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Dynamics of Female Sexuality; Hidden Emotional Issues

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Abstract

Sexual satisfaction following Laser or RF vaginal rejuvenation is usually assessed by straightforward self-report questionnaires that may not offer a deeper insight into female dynamics. Our randomized double-blind longitudinal clinical trial on 14 menopausal women with high FSFI satisfaction scores following laser or RF vaginal interventions, demonstrated a high positive correlation between the subjects' FSFI scores and the Hy (hysteria), D (Depression) and L (Lie) validity scales of the MMPI-2. Such high positive correlation between the FSFI and the L-scale negates the reported increase in female sexual satisfaction following laser or RF vaginal rejuvenations. The high positive correlations of the FSFI with the Hy and D scales indicate that despite reports of increased sexual satisfaction, the vaginal procedures did not improve psychological wellbeing or quality of life. Results on the Differential Emotions Scale (DES) reveal that 98% of the subjects were organized around the emotions of shame, sadness and joy. Such results indicated a multilayered emotional organization that possibly reflects joy on the outside and shame and sadness on the inside. Results of Laser or RF vaginal rejuvenation procedures should be evaluated by a battery of tests that take into account females' often prominent tendency to focus on satisfying their partners rather than themselves. Going down the path that starts with a dismissal of self-fulfillment to focus on their partners' satisfaction, may bring several women to the endpoint of disingenuous interpersonal relationships tainted by repressed disillusionment.

Keywords

Aging, Female Sexuality, Vaginal Rejuvenation, FSFI, MMPI, DES, Lie Validity Scale, Lasers, RF

1. Introduction

Sexual activity and satisfaction decline in about 85% of menopausal women [1],

partly due to hormonal and collagen structural changes leading to a disturbance in the balance between collagen 1 and other collagens in the pelvis, and reduced elasticity in the vaginal barrel leading to painful intercourse [2]. Several women strive to solve the aging problem by placing their hopes on surgical procedures which have recently given way to laser and RF interventions [3] [4] [5].

An issue of concern is the tests used to assess female satisfaction following vaginal rejuvenation. For example, Alinsod's non-longitudinal research [4] on 25 women receiving RF vaginal rejuvenation, assessed female sexual satisfaction by an 8 items self-made questionnaire with no established validity or reliability asking straight forward "yes" or "no" questions on sexual satisfaction, to which 23 out of 25 subjects answered on the affirmative. However, when more specific questions were posed, only 9 out of 25 subjects reported increased satisfaction with regard to their orgasms, while 16 out of 25 subjects reported no change. Even if all subjects were truthful rather than tailoring their responses to please their doctor or partners, the technology's effectiveness in increasing orgasms was statistically non-significant, since only 36% of the subjects experienced an improvement in sexual satisfaction and 64% of them reported no change. The only question that appeared to be statistically significant was the RF effect on vaginal tightening that pertains to increasing male satisfaction.

Longitudinal research assessing sexual satisfaction on the basis of standardized, widely accepted instruments such as the FSFI (Female Sexual Satisfaction Index) and the FSDS-R (Female Sexual Distress Index-Revised) has also reported improved sexual activity and satisfaction [6] [7] [8] [9]. These include a 6-month longitudinal RF study with 30 premenopausal women [10], a 12-week CO₂ laser clinical trial on 77 post-menopausal females [11], and other innovative techniques that report increased sexual satisfaction of up to 92.9% of the subjects [12] [13]. The probability corresponding to 92% is p = 0.18 which does not fulfill the minimum statistically significance level of p < 0.05. Importantly, the internal validity of these studies begs for scrutiny given the transparency of items composing straightforward self-report questionnaires such as the FSFI and FSDS-R that do not control for reality distortion. Several women may hide their true feelings in an effort to please, or due to conformity and fear of disapproval, or shame that their physical problems persist despite the expensive intervention. The rate of satisfaction with a procedure is as valid and reliable as the instruments adopted to evaluate the research. The FSFI, and other self-report questionnaires like the FSDS-R are short and prone to denial, poor self-awareness or lying. Content-transparent self-report questionnaires merely verify hypotheses, tainting their findings with a subjective confirmation bias that cannot offer solid scientific proof. Searching only for confirmation instances leads to phenomenological confirmation. Only the absence of falsification instances that renders a hypothesis impossible to refute can lead to a well-rounded scientific proof, based on truth rather than one-sided subjective phenomenology [14] [15].

The Minnesota Personality Inventory (MMPI-2) [16]-[21], is a well-recognized, highly reliable and valid instrument due to its internal validity that is substan-

tiated by the multidimensional specificity of its 567 questions, including an L (Lie) scale designed to detect answers from individuals who deliberately hide the truth, or strive to present themselves under a positive light. The research teams that evaluate female sexual satisfaction on the basis of short self-report questionnaires with no L-scale, may fail to notice that several women are embarrassed to admit problems related to their sexuality. Many women will deny that the problems remain or got worse because such admittance would either question the justification of their decision to invest in an RF or laser procedure, or it will signify an egocentric point of view that dismisses the increased level of satisfaction expressed by their partners. Additionally, women who have faked their orgasms most of their lives will not suddenly drop their customary façade of pleasantry to give negative feedback. They will be happy that at least their partners are more satisfied as a result of the treatment.

Moreover, the FSFI validation was performed on females with a clinical diagnosis of sexual dysfunction [22], unlike the healthy adults who undergo laser and RF treatments to resolve problems arising from painful intercourse or age-related sexual insecurity [23]. A further examination of the FSFI reveals scoring issues, primarily pertaining to sexually inactive women [24] [25].

A number of Federal agencies and Medical Associations such as the U.S. Food and Drug Administration (US Food and Drug Administration, 2018), The American College of Obstetricians and Gynecologists (2007), the Royal College of Obstetricians and Gynecologists stated in 2013, and the Royal Australian and New Zealand College of Obstetricians and Society of Obstetricians and Gynecologists [26] have expressed skepticism or have issued warnings against surgical, RF and laser vaginal rejuvenation procedures.

An extensive review paper strongly recommends psychological counseling to evaluate the complexity of female sexuality and determine whether the decision to undergo surgery or laser/RF procedures is driven by blind spots in the patient's self-appraisal or outright denial of hidden emotional issues [27].

Age related hormonal changes are highly correlated with depression, anxiety and hysteria, therefore, hormonal therapy such as estrogen alone or in combination with other hormones is often prescribed to decrease menopausal symptomatology and improve sexuality [28] [29]. None of this research assesses overall quality of life or considers the complexity of the endocrinological communication system that consists of over 200 known hormones. Sexual desire is not a simple event like pressing a button on or off, but a long sequence of intertwined dynamic events that start with sexual arousal and radiate through the entire communications network of the body. This process is regulated by hormones such as sex steroids that have multiple diverse effects on the central nervous system, and neurotransmitters like dopamine, norepinephrine, serotonin [30] that regulate mood, stimulation, reward and pleasure seeking behaviors, intertwined with cognition, attitudes and emotions to produce several layers of everchanging psychological dynamic states. Female sexuality is a multidimensional system of hormonal and other protein communications interacting with emotions and

cognition at different degrees of balance; an intricate network that has evolved into a Gestalt with a life of its own and qualities that are absent in any of the parts that compose it. Gestalts tend to persist irrespective of the reversal of some of their components. Quality of life is a Gestalt that cannot be improved by replacing a few hormones or changing the vaginal physique without regard to the entire psychophysiological enterprise of the female dynamic.

The current research explored the hidden psychological aspects of female sexuality that may often negate the outward positive façade. Understanding a woman's often contradictory emotional states can help in resolving psychological conflicts and bridge the disconnected intrapsychic aspects of her inner world. The alternative is dissociation from affect and a sense of emptiness that renders a woman a stranger to herself.

2. Methodology

The testing battery records of 14 postmenopausal women (6 Caucasian, 5 Hispanic, 2 African American and 1 Chinese) were analysed along with their psychotherapy notes pertaining to vaginal rejuvenation procedure, which were the psychotherapists' hand-written notes taken during therapy. We adopted a within subjects design that correlated the subjects' results on FSFI with their results on the Izard's Differential Emotions Scale (DES) and the Minnesota Multiphasic Personality Inventory (MMPI-2), while reviewing their psychotherapy notes to inspect any inconsistencies between self-reports in testing batteries and private confessions during psychotherapy. The subjects were patients in independent private practice clinics around the world that agreed to release their records to the author.

The MMPI-2 is a 567-item standardized psychometric test of adult personality and psychopathology based on a large number of reliability and validity studies. Special focus was given on the K-scale that assesses normality, the Code scores of personality profiles, as well as the Lie (L), Depression (D) and Hysteria (Hy) scales of the MMPI-2. The MMPI-2 K scale has 30 items measuring self-control, family and interpersonal relationships, designed to identify psychopathology which is the most severe when individuals have a high K score. The L (Lie) validity scale of the MMPI consists of 15 items intended to identify individuals who are deliberately trying to present themselves under a positive light, basically distorting reality. The Hy (Hysteria) subscales reveal a tendency to repress feelings and the need for others' approval; Hy2 (need for affection), H3 (lassitude malaise assessing a general feeling of unhappiness in the home environment) and Hy5 (inhibition of aggression). The D (Depression) subscales indicate a general dissatisfaction with one's life; D1 (subjective depression) and D4 (mental dullness), D5 (brooding/worrying).

The FSFI is a brief questionnaire assessing domains of sexual functioning (e.g. sexual arousal, orgasm, satisfaction, pain).

The DES is a validated 30 item self-report inventory, with each item scored on

a 5-point Likert system [31] [32] [33]. DES items are sensitive indicators of innate facial expressions postulating 10 basic emotions, universally discernible in the human facial expression: Interest, Joy, Surprise, Sadness, Anger, Disgust, Contempt, Fear, Shame and Guilt. The reason for choosing a discrete emotions instrument was to investigate the subjects' unexpressed feelings on the premise that emotions are often experienced and described as a visceral event.

3. Procedure

The 14 subjects were randomly selected out of 18 eligible female candidates ages 44 - 58, on the basis of blindly selecting 14 out of 18 numbers provided by the psychotherapists who treated them. Eligibility criteria for all 18 candidates out of which we randomly selected our 14 subjects were: 1) Gender. 2) Age within 44 - 58. 3) Menopausal. 4) Has undergone at least one vaginal rejuvenation procedure with either laser or RF. 5) Never being on psychiatric medication. 6) The battery of tests, MMPI-2, and DES were administered at least one month following the vaginal intervention. 7) The FSFI was administered by the doctor performing the vaginal treatment, immediately after the procedure. 8) Relatively low scores on the K validity scale of the MMPI-2, suggesting the absence of psychopathology, or mental illness. Exclusion criteria were 1) Gender. 2) Ages below 44 years of age. 3) Being non-menopausal. 4) High K scores on the MMPI-2 indicating a clinical disorder. 5) Has been or is currently treated with psychiatric medication.

All females gave their written consent to the anonymous release of their clinical records, including the relevant clinical notes from their psychotherapists. Every precaution was taken to protect the subjects' privacy and the confidentiality of their personal information. None of the subjects or their psychotherapists were in a dependent relationship with the author or were briefed on the research hypotheses. None of the psychotherapists had any conflict of interests, any bias or personal benefit from the direction of the results. The procedure was performed in accordance with the ethical standards and principles for psychological and medical research involving human subjects.

4. Results

FSFI scores listed on **Table 1** indicated high satisfaction scores for all subjects, irrespective of whether the vaginal rejuvenation was performed with a laser or RF. **Table 1** also includes additional subject information such as their age, time in psychotherapy, their personal experience as revealed by the psychotherapy notes, and whether or not the laser or RF vaginal treatment proceeded or followed each subject's decision to seek psychotherapy.

The average mean score of all subjects on the FSFI was 29.92. Most subjects gave higher scores on the orgasms (mean average: 4.07) and satisfaction (mean average: 4.21) subscales, and lower scores on the arousal subscale (mean average: 3.07).

Table 1. Subject information and FSFI scores.

Age	Type of Vaginal Rej. Procedure	Time in Therapy	Vaginal Rej. Preceded Therapy	FSFI Score	FSFI Orgasm Score	FSFI Satisfied Score	FSFI Arousal Score	Therapy Notes Satisfied Female
52	Laser	5m	no	32	4	5	2	Low
47	Laser	9m	no	30	3	5	2	Low
55	RF	2y	yes	33	5	5	3	Pain increase
58	RF	1y, 2m	yes	29	4	4	2	Pain increase
49	Laser	6m	no	30	5	4	4	Low
46	RF	1y m	yes	28	4	4	3	Low
59	Laser	8m	yes	31	5	4	3	Low
54	RF	7m	no	28	4	4	2	Low
48	RF	1y	no	29	4	4	3	Pain increase
56	Laser	1y 6m	no	31	4	5	4	Low
55	Laser	9m	no	30	4	4	2	Low
49	RF	6m	no	29	3	4	4	Low
50	Laser	11m	no	31	5	4	4	Pain increase
59	RF	1y10m	yes	28	3	3	5	Pain increase
	Mean Average Score				4.07	4.21	3.07	

The psychotherapy notes revealed that 99% of the subjects expressed contentment with being able to offer greater pleasure to their partners, thus eliminating some of their interpersonal conflicts. When it came down to their self-satisfaction, however, 99% of the subjects confidentially admitted during therapy that their orgasms were less frequent than before the procedure. 64.3% of the subjects privately admitted feeling "numb" during intercourse with a significant loss of all sensation including both arousal and pain. 35.7% confidentially disclosed experiencing more pain after the vaginal rejuvenation procedure (Table 1). Psychotherapy is based on developing an attachment with the therapist unveiling private thoughts and feelings, therefore, disclosures during psychotherapy should depict a more accurate perspective of the level of sexual satisfaction following vaginal rejuvenation. According to the psychotherapy notes all subjects reported being content with satisfying their partners. However, their level of sexual satisfaction appeared to be lower after the laser and RF procedure, despite the elimination of pain reported by 64.3% of the subjects.

FSFI scores were plotted against the MMPI-2 L, D and Hy subscales of the MMPI-2 depicted on **Table 2**. The L-scale scores range from 1 - 9, with scores higher than 5 revealing dishonesty. The D-scale scores that fall within the 55 - 64 range reveal insecurity and a general sense of dissatisfaction with an individual's life situation. The Hy-scale scores within the 55 - 64 range reveal denial, immaturity, need for approval, being suggestible, and attention seeking. **Table 2** also includes the subjects' code scores for an enriched perspective of their psychological profiles offering greater insight into their psychological states. Code Score 13

Table 2. Correlation between MMPI L, D and Hy subscales & MMPI-2 code scores.

Subjects	Procedure	FSFI Score	MMPI-2 L-scale	MMPI-2 D-scale	MMPI-2 Hy-scale	MMPI-2 Code score
African	Laser	32	8	59	60	13 or 31
Caucasian	Laser	30	7	57	59	13 or 31
Chinese	RF	33	8	61	63	12 or 21
Caucasian	RF	29	6	57	59	12 or 21
Caucasian	Laser	30	8	57	57	13 or 31
Hispanic	RF	28	6	56	57	13 or 31
Hispanic	Laser	31	8	59	61	12 or 21
African	RF	28	7	57	60	13 or 31
Caucasian	RF	29	7	57	58	13 or 31
Hispanic	Laser	31	8	61	64	12 or 21
Caucasian	Laser	30	8	60	62	13 or 31
Hispanic	RF	29	7	57	61	13 or 31
Hispanic	Laser	31	8	59	63	12 or 21
Caucasian	RF	28	6	56	58	13 or 31
Mean Ave	erage score	29.92857	7.28	58.07	60.14	

or 31 reflects a personality type that is immature, egocentric, sees self under a positive light, insecure, often dependent but denying dependency, that is defined by optimism, pollyannaism, denial and rationalization, often passive aggressive, harboring resentment when experiencing lack of support or being overcontrolled, presenting physical symptoms and complaints when under stress. The Code score 12/21 signifies a personality profile that is anxious, tense, irritable, brooding, self-conscious, indecisive, overly concerned about health and bodily functions, passive and dependent, often expressing somatic complaints.

Results were analyzed both with the Pearson Correlation Coefficient and the Spearman's Rho statistical tests. The Pearson Correlation Coefficient revealed a strong positive correlation between the FSFI and the MMPI-2 Lie L-scale, suggesting that the subjects' FSFI responses were tainted by dishonesty, thus negating the subjects' high satisfaction results on the FSFI. Results were statistically significant with a p-value of 0.000549 and a probability level at p < 0.01 (Table 3(a)).

Spearman's Rho validated the strong positive correlation between the high FSFI scores of sexual satisfaction and the L-scale of the MMPI-2, confirming the statistically significant results obtained with the Pearson Correlation Coefficient (Table 3(b)). This significantly positive correlation between the two variables suggested that the subjects' FSFI responses were untruthful with a tendency to either deny or deliberately distort reality.

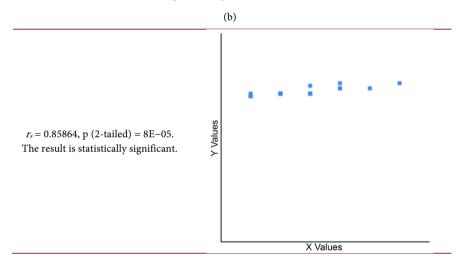
The Pearson Correlation Coefficient revealed a strong positive correlation

Table 3. (a) Correlation between FSFI and MMPI-2 lie scale pearson correlation coefficient; (b) Correlation between FSFI and MMPI-2 lie scale: Spearman's Rho.

(a)

XValues $\Sigma = 419 \text{ Mean} = 29.929$ $\Sigma (X - M_x)^2 = \text{SS}_x = 30.929$ YValues $\Sigma = 102 \text{ Mean} = 7.286$ $\Sigma (Y - M_y)^2 = SS_y = 8.857$ X and Y Combined N = 14 $\Sigma (X - M_x)(Y - M_y) = 13.286$ R Calculation $r = 13.286 / \sqrt{(30.929)(8.857)} = 0.8027$ Meta Numeric (cross-check). r = 0.8027 R = 0.8027. $R^2 = 0.6443$

The P-value is 0.000549. The Result is significant at p < 0.01.



between the FSFI and the MMPI-2 Depression D-scale, suggesting that despite claiming sexual satisfaction on the FSFI, they were in fact burdened by a deep sense of dissatisfaction with their lives, again, negating the subjects' high satisfaction results on the FSFI. Results were statistically significant with a p-value of 0.000549 and a probability level at p < 0.01 (Table 4(a)).

Spearman's Rho correlation revealed that the association between FSFI and the D-scale of the MMPI-2 was statistically significant validating the results obtained by the Pearson correlation coefficient (Table 4(b)). This strong positive correlation between FSFI and MMPI-2 D-scale suggested that the reports of sexual fulfilment and interpersonal satisfaction on the FSFI were based on a superficially positive outlook shielding an underlying general feeling of unhappiness in their home environment.

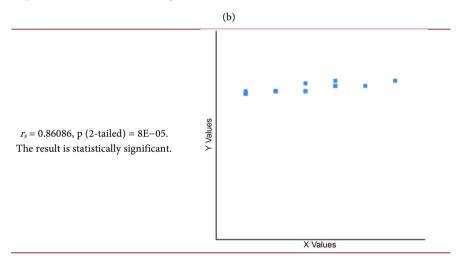
The Pearson Correlation Coefficient revealed a strong positive correlation between the FSFI and the MMPI-2 Hysteria H-scale, suggesting that the high satisfaction scores on the FSFI may have been due to a need for approval and acceptance,

Table 4. (a) Correlation between FSFI and MMPI-2 D scale pearson correlation coefficient; (b) Correlation between FSFI and MMPI-2 D-scale: Spearman's Rho.

(a)

X Values $\Sigma = 419 \text{ Mean} = 29.929$ $\Sigma (X - M_x)^2 = SS_x = 30.929$ X and Y Combined. N = 14 $\Sigma (X - M_x)(Y - M_y) = 29.071$ Y Values $\Sigma = 813. \text{ Mean} = 58.071$ $\Sigma (Y - M_y)^2 = SS_y = 38.929$ R Calculation $r = 29.071/\sqrt{(30.929)(38.929)} = 0.8378$ Meta Numerics (cross-check) r = 0.8378 $R = 0.8378 R^2 = 0.7019$

The p-value is 0.000184. The result is significant at 0 < 0.01.



unrealistic optimism and an impressionistic style of superficial self-awareness that represses negative feelings harboring under the positive façade. Results were statistically significant with a p-value of 0.000549 and a probability level at p < 0.01 (Table 5(a)).

Spearman Rho correlation revealed that the association between FSFI and the MMPI-2 Hy-scale is highly statistically significant validating the results obtained by the Pearson Correlation Coefficient on these two variables (**Table 5(b)**).

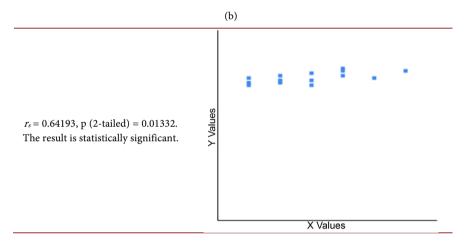
The DES revealed that the subjects highest scores were on the discrete emotions of shame and joy or shame, sadness and joy reflecting an almost surrealistic juxtaposition of contradictory layers; an overt front layer of sexual satisfaction and contentment shielding a hidden layer of unspoken discontent. These results appeared consistent with the subjects' scores on the MMPI-2 code scores with 13/31 correlating with shame and joy and the 12/21 scores correlating with shame, sadness and joy (Table 2). Findings pertaining to our subjects' emotional organization around shame, sadness and joy appeared to reveal a multidimensional

Table 5. (a) Correlation between FSFI and MMPI-2 Hy-Scale: pearson correlation coefficient; (b) Correlation between FSFI and MMPI-2 Hy-Scale: Spearman's Rho.

(a)

X Values $\Sigma = 419 \text{ Mean} = 29.929$ $\Sigma (X - M_x)^2 = SS_x = 30.929$ Y Values $\Sigma = 842. \text{ Mean} = 60.143$ $\Sigma (Y - M_y)^2 = SS_y = 67.714$ X and Y Combined. N = 14 $\Sigma (X - M_x)(Y - M_y) = 29.143$ R Calculation $T = 29.143 / \sqrt{(30.929)(67.714)} = 0.6368$ Meta Numerics (cross-check) T = 0.6368 $T = 0.6368. R^2 = 0.4055$

The P-value is 0.014326. The result is significant at p < 0.05.



landscape with a multi-layered overtly positive and covertly negative emotional configuration. Moreover, the subjects' emotional organization around shame and sadness on the inside and joy on the outside appeared to coincided with higher than average reports of physical illness. All women reported a higher incidence of body aches and indigestion in their psychotherapy notes.

5. Discussion

The high correlation between the L-, D- and Hy-scales of the MMPI-2 and the FSFI, suggested that the subjects' reports of sexual satisfaction on the FSFI may not have reflected their true feelings but may have been driven by their need for approval, being ashamed of their sadness, and perhaps an overly optimistic expectation that the pretence of happiness will make everything alright. This conclusion was supported by the subjects' psychotherapy notes that unveiled the subjects' tendency to focus on their partners' satisfaction, while privately admitting a decline in arousal and sexual satisfaction for themselves.

It is unclear whether the reported physical symptoms were an aspect of the

subjects' personality constellation that was characterized by depressive and hysterical features as seen in the MMPI-2, or whether there was a significant correlation between the three dominant discrete emotions of shame, sadness, joy and a more complex behavioural pattern corresponding to type-C personality that is susceptible to cancer [34]. Recent research that compared cancer patients against healthy controls found that type C personality was significantly more prominent in cancer patients [35]. More research specific to emotional organization and physical illness is necessary before making a conclusive inference.

A high correlation between shame, sadness and physical illness was observed in previous unpublished research where 92 subjects were tested with the DES. DES was correlated with a 10 point Likert scale of self-reported physical health, that was assessed by subjects rating themselves from 0 - 10 on the following variables for the past two years: Severity of Illness, Frequency of Illness, Energy Level, Sense of Well-being and Overall Health. Results revealed that shame (p < (0.0001) and sadness (p < (0.001)) had the highest negative correlation with overall physical health, while anger (p < 0.0001), had the highest overall positive correlation with physical health. Interest (p < 0.01), joy (p < 0.05) and contempt (p < 0.05) had a statistically significant positive correlations with physical health, indicating that people organized around interest, joy or contempt are usually relatively physically healthier than others. Fear, disgust and guilt had a negative correlation with physical health however, these three emotions did not reach statistical significance suggesting that relatively to individuals organized around shame and sadness, those organized around disgust and guilt and fear are usually physically healthier. Surprise had a positive correlation with overall physical health but did not reach statistical significance. Overall, emotional organization around shame will distort a subject's sincerity on self-report questionnaires, therefore, it is quite relevant to the administration of short straightforward questionnaires like the FSFI or the FSDS-R. Sadness may be partly related, among other things, to hormonal imbalance. Hidden, denied, or repressed psychological issues may stem from interpersonal or intrapsychic conflicts or a physiological imbalance related to hormones and neurotransmitters or both, and it should be taken into consideration when investigating sexual satisfaction since from this perspective, the results of self-report questionnaires may be false and therefore, invalid and unreliable. It should be noted that focusing on hormonal imbalance alone is still short of providing a comprehensive perspective of the female sexuality. Psychotherapy may turn out to be a crucial addition in successfully treating menopausal women seeking medical interventions. Some of the most common psychotherapy targets for adults without a mental illness are listed below:

- 1) The main psychotherapy goal is to increase degrees of freedom by releasing the patient from the stickiness of past failures, abandonment, resentments and loss.
 - 2) Support new beginnings and opportunities.
- 3) Introduce patients to themselves for a realistic self-appraisal, appreciation and acceptance of strengths, weaknesses, and dependency issues.

- 4) Reinforce a realistic appraisal and acceptance of others that renders realistic expectations, thus avoiding repetition of unresolved conflicts in interpersonal relationships.
 - 5) Reinforce a realistic evaluation of life events and situations.
- 6) Guide patients on how to develop a strategy that brings solutions, avoiding rationalizations, teleological explanations and attitudes that give the distorted perspective of self-punishment or a predetermined destiny.
- 7) Guide patients to abandon self-deprecating attitudes, self-blame, unrealistic optimism or eternal pessimism.
- 8) Enhance self-driven motivation, self-reliance, self-confidence and persistence in completing tasks.
- 9) Educate patients on how to turn adversity into advantage and learn how to utilize both character advantages and personality flaws in a productive manner.

Admittedly, there were limitations our research. These included a rather small sample size and the fact that all participants were in psychotherapy that could pose threat to validity in terms of a selection bias, despite of the exclusion of patients with a clinical disorder and the fact that our sample was randomized. Interestingly, all our subjects appeared to fall under a personality organization with hysterical and depressive undertones which may or may not be representative of the female population seeking vaginal rejuvenation procedures. This selection bias issue should be investigated by more research with a larger sample of women who are not in psychotherapy.

6. Conclusion

The success of interpersonal relationships is largely dependent on understanding and improving female quality of life that includes sexual satisfaction. Females are usually in charge of maintaining the foundation, continuity and integrity of a relationship. Female satisfaction is a simple matter but a multi-faced, psycho-physiological composite that cannot be modified without altering both its physiological and psychological components. The high correlation between the FSFI and the MMPI-2 Lie scale was somewhat alarming as was the positive outcome of the FSFI that highly correlated with depressive/hysterical features, suggesting that the FSFI had provided a very limited and rather inaccurate view of female satisfaction after laser or RF vaginal rejuvenation. A personality type with hysterical and depressive undertones, driven by insecurity, shame, the longing for happiness and the need for approval would distort the results of any transparent self-report questionnaire to maintain or rescue interpersonal relationships and enhance self-esteem. Therefore, in assessing female satisfaction after any medical or aesthetic procedure a comprehensive battery of tests is necessary in order to secure the internal validity of a study.

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who requested to remain anonymous, and who provided the psychological testing and other clinical data for several of their patients, out of which the author randomly selected the 14 subjects that participated in this research.

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Conflicts of Interest

The author reports no conflicts of interest.

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