around the world (Sivec, 1994). Current studies fail to explore the relationship between Hand

Test performance (e.g., behavioral inclinations) and marital satisfaction. A significant gap in literature appeared in determining the usefulness of the Hand Test in classifying non-clinical adult populations. To date, adults struggling with alcoholism are the closest population to married couples in terms of assessing behavioral tendencies (Haramis & Wagner, 1980). Haramis and Wagner (1980) successfully differentiated non-acting out from acting-out adult persons with alcoholism. Participants labeled as ‘acting-out’ patients shared similar traits of aggression and impulsiveness and demonstrated an overall lack of environmentally constructive responses. Haramis & Wagner (1980) believed this finding lended construct validity to the assessment and its usefulness in assessing adult behavioral tendencies.

The author of the present study seeks to determine whether or not the presence of acting-out traits may indicate a satisfactory or unsatisfactory marriage, as reported by those couples. The Hand Test thus far has demonstrated its usefulness in categorizing a range of behavioral functioning (Bricklin et al., 1962; Haramis & Wagner, 1980; Sivec, 1994; Wagner, 1963; Wagner, 1983). A notable literature gap has also emerged in terms of how similar projective techniques might support clinicians during the assessment phase of counseling (Fowers & Olsen, 1993). At the very least, the Hand Test could prove useful in identifying behavioral patterns amongst couples.

Rationale

Marriage and family issues are a prominent reason people seek mental health services (Bradbury, Johnson, Lawrence, & Rogge, 1998; Gurman, 2008; Veroff, Kulka, & Douvan, 1981). Mental health professionals are overwhelmed with couples reporting low levels of marital satisfaction (Gurman, 2008). Assessment of the identified patient

and presenting problem tends to be the first phase of any therapeutic encounter.

Unfortunately, many couples present to therapy after too much damage to the relationship has occurred (Bradbury et al., 1998; Gottman, 1998). Most marital assessments are of considerable length and require too much time for scoring and interpretation (Fowers & Olson, 1993; Spanier & Lewis, 1980). Distressed couples often lack the mental and physical energy required to complete such assessments (Bradbury et al., 1998). The purpose of the present study is therefore to address the need for a brief marital satisfaction assessment.

The Hand Test already demonstrated its usefulness in assessing behavioral tendencies in a variety of settings such as prisons, psychiatric hospitals, schools, rehabilitation facilities and so forth (Bricklin et al., 1962; Haramis & Wagner, 1988; Panek, Wagner, & Avolio, 1978; Sivec, 1994; Wagner, 1962; Wagner, 1978; Wagner & Hawkins, 1964). The impact of constructive and destructive behaviors on marital satisfaction, in particular, is well documented among researchers (Anderson, Guerrero, & Jones, 1996; Bradbury et al., 1998, p. 265; Caughlin & Huston, 2002; Fincham, 2003; Gottman, 1980; Gottman, 1993a; Gottman, 1993b; Gottman & Porterfield, 1981; Hicks & Diamond, 2008; Houck & Daniel, 1994; Levenson & Gottman, 1983; Patterson, 2012; Veroff, Kulka, & Douvan, 1981). The Hand Test and the ENRICH Marital Satisfaction Scale (EMS) are both brief, empirically sound assessments that help psychologists form a clinical picture of the marriage (Fowers & Olson, 1993; Wagner, 1962; Wagner, 1983).

Correlation between the Hand Test and marital satisfaction might pose marked implications for the assessment of marital satisfaction. The Hand Test may become a viable early intervention technique for ailing couples on the trajectory for divorce. The

effects of marital conflict, separation, and divorce on individuals and families are well documented in the literature (Bradbury et al., 1998; Caughlin & Huston, 2002; Fincham, 2003; Gottman, 1998; Levenson & Gottman, 1985; Patterson, 2012; Satir, 1964).

Whisman and Uebelacker (2006) reported that low marital satisfaction is often linked to poor physical health, as well as mood and substance use disorders. Couples reporting low marital satisfaction also tend to suffer in the work place and in other social relationships (Whisman & Uebelacker, 2006). Researchers therefore are calling for brief marital satisfaction assessments to expedite the therapeutic process so that couples can sooner enter the working phase of therapy (Bradbury et al., 1998).

Research Question and Hypotheses

The Hand Test is a potentially untapped resource for the assessment phase of marital counseling. The Hand Test has been utilized in a variety of clinical settings to promote better patient care (Haramis & Wagner, 1980; Rand & Wagner, 1973; Wagner, 1978; Wagner, 1983). The assessment differentiated potentially violent adults from non-violent adult patients in hospital and treatment settings (Haramis & Wagner, 1980; Wagner, 1978; Wagner, 1983). In addition, the Hand Test determined recidivism rates for prisoners in order to keep other prisoners and communities safe, as well as identified personality traits that contributed to better police officer performance (Bricklin et al., 1962; Wagner, 1978; Wagner, 1983). Given the research on the usefulness of the Hand Test it is reasonable to assume that the assessment can produce meaningful information regarding the behavioral tendencies of married couples. Psychologists administering the assessment can deduce potential problem areas in the relationship such as communication and personality issues including but not limited to passivity, hostility, and codependency

(Wagner, 1962; Wagner, 1978; Wagner, 1983). Mental health professionals can in turn incorporate these results into individualized treatment plans that address the unique needs of the marriage in order to enhance function and marital satisfaction. The more that couples work together to promote affection, emotional safety, and constructive communication the more marital satisfaction levels tend to rise (Gottman, 1976; Gottman, 1998; Gottman & Gottman, 1999; Gottman & Notarius, 2000; Gurman, 2008). If the below hypotheses are upheld, The Hand Test would be a brief, accessible option for clinicians in determining problematic behavioral tendencies present in a marriage.

Research question. Is the Hand Test an effective test to use for assessing marital satisfaction?

Hypotheses. 1) The higher the AFF, DEP, and COM score on the Hand Test the higher the EMS score for participants and 2) The higher the DIR and AGG score on the Hand Test the lower the EMS score for participants.

Chapter Two: Methods

This chapter explores the research design and methodology of the present study. The study is a non-experimental, correlational design. Correlational designs are intended to observe a potential relationship between two variables without interference (Field, 2013). In an experimental design, at least one variable is manipulated to determine its effect on another variable (Field, 2013). The present study aims to measure the relationship between two categorical variables at a single point in time to determine if any relationship exists. In this case, those variables include the Hand Test and marital satisfaction scores. The purpose of this research is to explore the usefulness of the Hand Test in assessing marital satisfaction. The research question for the proposed study is as follows: Is the Hand Test an effective test to use for assessing marital satisfaction? The author hypothesizes a two-directional relationship between Hand Test scores and the self-reported level of marital satisfaction. The rationale behind these hypotheses remains the overwhelming support from the literature that correlates the presence of affection, communication, and connection with successful marriages (Gottman, 1976; Gottman, 1998; Gottman, 2000; Greenberg & Johnson, 1988; Guerney, 1977; Gurman, 2008).

Participants

Participants for the study were legally married couples over the age of eighteen, currently living in the Pacific Northwest. Participants were recruited primarily through Facebook and word-of-mouth. Participants verified on a demographic questionnaire that they have not previously taken the Hand Test. This was in order to control for practice effects. Participants who completed the study were entered into a drawing for a \$50 Amazon gift card. Marital satisfaction responses were not available to couples at any

point during the study. Participants instead were provided referrals to local individual and couples counselors for the purposes of discussing any discomfort or concerns in their marriage that might have occurred during the course of the study. The author was not available to discuss specific marital concerns with participants, as this could have become a conflict of interest concern and/or increased risk of harm to participants.

Participants arranged a time to meet with the author in order to complete the (a) demographic questionnaire; (b) Hand Test; and (c) brief marital satisfaction assessment. Most couples spent thirty minutes to an hour with the author to complete the study. Couples completed their assessments individually with the author during their scheduled appointment time. This arrangement intended to ensure a valid correlation between current marital satisfaction and Hand Test performance.

Materials and Procedures

In order to determine the usefulness of the Hand Test in assessing marital satisfaction participants completed the demographic questionnaire (see Appendix A), Hand Test, and Prepare Enrich Marital Satisfaction questionnaire (see Appendix B). The aforementioned instruments were completed in the above stated order in-person with the researcher after an informed consent was signed, emailed, or received via postal mail from participants. Participants completed their assessments individually and not in the presence of their spouse. Couples were asked if there was a spouse who might like to take the Hand Test first. In case of a tie, the author brought die to roll to determine order. The spouse rolling the highest number would complete the Hand Test first. The die, however, were never used, as one partner was always willing to try the Hand Test first without objection from their spouse.

Demographic questionnaire. The demographic questionnaire (see Appendix A) consisted of seven questions created by the researcher. The first three questions were basic demographic information (e.g., age, gender, and place of residence). The following two questions concerned the participants' marriage (e.g., length of marriage and whether or not the marriage is legally recognized within their state of residence). The final two questions were qualifying in nature and inquired as to whether or not participants have ever taken the Hand Test and ENRICH Marital Satisfaction (EMS) Scale (Fowers & Olson, 1993; Wagner, 1962).

The Hand Test. The Hand Test is a brief, projective assessment designed to assess individual behavioral tendencies. The assessment consists of ten cards shown in standardized succession to the participant (Wagner, 1962). Examinees verbalize their associations to the examiner after viewing each card (Bricklin et al., 1962; Wagner, 1962). Participants were instructed to provide as many responses as possible for each card. Nine test cards display hands drawn in simple, various poses (Wagner, 1962; Wagner, 1983). The final test card is left blank. Participants were instructed at this card to imagine and then describe a hand and what it might be doing (Wagner, 1962; Wagner, 1983). In such, the participant has projected an association between the external stimuli (e.g., the card) and their internal world (Wagner, 1962; Wagner, 1983).

Reliability. The Hand Test is reliable in assessing a spectrum of behavioral tendencies ranging from adaptive and maladaptive behavior in a variety of testing populations (Bricklin et al., 1962; Wagner, 1962). The Hand Test has been effective in differentiating between various criterion groups among normal examinees, normal versus clinical examinees, and mixed clinical populations (Campos, 1968; Daniel & Wagner,

1982; Maloney, Deitchman, & Wagner, 1982; Rush, Phillips, & Panek, 1978; Sivec, 1994; Wagner, 1981; Wagner, 1982). However, few reliability studies exist on the assessment (Wagner, 1978). According to Wagner (1978), the existing studies demonstrated satisfactory psychometric properties. The Hand Test manual reports interscorer reliabilities from .71 to 1.00 with a median of .91 (Maloney & Wagner, 1979; Wagner, 1978). Split-half reliabilities from .84 to .85 were calculated, as well as interscorer agreement percentages on all categories that ranged from 78% to 83% (Wagner, 1978).

Test variables have remained stable when taken in intervals for different age groups (McGiboney & Carter, 1982; Panek & Stoner, 1979; Sivec, 1994; Wagner, 1983). Test-retest correlations have ranged from .33 to .89 with a median of .65 and were considered adequate indications of stability over a test-retest period of 1 to 10 years (Panek & Stoner, 1979; Wagner, Maloney, & Wilson, 1981; Wagner, 1981). Researchers have also found strong interrater reliability for the Hand Test (Wagner, 1981; Wagner et al., 1981). Weiner (1991) advised that researchers achieve an adequate amount (80% or better) of interrater reliability for psychological assessments. Wagner et al. (1981) met this requirement in a study involving graduate student participants. The students scored 100 Hand Test protocols using the test manual as an aid for scoring. Interscorer agreement was defined in this study as exact agreement on any of the 15 quantitative scoring subcategories for all examinees (Wagner, 1981). Agreement between the scorers was significant in that scorers 1 and 2 agreed 80% of the time, scorers 1 and 3 agreed 78%, and scorers 2 and 3 83% of the time (Wagner, 1981). When disagreements arose

between the scorers, the discrepancies occurred more within scoring categories rather than between (Wagner, 1962).

Prepare Enrich Marital Satisfaction Questionnaire. The ENRICH Marital Satisfaction Scale is a 15-item Marital Satisfaction (EMS) Scale (Fowers & Olson, 1993). The instrument assesses several areas associated with marital satisfaction such as, relationship issues, communication, and happiness (Fowers & Olson, 1993). The EMS was designed to be used as a brief, valid and reliable measure of marital satisfaction (Fowers & Olson, 1993). Ten items assess different domains of marital quality (Fowers & Olson, 1993). Only two of these measures (communication and conflict resolution) will be examined in the present study due to overlap with domains measured by the Hand Test. The remaining five items on the EMS are implanted to correct for the tendency to present overly positive descriptions of the marriage (Fowers & Olson, 1993).

Reliability and validity of the ENRICH Marital Satisfaction Scale. Fowers and Olson (1993) reported strong psychometric properties of the EMS with Cronbach's alpha of .86 for internal reliability (Fowers & Olson, 1993). The authors (1993) tested 115 participants over a four week period for a reliability coefficient of .86. Item-total correlations examined the extent to which the items form a unified scale (Fowers & Olson, 1993). The researchers found acceptable results for the scale items ranging from .52 to .82 (Fowers & Olson, 1993). Male participants scored here an average of .65 and women .68 (Fowers & Olson, 1993). Olson, McCubbin, Barnes, Larsen, Muxen, and Wilson (1989) examined concurrent validity of the EMS scale in a nation-wide study of 1,200 couples. A correlation of .81 was found with the Locke-Wallace Marital Adjustment Test (MAT) when using couple scores (Fowers & Olson, 1993; Locke &

Wallace, 1959; Olson et al., 1989). Olson et al. (1989) also examined construct validity for the EMS and found correlations of .71 with the Family Satisfaction Scale (Fowers & Olson, 1993). The same study analyzed cross-sectional variations in marital satisfaction across the family lifespan (Fowers & Olson, 1993; Olson et al., 1989). Researchers typically find that marital satisfaction follows a U-shaped curve in which couples experience the highest levels of satisfaction before children are born and after they leave the home (Fowers & Olson, 1993; Olson et al., 1989). Olson et al. (1989) found support for this pattern for both the EMS Scale and the MAT in terms of construct validity (Fowers & Olson, 1989). EMS Scale items demonstrated suitable correlations ranging between .50 and .80 with their corresponding 10-item content scales from the broader ENRICH Inventory measure of marital satisfaction (Fowers & Olson, 1993). Fowers & Olson (1993) maintained that the results suggest an appropriate sampling of the imperative domains for measuring marital satisfaction.

Scaling and scoring of the ENRICH Marital Satisfaction Scale. The EMS measure was designed to research the couple as the unit of analysis (Fowers & Olson, 1993; Thompson & Walker, 1982). Although taken individually, dyadic test results are derived during scoring by combining individual marital satisfaction scores (Fowers & Olson, 1993; Thompson & Walker, 1982). For the present study, however, only individual raw marital satisfaction scores were considered. Participants responded to 15-items on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Test items include statements involving marital satisfaction such as, “I am very happy about how we make decisions and resolve conflicts” to “I have some needs that are not being met by our relationship.” (Fowers & Olson, 1993). Test creators implemented five

possible levels of marital satisfaction. Those levels are titled “Very low”, “Low”, “Moderate”, “High”, and “Very High”. An individual’s raw marital satisfaction score determined their current level of marital satisfaction. Mean and scoring levels were determined by a national sample of 50,000 married couples who had taken the EMS (Olson, Olson Sigg, & Larson, 2008).

In this study, raw marital satisfaction scores were considered, as well as, their standing as either a “Very Low” or “High” satisfaction couple. The categorization transformed raw marriage scores into categorical variables, as based on their raw score they were placed into distinct categories. Raw scores ranging from 10-22 on the EMS were categorized as “Very Low” satisfaction. Raw scores ranging from 23-28 are considered “Low” satisfaction marriages. “Moderate” satisfaction scores ranged from 29-36. “High” satisfaction marriages ranged from 37-40. “Very High” satisfaction couples achieved a raw marital satisfaction score ranging from 41-50. Transforming the data in this manner facilitated data analysis in determining whether or not the Hand Test can predict level of marital satisfaction.

Summary

Three items including a brief demographic questionnaire, The Hand Test, and the Prepare ENRICH Marital Satisfaction Questionnaire were administered to married couples over the age of eighteen living in the Pacific Northwest to determine whether or not the Hand Test is a suitable indicator of marital satisfaction. The Hand Test possesses several response scoring categories that seemingly overlap with realms of marriage that are known to correspond to marital satisfaction (i.e. affection, communication, sexuality and so forth). Therefore it was proposed that Hand Test performance would correspond to

self-reported levels of marital satisfaction. If these findings are valid, professionals might find it useful to include the Hand Test as part of an assessment battery for married couples.

Chapter Three

Data Analysis

Twelve couples (24 individuals) participated in the study. All participants produced scoreable responses. The researcher experienced zero attrition in the study. The aim of the study was to determine whether or not Hand Test performance (i.e., AOS) would predict participants' marital satisfaction (i.e., EMS score). The researcher used a linear regression equation to explore any possible relationship between the two variables. A simple Pearson correlation was also conducted to assess interrater reliability with Hand scoring. Additional exploratory analyses taught more about the sample population.

Findings

Descriptive statistics. Participants on average scored a 38.5 with ranging from 37.48-39.52 on the EMS. It is of note that our mean was significantly higher than the EMS scoring protocol mean of 33. The EMS scoring mean was based on a national sample of 50,000 married couples living in the United States (Olson et al., 2008). Participants of the present study achieved individual, raw marital satisfaction scores ranging from 21-50 out of 50. The researcher categorized marriages using the individual raw scores of each spouse in accordance with EMS scoring protocol. The researcher found that 45 percent of participants fell within the "Very High" category of marital satisfaction. EMS authors describe these couples as "very satisfied" and pleased with the relationship (Olson et al., 2008, p. 3). 10 percent of couples fell within the "High" category of marital satisfaction. These couples are described as satisfied with their relationship, enjoying most aspects of their relationship (Olson et al., 2008, p. 3). 35 percent of the participants experience a "Moderate" level of marital satisfaction. These couples were described as "somewhat satisfied" with their marriage (Olson et al., 2008,

p. 3). Five percent of individuals reported a “Low” level of marital satisfaction, meaning they were somewhat dissatisfied and concerned about their marriage (Olson et al., 2008). Another five percent of participants reported a “Very Low” marital satisfaction level where they feel “very dissatisfied” and troubled about their marriage (Olson et al., 2008, p. 3).

80 percent of participants fell within the same EMS category as their spouse (e.g., either partners “Very High” or both “Moderate”). 50 percent of these couples were matched at the “Very High” level. 12 percent matched at the “High” level and 38 percent at the “Moderate” level of marital satisfaction. Interestingly, of the two couples that failed to match in terms of marital satisfaction, one spouse fell within the “Low” or the “Very Low” level of satisfaction, while their partner scored significantly above. Both of the aforementioned couples were married less than five years.

In addition to length of marriage, the researcher performed additional exploratory analyses. Length of marriage among participants ranged from three months to 34 years. With participants combined length of marriage averaging 12 years. Spouses and individuals reporting a “Very High” level of marital satisfaction, however, were married less than six years, perhaps indicating a “honeymoon effect.” The researcher also discovered that husbands experienced a 4:1 ratio of higher satisfaction compared to their spouse. This finding was consistent with existing literature that women report lower satisfaction levels on average.

Inferential statistics. The researcher and a second scorer determined the whole number Hand Test scores. Hand Test scores calculated by the autor were those used in the linear regression equation. Interrater reliability between the researcher and second

scorer will be explored later in this section. Whole number EMS scores were also collected to be used in a simple linear regression. The EMS scores of each spouse was correlated with their Hand Test whole number score. The researcher, however, failed to find a significant regression equation. $F(1,18) = .053, p > .05, R^2 = .003$. Hand Test performance was not a significant predictor of marital satisfaction among the participants, $p = .82, r = .054$.

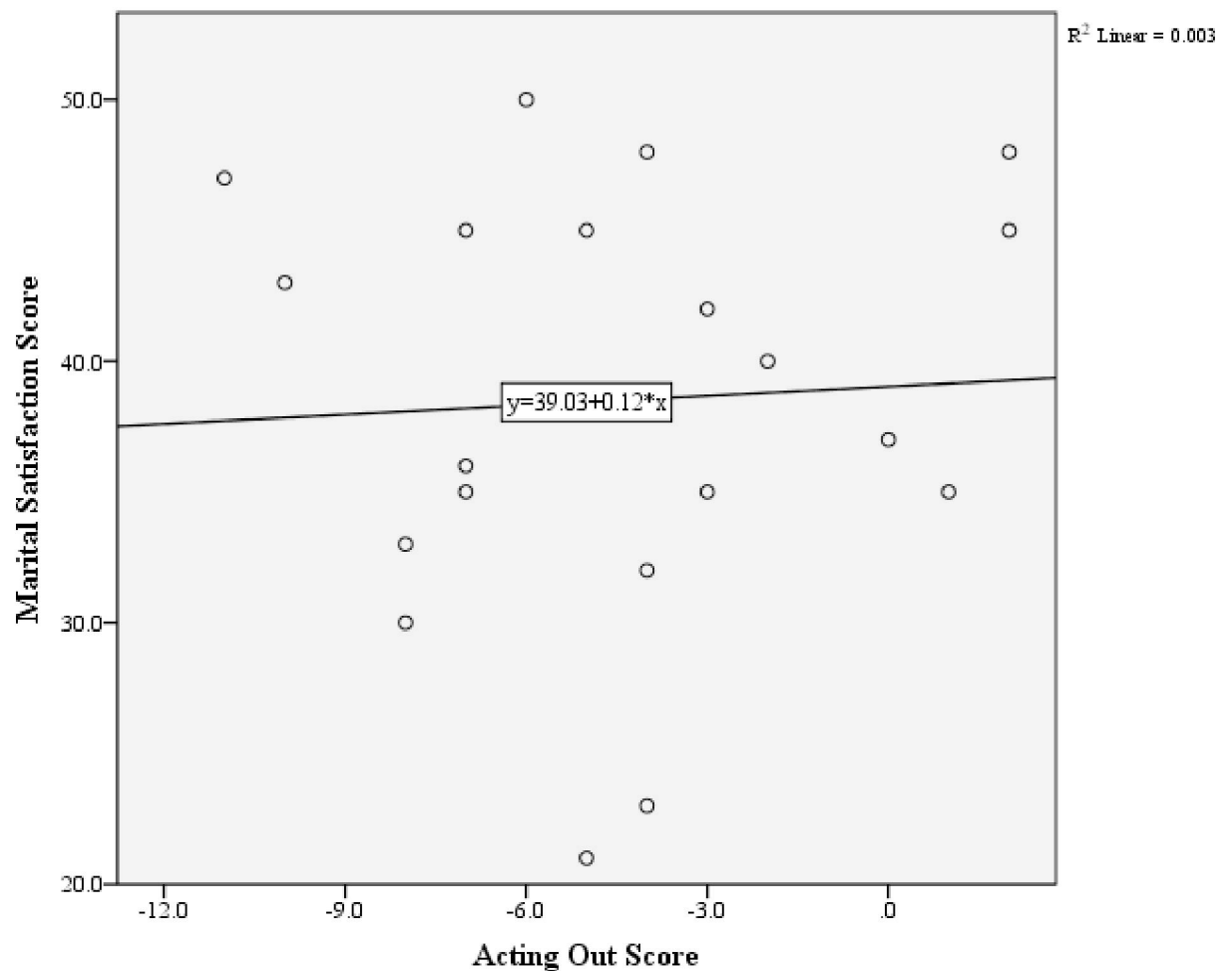


Figure 1. Linear regression of Acting Out Score (AOS) and Marital Satisfaction Score (EMS) derived from the Hand Test and EMS. This figure illustrates the absence of relationship between AOS and EMS scores.

Two additional Pearson correlations were conducted to determine whether or not length of marriage and age were related to Hand Test performance. The correlation between Hand Test performance and length of marriage, however, was not significant, $p = .70$, $r = .09$. Neither was the correlation between Hand Test performance and age, $p = .62$, $r = .12$.

A final correlation was performed to assess interrater reliability among Hand Test scorers. The researcher trained an additional scorer to score Hand Test responses. The second scorer had no previous experience administering or scoring the Hand Test. After receiving training on the administration and scoring, the second scorer was also provided a copy of the Hand Test manual in need of reference when scoring participants' responses. A Pearson correlation compared the acting out scores scored by the researcher and those by the second scorer. The researcher and the second scorer achieved a significant correlation between their two interpretations of participant Hand Test responses, as $p = .00$, $r = .98$.

Summary

In this chapter, a simple linear regression was performed in order to determine whether or not Hand Test performance could predict the marital satisfaction of participants. A total of 24 individuals completed a brief demographic questionnaire, the Hand Test, and the EMS questionnaire. Participants' individual raw EMS scores ranged from "Very Low" to "Very High". The majority of participants, however, matched their partner in terms of their marital satisfaction level. Hand Test performance overall was not a significant predictor of participants' marital satisfaction. Further interpretation of the

results and future directions for research involving the Hand Test are discussed in the next chapter.

Chapter Four

Interpretation

Statistical analyses demonstrated a lack of effect of Hand Test performance on current levels of marital satisfaction. One possible explanation is small sample size and low power. The average Hand Test and marital satisfaction studies consisted of hundreds, if not thousands of participants. The present study, however, failed to replicate the power of earlier research. It is reasonable to assume that the same study with 30+ couples could have yielded an effect. The use of self-report methods, such as the EMS, might also have influenced statistical power. Another noteworthy consideration is the history of the Hand Test. This assessment was developed for and normed on various clinical populations. When considering how to expand the usefulness of the Hand Test one must consider creative ways to test marriages. Projective techniques often gifts clinicians with rich data on the patient. Thus, the Hand Test might still be useful in identifying problematic tendencies within a marriage. The Hand Test and its versatility, at the very least, remain in need of application to determine novel usefulness.

Integration

Prior to this study, The Hand Test and marital satisfaction were not explored in tandem. Across diverse populations, the Hand Test distinguished with significance individuals that were more likely to behave in a socially disharmonious manner (Wagner, 1962). Thus emerged the premise of this work; if an individual demonstrated socially constructive or destructive tendencies on the Hand Test, that behavior was likely to manifest within the marriage. However, the results of analysis failed to support the present hypotheses.

One notable finding however has emerged from this study. The majority of participants reported a level of satisfaction markedly above the national average. Due to low power and small sample size one cannot claim any significant findings; however, it is still worthwhile to note and appreciate that in one small part of the Pacific Northwest exists 12 couples working hard to make their marriages thrive.

Exploration

Exploring the strengths and weaknesses of the present study provided a deeper understanding of how assessments can support married couples. Strengths of the study included the brief administration and scoring of the Hand Test and EMS. Their user-friendly design allowed participants to approach the testing environment comfortably. The majority of participants expressed enjoyment of the assessment phase and were eager to learn of their specific results. Weaknesses of the study, as previously mentioned, included poor sample size and use of a self-report marital satisfaction measure. The researcher attempted to increase sample size of the study, however, many couples appeared reluctant to participate. The researcher first attempted contact via email and phone to local church leadership. The researcher queried interest of parishioners in a study involving marital satisfaction. Word went unanswered from leadership. Word of mouth proved most effective for participant recruitment. The researcher also visited graduate psychology classes at two academic institutions to discuss the study. A handful of couples were recruited from those visits. Several situations occurred, however, where couples would agree to participate in the study yet when contacted to begin paperwork would not respond. The researcher also searched for relationship counseling events happening in the community, however, scheduling often conflicted.

Nonetheless, one might postulate that the small sample size relates in part to uncertainty about projective techniques and what exactly is assessed in the marriage. The researcher provided clear and concise explanations to interested parties about what the Hand Test assessed and entailed. Despite these discussions, some couples felt uncomfortable exposing or discovering issues in their marriage or failed to find the experience worthwhile enough to attempt.

Another weakness of the study involved limiting research to couples of the Pacific Northwest. Perhaps with a wider net the researcher could have obtained more diversity and power in respect to sample size. One must also consider the use of self-report measures. Self-report measures rely on the word of the individual completing the measure. It is reasonable to assume that for any number of reasons, participants could have “faked good” on their marital satisfaction assessment. Considering the average divorce rate in the United States is 50 percent, the present sample of mostly satisfied couples is not representative of the general population. A review of EMS mean score and reliability data notes that on a national sample of 50,000 married couples the average marital satisfaction score is 33 (Olson et al., 2008). A raw score of 33 on the EMS is considered within the moderate range (Olson et al., 2008). The average marital satisfaction score in the present study was 39, notably above the national average found by EMS researchers. A raw score of 39 on the EMS falls within the “High” satisfaction category (Olson et al., 2008). Another reason for low power could have been related to the use of a projective technique. Participants could have knowingly or unknowingly filtered their initial reactions to stimulus cards on the Hand Test, which would largely impact results. As a projective technique, the Hand Test is designed to elicit associations

from one's unconscious mind. Thus, responses can be filtered or altered by participants and replaced with a timely response deemed more socially appropriate or desirable.

Future Directions

Replication of the present study with a larger, diverse sample of married couples would be worthwhile and might produce statistical significance. Psychologists working with married couples are still in need of brief assessment interventions; although the present study failed to achieve statistical significance, the process of administering the Hand Test to married individuals produced rich data in a limited timeframe. Individuals in this study connected with the stimulus cards and were able to produce valid, meaningful associations. The researcher gained from this experience a snapshot of the participants' internal and emotional landscapes. For instance, in response to stimulus cards, some participants produced almost entirely affectionate, communicative responses, while others aired towards goal-oriented or logistic responses. Gathering such data about clients is an asset to professionals looking to establish rapport and connect with their couples. This data in conjunction with the dyadic design of the EMS, provided the researcher with psychometrically sound impressions about spouses and their style of relating in under fifteen minutes. Despite the lack of statistical significance, the Hand Test demonstrated promise as a brief, accessible assessment tool for married couples when combined with a psychometrically sound marital satisfaction scale.

Conclusions

The author designed a study in order to address a need for brief marital satisfaction assessments. The need is dire for many professionals with overflowing professional practices and statistics indicating that 1 in 2 marriages in the United States

result in divorce (Carter & Glick, 1970). The author chose two psychometrically sound assessments to administer to married couples in the Pacific Northwest. The author hypothesized that a projective assessment, known as the Hand Test, would be a reliable indicator of participants' marital satisfaction. However, a simple linear regression failed to find statistical significance that the Hand Test can make any statements about the health of a marriage. The Hand Test and EMS, however, left the author with remarkable qualitative data. The author was pleased to have found two expedient assessments that possess this quality and encourage appropriately licensed clinicians incorporate one or both of the aforementioned instruments into their clinical toolbox.

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Appendix A
Demographic Information Questionnaire

1. What is your age?
2. What is your gender?
3. Are you currently living in the Pacific Northwest?

Yes No
4. Are you legally married to your current spouse?

Yes No
5. How many years have you been married to your current spouse?
6. Have you ever taken the Hand Test?

Yes No
7. Have you ever taken the Prepare ENRICH Marital Satisfaction questionnaire?

Yes No

Appendix B

Prepare ENRICH Marital Satisfaction Scale

Response choices

1	2	3	4	5
Strongly Disagree	Moderately Disagree	Neither Agree nor Disagree	Moderately Agree	Strongly Agree

1. My partner and I understand each other perfectly. _____
2. I am not pleased with the personality characteristics and personal habits of my partner. _____
3. I am very happy with how we handle role responsibilities in our marriage. _____
4. My partner completely understands and sympathizes with my every mood. _____
5. I am not happy about our communication and feel my partner does not understand me. _____
6. Our relationship is a perfect success. _____
7. I am very happy about how we make decisions and resolve conflicts. _____
8. I am unhappy about our financial position and the way we make financial decisions. _____
9. I have some needs that are not being met by our relationship. _____
10. I am very happy with how we manage our leisure activities and the time we spend together. _____
11. I am very pleased about how we express affection and relate sexually. _____
12. I am not satisfied with the way we each handle our responsibilities as parents. _____
13. I have never regretted my relationship with my partner, not even for a moment. _____
14. I am dissatisfied about our relationship with my parents, in-laws, and/or friends. _____
15. I feel very good about how we each practice our religious beliefs and values. _____