Gender Differences in Self-Reported Defense Mechanisms: A Study Using the New Defense Style Questionnaire-60

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Studies have shown that men and women differ in their use of defense mechanisms (e.g. Cramer, 1991; Watson and Sinha, 1998). However, how and why this difference exists is still open to debate. The present study explores the relationship between gender and defenses using the Defense Style Questionnaire (DSQ-60; Trijsburg, Bond, & Drapeau, 2003). As expected, no significant differences were found in Overall Defensive Functioning (ODF); however, men and women differed in their choice of defense style, defense level, and individual defense mechanisms. Evidence is provided to support the notion that while overall adaptivity of defenses is comparable, men and women rely on different defensive organizations during conflictladen situations. We discuss the clinical relevance of these results in light of previous findings.

KEYWORDS: defense mechanisms; gender differences; Defense Style Questionnaire

LITERATURE REVIEW

The ability of therapists to tailor treatment not only to presenting problems but also to clients' characteristics is an important part of clinical acumen. Recently, research has shown that men and women respond differently to supportive and interpretative therapies, supporting the idea that clients may require customized approaches in order to maximize therapeutic gains (Ogrodniczuk, 2006; Ogrodniczuk, Piper, Joyce, &

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MaCallum, 2001). For example, therapist and client gender predicts posttreatment variables and retention in treatment (Cottone, Drucker, & Javier, 2002). Gender is an important client variable that, if properly investigated, could contribute significantly to individualizing treatment. However, as Clarkin and Levy (2004) point out, despite the studies mentioned above, research studying the intersection of therapy and gender is still in its preliminary phase.

One exception can be found in the study of defense mechanisms. In recent years, a growing number of researchers from varied theoretical backgrounds have employed the study of defense mechanisms in personality assessment (Cramer, 1991, 1998, 2006; Vaillant, 1998) and psychopathology (Bond, 2004; Perry, 1990). Gender differences have traditionally been found in defense mechanism research over the course of the last 35 years (Bogo, Winget, & Gleser, 1970; Cramer, 1987, 1991, 2006; Hibbard & Porcerelli, 1998; Mahalik, Cournoyer, DeFranc, Cherry, & Napolitano, 1998; Vaillant, 1993; Watson & Sinha, 1998; Watson, 2002).

Using a projective measure, Cramer (1987) found that women scored significantly higher on internalizing defenses (e.g. denial and identification), whereas men favored externalizing defenses (e.g. projection). The results of this study were replicated using a similar projective measure with university students in a controlled anger-provoking situation (Cramer, 1991). Mahalik and associates (1998) found similar results for the use of projection among males, but were unable to find evidence for the increased use of denial and identification in women. However, at least two studies have found that women use altruism, conceptually an externalizing defense, more often than men (Vaillant, 1993; Watson & Sinha, 1998), confounding the externalization-internalization hypothesis initially proposed by Cramer (1987, 1991, 1998). Furthermore, not all studies comparing men and women found the increased use of projection among males (Munteanu, 2002; Watson, 2002; Watson & Sinha, 1998).

Other studies examining underlying gender differences on specific defense mechanisms found that men tend to score higher on Suppression, Isolation, Denial, Omnipotence, Devaluation, and Splitting (Watson & Sinha, 1998). In contrast, Munteanu (2002), using the original 88-item DSQ (Bond, 1986), found that males had lower overall scores on the Maladaptive Defense Style, in comparison to Watson and Sinha (1998), who found that men were more likely to endorse the maladaptive defensive style. The items that comprise the Maladaptive Style from the 88-item DSQ used by Munteanu (2002) and the DSQ-40 used by Watson and

Sinha (1998) are not equal, and this may be partly responsible for the incongruent findings.

While differences have been regularly noted, there is little consensus in the literature as to what type of defensive variation exists between genders. Choice of instrument plays a central role in the findings. For example, Cramer (1991) and others (Hibbard & Porcerelli, 1998) who used projective methods to assess defenses typically find similar results. Studies examining the psychometric properties of the original 88-item version of the Defense Style Questionnaire (Bond, Gardner, Christain, & Sigal, 1983) did not report any gender differences. While the more recent 40-item DSQ developed by Andrews, Singh, and Bond (1993) reported no differences for the 'normal controls,' men in the patient group scored higher than women on the Immature Style on both DSQ versions (DSQ-40 & DSQ-72) used in the study. Furthermore, the original four-factor model proposed by Bond and associates (1983) has only been replicated once in the literature by the same author (Bond, 1986).

One potential approach to resolving these discordant findings is to adopt a common list of defenses across studies. Previous studies using self-report methodology to capture defensive style have incorporated anywhere from 17 to 25 defenses, with instrument lengths that range from 36 to 88 items. The DSM-IV contains a list of 30 defenses (APA, 1994) that is based on an empirically validated hierarchy (Vaillant, Bond, & Vaillant, 1986). As Cramer (2006) has shown, few studies using the numerous versions of the DSQ (DSQ-88, DSQ-40, DSQ-60, etc.) have examined gender differences specifically. In addition, no study to date has examined gender differences with an instrument that incorporates all 30 defenses listed in the DSM-IV (APA, 1994). The DSQ-60 represents each defense listed in the DSM-IV (APA, 1994) with two items, thus more closely representing current thinking on defensive functioning.

The clinical usefulness of identifying gender variation in defensive patterns is twofold. First, clinicians who are aware of defensive patterns presented by male and female clients may be in a better position to facilitate insight and change in their clients. Therapists may subsequently have a better understanding of what defensive patterns are considered typical for each gender. Second, monitoring changes in defensive functioning might be a helpful tool for measuring progress and outcome of treatment (Bond, 2004).

The aim of the present study is to investigate the nature of gender differences with a large university sample using the most recent version of the DSQ ([DSQ-60]; Trijsburg et al., 2003). Because the DSQ-60 is more

reliable psychometrically than earlier versions of the instrument (Trijsburg, Bond, Drapeau, Thygesen, de Roten, & Duivenvoorden, 2003; Thygesen, Drapeau, Trijsburg, Lecours, & de Roten, 2008), it allows for a more empirically robust investigation of self-reported defensive styles than was previously possible. As such, this investigation focuses on normal defensive functioning to appraise the typical defensive patterns of men and women.

METHOD

PARTICIPANTS

Data for the present study were collected from two sites between June and December 2004. The first site was an English-speaking Canadian University. Participants (n = 322) were recruited on a volunteer basis and no compensation was provided for filling out the questionnaires. Thirtythree percent (33%) of subjects were education majors, 13% were psychology majors, 6% were kinesiology majors, and the remaining participants were from a variety of social science, arts and business majors. Participants were given the consent form, the Defense Style Questionnaire, and the demographic form to complete and return to the research assistant. Seventeen questionnaires were excluded from the final sample (n =305) due to incomplete information. The final sample consisted of 247 females (81%) and 58 males (19%) with a mean age of 23 years (SD =6.57).

Data for the second sample was collected from a French-speaking Canadian University using the French version of the DSQ-60. Participants were recruited from an undergraduate class in the fall of 2003 and winter of 2004. Although the questionnaire package was given to subjects in the classroom, participants filled out the information and returned the package to the research assistant at their convenience. Participation was completely voluntary and no financial compensation was provided for participating in the study. After eliminating participants who submitted incomplete information, the second sample included 135 women (80%) and 33 men (20%), for a total of 168 participants.

The final sample used for data analysis combined the English-speaking and French-speaking University participants for a total sample size of 473.

INSTRUMENT: DSQ-60

The DSQ-60 is a 60-item self-report measure used in a variety of research settings (Trijsburg et al., 2003; Trijsburg et al., 2005; Thygesen, et al., 2008). It is a shortened version of the original 81-item questionnaire developed by Bond (1986). The shorter version has several benefits, of

which the most obvious is decreased administration time. The psychometric properties of this instrument have been published elsewhere (Trijsburg el al., 2003; Trijsburg et al, 2005). Cronbach's alpha was used to calculate the internal consistency of the instrument and was found to be in the moderate range for the Image-Distorting Style ($\alpha = 0.64$) and the Adaptive Style ($\alpha = 0.61$), while the Affect-Regulating Style ($\alpha = 0.72$) was shown to be slightly more consistent.

A number of indices can be derived from the DSQ-60 (Trijsburg et al., 2003). The first is Overall Defensive Functioning (ODF), which is a measure of the overall maturity level of defensive functioning in an individual. The second index, Defensive Style, was determined through exploratory and confirmatory factor analyses, which yielded the three-factor model that comprises the DSQ-60 (Thygesen et al., 2008). This factor model is similar to the ones found in previous versions of the DSQ (e.g. DSQ-40: Andrews et al., 1993) and was performed using the present sample. These three factors include

- 1) the Image-Distorting Style, which includes help-rejecting complaining, splitting of self/other, projection, and projective identification, considered to be the least mature of the DSQ-60;
- 2) the Affect-Regulating Style, which includes intellectualization, dissociation, isolation, and fantasy, falls into the moderate level of functioning; and
- 3) the Adaptive Style, which includes sublimation, self-observation, humor, anticipation, and self-assertion, considered to be a mature level of functioning.

The third index in this study employed the seven-level hierarchy of the Defense Mechanism Rating Scales ([DMRS] Perry, 1990). Higher levels are considered to be more adaptive or mature, while lower levels are considered maladaptive or immature. These levels, which were calculated using the individual defense mechanisms from the DSQ-60, are:

- 1) action (help rejecting complaining, passive-aggression, acting out);
- major-image distortion (projective identification, splitting self/other);
- 3) disavowal (fantasy, rationalization, projection, denial);
- 4) minor-image distortion (devaluation self/other, idealization self/ other, omnipotence);
- 5) neurotic (displacement, reaction formation, dissociation, repression);
- 6) obsessional (undoing, intellectualization, isolation of affect); and

	Men M (SD)	Women M (SD)	F (p)	η^2
Overall Defensive Functioning				
(ODF)	4.99 (0.25)	4.98 (0.25)	0.11 (.92)	0.00
Factor 1: Image-Distorting (or		,		0.00
maladaptive) style	3.37 (1.04)	3.26 (1.08)	0.80 (.37)	0.00
Factor 2: Affect-Regulating Style	4.34 (1.41)	3.65 (1.36)	18.53 (.000)***	0.04
Factor 3: Adaptive Style			3.95 (.05)*	0.01
* $p < .05$, ** $p < .01$, *** $p < .001$				

Table I.OVERALL DEFENSIVE FUNCTIONING (ODF) AND DEFENSE STYLE
MEANS, STANDARD DEVIATIONS, & SIGNIFICANCE LEVELS FOR
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7) adaptive (suppression, sublimation, self-observation, self-assertion, humor, anticipation, altruism, affiliation).

Finally, the DSQ-60 also measures the use of individual defense mechanisms. The instrument includes all thirty defenses listed in the DSM-IV (APA, 1994).

RESULTS

Three separate multivariate analyses of variance were employed to determine if gender was significantly related to Overall Defense Functioning (ODF), defensive style, defense level, and defensive functioning. No significant difference was found between men and women on ODF, t(471) = .106, p = .915. However, results indicate that gender plays a significant role in choice of defensive style, F(30, 442) = 2.90, p < .001. Subsequent univariate analyses found men to be significantly higher on factor 2, Affect-Regulating Style, F(1, 471) = 18.53, p < .001 and factor 3, Adaptive Style, F(1, 471) = 3.95, p < .05 when compared to women. Complete results with effect sizes can be found in Table 1.

The second MANOVA examined defensive level, F(3, 469) = 8.85, p < .001. Univariate analysis revealed that men scored significantly higher than women on level 6, obsessional, F(1, 471) = 11.98, p < .001, level 4, minor-image distortion), F(1, 471) = 10.92, p < .001, and level 3, disavowal, F(1, 471) = 4.38, p < .05. Table 2 shows the complete results with effect sizes for each Defensive Level.

The third MANOVA revealed gender differences for specific defense mechanisms, F(8, 464) = 3.52, p < .001. Subsequent univariate analysis revealed that men had significantly higher scores for suppression [level 7] would, F(1, 471) = 15.78, p < .001, sublimation [level 7], F(1, 471) =

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	Men M (SD)	Women M (SD)	F (p)	η^2
Level 1 (action)	3.55 (1.30)	3.56 (1.31)	0.00 (.95)	0.00
Level 2 (major-image distortion)	3.63 (1.18)	3.46 (1.19)	1.40 (.24)	0.00
Level 3 (disavowal)	4.23 (1.00)	3.98 (1.03)	4.38 (.04)*	0.01
Level 4 (minor-image distortion)	3.00 (0.98)	2.67 (0.83)	10.92 (.001)***	0.02
Level 5 (neurotic)	4.36 (1.08)	4.31 (1.08)	0.18 (.68)	0.00
Level 6 (obsessional)	4.94 (1.28)	4.42 (1.29)	11.98 (.001)***	0.02
Level 7 (adaptive)	6.22 (0.79)	6.06 (0.92)	2.19 (.14)	0.00

Table II.DEFENSE LEVEL MEANS, STANDARD DEVIATIONS, & SIGNIFICANCELEVELS FOR MEN AND WOMEN

* p < .05, **p < .01, ***p < .001

4.40, p < .05, devaluation of other [level 4], F(1, 471) = 12.01, p < .001, omnipotence [level 4], F(1, 471) = 22.37, p < .001, fantasy [level 3], F(1, 471) = 5.55, p < .05, intellectualization [level 6], F(1, 471) = 13.10, p < .001, splitting of self [level 2], F(1, 471) = 6.63, p < .01, and isolation of affect [level 6], F(1, 471) = 24.49, p < .001.Women were found to be significantly higher on affiliation [level 7], F(1, 471) = 7.45, p < .01. Table 3 shows the descriptive statistics for each Defense Mechanism.

DISCUSSION

We observed no gender differences between men and women on defensive maturity as measured by Overall Defensive Functioning. Although men endorsed the adaptive defenses more often, their overall functioning was not found to be more mature than women. Previous research shows that the DSQ is an effective measure for determining an individual's ODF (Trijsburg, Van T' Spijker, Van, Hesselink, & Duivenvoorden, 2000). Overall Defensive Functioning scores have been associated with both Axis I and Axis II psychopathology (Bond, 2004). These results confirm that the overall maturity of both men and women in the sample is equal, with no one group considered to have a higher overall maturity level than the other.

This investigation is in accordance with previous studies (Mahalik et al., 1998; Watson & Sinha, 1998) that found gender differences in defensive functioning. However, in contrast to Watson and Sinha (1998), men were not found to support an image-distorting (or maladaptive) style more than women, possibly because the defense mechanisms that make up this style in the present study are different from those used in the Watson and Sinha (1998) study. Contrary to earlier results that found no gender differences

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	Men	Women		
·····	M (SD)	M(SD)	F (p)	η^2
Affiliation	5.16 (2.02)	5.79 (1.94)	7.45 (.01)**	0.02
Altruism	7.13 (1.36)	7.39 (1.32)	2.85 (.09)	0.01
Anticipation	5.88 (1.55)	5.91 (1.62)	0.027 (.87)	0.00
Humor	6.81 (1.83)	6.48 (1.87)	2.25 (.13)	0.00
Self Assertion	6.30 (1.64)	5.96 (1.61)	3.22 (.07)	0.01
Self Observation	6.87 (1 <i>.</i> 50)	6.77 (1.42)	0.37 (.54)	0.00
Sublimation	5.53 (2.05)	5.02 (2.10)	4.40 (.04)*	0.01
Suppression	6.07 (1.49)	5.19 (1.96)	15.78 (.000)***	0.03
Isolation	4.87 (2.07)	3.66 (2.10)	24.49 (.000)***	0.05
Intellectualization	4.79 (1.81)	4.04 (1.75)	13.10 (.000)***	0.03
Undoing	4.74 (1.89)	4.33 (1.93)	3.43 (.07)	0.01
Repression	4.13 (1.94)	3.79 (1.98)	2.15 (.14)	0.00
Dissociation	3.54 (1.59)	3.30 (1.65)	1.67 (.20)	0.00
Reaction Formation	5.23 (1.84)	5.20 (1.77)	0.03 (.87)	0.00
Displacement	4.54 (1.72)	4.95 (2.00)	3.20 (.07)	0.01
Omnipotence	4.27 (1.84)	3.33 (1.68)	22.37 (.000)***	0.05
Idealization	4.29 (2.21)	4.45 (2.07)	0.44 (.51)	0.00
Devaluation Other	3.65 (2.10)	2.97 (1.56)	12.01 (.001)***	0.02
Devaluation Self	2.80 (1.66)	2.60 (1.60)	1.08 (.30)	0.00
Denial	4.14 (1.69)	3.98 (1.64)	0.70 (.40)	0.00
Projection	2.78 (1.41)	2.76 (1.62)	0.01 (.92)	0.00
Rationalization	5.86 (1.47)	5.59 (1.46)	2.39 (.12)	0.01
Fantasy	4.15 (2.07)	3.59 (2.04)	5.55 (.02)	0.01
Splitting Other	3.37 (1.65)	3.45 (1.87)	0.14 (.71)	0.00
Splitting Self	3.69 (1.86)	3.18 (1.64)	6.63 (.01)**	0.01
Projective Identification	3.83 (1.39)	3.76 (1.47)	0.15 (.70)	0.00
Acting Out	4.54 (2.00)	4.67 (2.02)	0.33 (.57)	0.00
Passive Aggression	2.92 (1.65)	2.87 (1.64)	0.08 (.77)	0.00
Help Rejecting	3.18 (1.64)	3.13 (1.79)		
Complaining			0.057 (.81)	0.00
Withdrawal	5.37 (2.21)	5.66 (2.06)	1.40 (.24)	0.00

 Table III.
 DEFENSE MECHANISM MEANS, STANDARD DEVIATIONS, & SIGNIFICANCE LEVELS FOR MEN AND WOMEN

* p < .05, **p < .01, ***p < .001

using the DSQ (Andrews et al., 1993; Spinhoven & Kooiman, 1997), the current study found evidence to support the notion that a sample of nonpatient men and women have differential defensive organizations.

The Maladaptive Style comprises five defense mechanisms (projection, splitting self/other, help-rejecting complaining, & projective identification)

and is considered to be the least healthy defensive pattern. The Affect-Regulating Style is composed of four defense mechanisms (isolation, intellectualization, fantasy, & dissociation) and all share the common protective function of distancing affect from that for whatever reason is considered too problematic to be acknowledged (Thygesen et al., 2008). The final factor is the Adaptive Style and also consists of five defense mechanisms (self-observation, self-assertion, anticipation, sublimation, & humor). The use of adaptive defenses involves an accurate representation of the self together with behaviours that are helpful to both the individual as well as others.

There is some evidence in the literature to corroborate the finding that men use affect-regulation in conflictual situations (Hwang, 2001; Vaillant, 1993). The present study found that men endorsed the Affect-Regulation Style more often than women. At least one study has found that men and women perceive emotional situations based on gender roles (Plant, Hyde, Keltner, & Devine, 2000), which in turn may affect defense choice, although more research is needed to determine its relationship to defensive functioning. Hwang (2001) noted that females scored higher than males on a measure of emotionality in general. While women may experience affective material more intensely, men place more emphasis on regulating their emotional tone to situations.

When Perry's (1990) seven-level hierarchy was used to classify defenses, where Level 1 denotes an immature style and Level 7 includes the most mature defenses, gender differences were found on Level 3 (disavowal), Level 4 (minor-image distortion), and Level 6 (obsessional). In all three cases men's scores were higher than women's.

This study provided limited support for previous findings that found an increased likelihood for men to use projection (Cramer, 1987, 1991; Hibbard & Porcerelli, 1998; Mahalik et al. 1998). Although, men were not found to endorse projection more than women, the increased use of minor-image distortion and disavowal defenses may help to partly explain these findings. Soldz and Vaillant (1998) found that these two conceptual categories of defenses tend to co-occur in males. Cramer (1987, 1991) observed that male university students used projection in an experimental condition that provoked anger as a means of protecting their egos in the face of a critical female research assistant. Consequently, men use protective defense mechanisms in the face of imagined conflicts. Conceptually, projection falls under the disavowal defense category, which men were found to use more often than women in the study. Hence, these results provide indirect tentative support for previous findings by Cramer (1991)

and Hibbard and Porcerelli (1998) with respect to male university students and their use of projection.

For exploratory purposes, men and women were compared on their use of individual defense mechanisms. Similar to the responses reported by Watson and Sinha (1998), we found men endorsed suppression, isolation, devaluation, splitting, and omnipotence to a higher degree than did women. The only defense mechanism that females clearly used more than males was affiliation. a defense where the individual uses the comfort of others to manage conflict. This finding is consistent with previous reviews of the defense literature (Cramer, 2006). Furthermore, men may be discouraged from seeking an affiliative style of conflict management. whereas women may receive messages that it is accepted and even expected for them to "talk to a friend" in times of need. However, empirical research has not yet confirmed this. As noted above, men scored higher on the Affect-Regulating Style, which is composed of four defense mechanisms (isolation, intellectualization, fantasy, dissociation). Men scored higher on three of the individual defenses that make up this scale, which supports the notion that men use a variety of defenses managing affect. Although we made comparisons among individual defenses for exploratory purposes, caution should be exercised when interpreting these differences, as Trijsburg and associates (2000) have correctly pointed out.

Understanding an individual's defensive structure has shown to be an important part of psychotherapeutic outcome (Bond, 2004). For instance, Bond (2004) highlights that alliance issues may arise with individuals who rely on a more Image-Distorting Style. Clinicians who can use this information effectively have the potential to form better alliances and to promote better outcomes in therapy. Collectively, these results might aid clinicians in tailoring their psychotherapeutic approaches to men and women. Specifically, clinicians aware of the expected defensive profile of their clients (either male or female) might mould their therapeutic stance to better support treatment. For example, this study found that men tend to use affect-regulation more than did women. If this pattern is considered a normal part of the defensive makeup of healthy men, a therapist equipped with this knowledge would be less likely to label men displaying this pattern as "maladaptive." Additionally, changes in defensive organization toward healthier functioning as treatment progresses may present differently for men and women. This research stream is in line with previous research that highlighted the need to adapt treatment to patient characteristics (Despland, Despars, de Roten, Stigler, & Perry, 2001). However, further research is required to examine whether or not tailoring

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treatment individually to men and women is, in fact, clinically relevant. We also note that the present analysis used a nonpatient sample to identify defensive differences between men and women to show that "normal" defensive functioning may be qualitatively different for these two groups.

Our study used a questionnaire that requires participants to imagine a conflict and to respond accordingly. Critics of self-report defense measures have cautioned about interpreting individual defense mechanisms (Davidson & MacGregor, 1998, Trijsburg et al., 2000). Measurement technique may play a role in the type of defense mechanisms found in various studies and may help to explain the reason for contradictory findings. For instance, Perry and Hoglend (1998) found modest overlap between a previous version of the DSO (Andrews et al., 1993) and the DMRS, an observer-rated measure of defenses. Consequently, it is still not clear to what degree these two measurement styles can be compared in one unifying theoretical understanding. The goal of using instruments such as the DSQ-60, which was designed with a defense list more akin to observerrated methods, such as the DMRS (Perry, 1990), is to bridge the gap that presently exists between these two measurement systems. Further studies should focus on examining this aspect of defense classification and measurement.

A study by Davis (1999) found that accuracy and speed of biographical memory for emotionally charged memories was different for men and women. It is possible that females in the study were able to call up a greater number of memories, which then created an averaging effect, whereas males based their responses on fewer autobiographical examples, which lead to a more wide-ranging response pattern. Until research investigates it further, at this point this conclusion is only speculative. Future studies should attempt to increase the number of males in the sample.

CONCLUSION

The DSQ-60 was used to collect information on the defensive functioning of men and women at two Canadian universities. The hypothesis that ODF, defensive style, defensive level, and individual defenses were related to gender was investigated. Although no differences were found in overall maturity, we found that men and women have dissimilar defensive arrangements. These differences may caused by socialization patterns, which favour the development of certain defenses over others. Thus, significant differences in typical response patterns of non-clinical men and women were found using the DSQ-60. Therapists might use these results to understand more thoroughly the normal defensive presentations of male and female clients and to tailor treatments to better suit the defensive makeup of their clients based on the DSM-IV's (APA, 1994) established list of defense mechanisms.

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REFERENCES

- American Psychiatric Association. (1994). Diagnostic and Statistical Manual of Mental Disorders, ed 4 (DSM-IV). Washington, American Psychiatric Association.
- Andrews, G., Singh, M., & Bond, M. (1993). The Defense Style Questionnaire. Journal of Nervous & Mental Disease, 181, 246-256.
- Bond, M. (1986). Defense Style Questionnaire. In G. E. Vaillant (Ed.), Empirical studies of ego mechanisms of defense (pp 146-152). Washington, DC: American Psychiatric Press.
- Bond, M. (2004). Empirical studies of defense style: Relationships with psychopathology and change. Harvard Review of Psychiatry, 12, 263–278.
- Bond, M., Gardner, S.T., Christian, J., & Sigal, J.J. (1983). Empirical study of self-rated defense styles. Archives of General Psychiatry, 40, 333–338.
- Bogo, N., Winget, C., & Gleser, G.C. (1970). Ego defenses and perceptual styles. Perceptual and Motor Skills, 30, 599-605.
- Bullitt, C.W. & Farber, B.A. (2002). Gender differences in defensive style. Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry, 30, 35-51.
- Clarkin, J.F., & Levy, K.N. (2004). The influence of client variables on psychotherapy. In M.J. Lambert (Ed.), Bergin and Garfield's Handbook of Psychotherapy and Behavior Change (pp194–226). (5th ed.). New York: NY: John Wiley & Sons, Inc.
- Cottone, J.G., Drucker, P., & Javier, R.A. (2002). Gender differences in psychotherapy dyads: Changes in psychological symptoms and responsiveness to treatment during 3 months of therapy. *Psychotherpy: Theory, Research, Practice, Training*, 39, 297–308.
- Cramer, P. (1987). The development of Defense Mechanisms. Journal of Personality, 55, 597-614.
- Cramer, P. (1991). Anger and the use of defense mechanisms in college students. *Journal of Personality*, 59, 39–55.
- Cramer, P. (1998). Defensiveness and defense mechanisms. Journal of Personality, 66, 879-894.
- Cramer, P. (2006). Protecting the self: Defense mechanisms in action. New York, NY: The Guilford Press.
- Despland, J.N., Despars, J., de Roten, Y., Stigler, M., & Perry, J.C. (2001). Contribution of patient defense mechanisms and therapist interventions to the development of early therapeutic alliance in a brief psychodynamic investigation. *Journal of Psychotherapy Practice and Research*, 10, 155–164.
- Davidson, K. & MacGregor, M.W. (1998). A critical appraisal pf self-report defense mechanism measures. Journal of Personality, 66, 965–992.
- Davis, P.J. (1999). Gender differences in autobiographical memory for childhood emotional experiences. Journal of Personality and Social Psychology, 76, 498-510.
- Hibbard, S. & Porcerelli, J. (1998). Further validation for the Cramer defense mechanism manual. Journal of Personality Assessment, 70, 460-483.
- Hwang, H.S. (2001). Affect intensity, distress, gender role and defense use in college students: Patterns of relationships. Dissertation Abstracts International Section B: The Sciences and Engineering, 62, 2-B. (UMI No. 3004700)
- Loffler-Stastka, H., Ponocny-Seliger, E., Fischer-Kern, M., & Leithner, K. (2005). Utilization of psychotherapy in patients with personality disorder: The impact of gender, character traits, affect regulation, and quality of object-relations. *Psychology and Psychotherapy: Theory, Research and Practice*, 78, 531-548.
- Mahalik, J.R., Cournoyer, R.J., DeFranc, W., Cherry, M., & Napolitano, J.M. (1998). Men's gender role conflict and use of psychological defenses. *Journal of Counseling Psychology*, 45, 247–255.
- Munteanu, M. A. (2003). The relationship between psychological types and ego defense mechanisms:

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A correlational study. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, 63, 12-A. (UMI No. 95011-137)

- Ogrodniczuk, J.S. (2006). Men, women, and their outcome in psychotherapy. *Psychotherapy Research*, 16, 452-462.
- Ogrodniczuk, J.S., Piper, W.E., Joyce, A.S., & McCallum, M. (2001). Effect of patient gender on outcome in two forms of short-term individual psychotherapy. *Journal of Psychotherapy Practice* and Research, 10, 69-78.
- Perry, J. C. (1990). Perry's Defense Mechanism Rating Scale. In G. E. Vaillant (Ed.), Ego mechanisms of defense: A guide for clinicians and researchers (pp. 253–259). Washington, DC: American Psychiatric Press.
- Perry, J.C. & Hoglend, P. (1998). Convergent and discriminate validity of Overall Defensive Functioning. The Journal of Nervous and Mental Disease, 186, 529-535.
- Plant, E.A., Hyde, J.S., Keltner, D. & Devine, P.G. (2000). The gender stereotyping of emotions. Psychology of Women Quarterly, 24, 81-92.
- Soldz, S. & Vaillant G.E. (1998). A 50-year longitudinal study of defense use among inner city men: A validation of the DSM-IV Defense Axis. *The Journal of Nervous and Mental Disease*, 186, 104–111.
- Spinhoven, P. & Kooiman, C.G. (1997). Defense style in depressed and anxious psychiatric outpatients: An explorative study. *The Journal of Nervous and Mental Disease*, 185, 87–94.
- Thygesen, K.L., Drapeau, M., Trijsburg, R.W., Lecours, S., de Roten, Y. (2008). Assessing defense styles: Factor structure and psychometric properties of the new Defense Style Questionnaire 60 (DSQ-60). The International Journal of Psychology and Psychological Therapy, 8, 171–181.
- Trijsburg, R.W., Bond, M., & Drapeau, M. (2003a) Defense style questionnaire-60. Unpublished instrument. Institute of Community and Family Psychiatry, McGill University.
- Trijsburg, R.W., Bond, M., Drapeau, M., Thygesen, K.L., & de Roten, Y. (June, 2005). The defense style questionnaire(DSQ-60): shorter but improved. Paper presented at the Society for Psychotherapy Research International Meeting, Montreal, Canada.
- Trijsburg, R.W., Bond, M., Drapeau, M., Thygesen, K. L., de Roten, Y. & Duivenvoorden, H.J. (2003b). Defense Style Questionnaire 60: Development and psychometric evaluation. Paper presented at the University of Lausanne, Lausanne, Switzerland.
- Trijsburg, R.W., Van T' Spijker, A., Van, H.L., Hesselink, A.J., & Duivenvoorden, H.J. (2000). Measuring overall defensive functioning with the defense style questionnaire: a comparison of different scoring methods. *Journal of Nervous & Mental Disease*, 188, 432–439.
- Vaillant, G. E. (1993). The wisdom of the ego. Cambridge: Harvard University Press.
- Vaillant, G. E. (1998). Where do we go from here? Journal of Personality, 66, 1147-1157.
- Vaillant, G.E., Bond, M. & Vaillant, C.O. (1986). An empirically validated hierarchy of defense mechanisms. Archives of General Psychiatry, 43, 786–794.
- Watson, D.C & Sinha, B.K. (1998). Gender, age, and cultural differences in the defense style questionnaire-40. Journal of Clinical Psychology, 54, 67–75.
- Watson, D.C. (2002). Predicting psychiatric symptomatology with the Defense Style Questionnaire-40. International Journal of Stress Management, 9, 275–287.

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