

Acceptance and Commitment Therapy in the Satisfaction of Veterans with Spinal Cord Injuries Spouses

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Objectives: The aim of this study was to examine the effectiveness of psychotherapy based on acceptance and commitment therapy (ACT) on the subscales of marital satisfaction; overall satisfaction, religious orientation, relations with children, sex, occasional conflicts, interpersonal conflicts and arrogance, by single case study in the spouses of veterans with spinal cord injuries.

Method: Participants completed Enrich marital satisfaction questionnaire at baseline (3 to 6 weeks), during six session's psychotherapy and the two-month follow-up.

Results: Analysis method of charting and visual analysis of the results showed that the (ACT) is an effective therapeutic approach to 4 marital satisfaction subscales but second and third participant didn't show any improvement..

Conclusion: Considering the above, (ACT) is an effective therapeutic approach to overall satisfaction, occasional conflicts, relations with children and interpersonal conflicts.

Keywords: acceptance and commitment therapy (ACT), veterans, marital satisfaction

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Introduction

Spinal cord is a big debilitating trauma in the life (1). This may have a destructive effect on family cohesion and lead to confusion and conflict in the family roles in a marriage (2). Research of Renshaw, Rodriguez and Jones and Warren Ponder has shown that the experience of the war itself is negative correlation with marital satisfaction in military families (3;4). This dissatisfaction caused by factors such as increase of women's responsibilities at home, parenting problems, and occasionally enforces military regulations at home (5).

The impact of physical changes in the social, economic, psychological and familial relations is a fundamental issue(2). Veterans who suffer serious physical injury involved in mental disorders such as depression, anxiety, and decreased quality of interpersonal relationships (6) and Subsequently the great effects on the family, especially his wife and children are seen (7). Veterans with spinal cord injuries suffer from slow movement of their arms and legs, loss of sensation in certain parts of the body, Lack of bladder and bowel control and sexual dysfunction, and these factors lead to fundamental changes in social and marital relations and put a lot

of pressure on their spouse (7). In comparison to other women these women have more somatic complaints, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, and paranoid ideation (2).

According to veteran and their spouse problems, if psychological and educational services are not provide to them would increase discontent, violence and divorce in these couples. Including the approaches that are used to enhance the marital satisfaction is cognitive – behavioral interventions (8). One of these interventions is mindfulness based acceptance and commitment that is a third generation intervention of cognitive – behavioral therapy.

Acceptance and commitment therapy (ACT) has a consist philosophical and theoretical framework, it is an experience-based intervention that applies strategies based on awareness and acceptance, along with commitment and behavior change strategies to increase psychological flexibility, So client can completely touch the present time and change her/his behavior based on her/his values (9). Effectiveness of this therapeutic approach is appropriate in improvement of depression, (10; 11; 12; 13), addiction (14; 15), stress (16), occupational

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stress (17), Chronic pain (4; 18), Eating Disorders and Obesity (19). This study was performed to answer the following questions. Does acceptance and commitment therapy improve overall satisfaction of veteran's spouses? Does acceptance and commitment therapy improve adaptation of spouses at religious orientation? Does acceptance and commitment therapy improve adaptation of spouses at relationship with children? Does acceptance and commitment therapy improve sex of spouses? Does acceptance and commitment therapy reduce occasional disagreements and conflicts? Does acceptance and commitment therapy reduces arrogance and improve interpersonal relationship?

Methods

This semi-experimental study of a single subject with the following two months. The number of spouses of veterans who meet the entry criteria, were interviewed and a questionnaire was delivered to marital satisfaction, 4, the lowest score (score less than 80) in the scale were achieved. To increase external validity, Participants who met inclusion criteria were randomly divided into two groups. And at any time only a single subject was studied, In the first phase of therapy sessions were conducted by

only 2 Participants Enter the 2 others were tested. And subsequent measurement periods, the baseline: the 12-session intervention and the final evaluation were conducted. Finally, after a two-month follow-up assessment was conducted. Two of the three baselines were assessed at baseline and two others were six sessions.

Measures - Enrich Marital Satisfaction Scale: This has been applied as a reliable scale to measure marital satisfaction. In this study, 40 items were used to form, Bahmani, Asgari& Tamaddoni (19; 20) reported the reliability of the scale to be 0/91. Also Subscales for the 0/83, 0/70, 0/72, 0/70, 0/76, 0/66 is obtained. Includes the following 6 subscales: Overall satisfaction: (1, 2, 3, 4, 7, 9, 13, 14, 15, 18, 20, 24, 29).

Religious Orientation: (6, 8, 12, 16).

Children and Parenting: (5, 10, 17, 19, 22).

Sex: (11, 21, 23, 25, 26).

Incidental or occasional disagreements and conflicts: (27, 28, 30, 31, 32, 33, 34, 35).

Selfishness and poor interpersonal: (36, 37, 38, 39, 40).

Results

Profile of each participant in the study has been described in table (1).

Table 1: Demographic Information

Participants	P 1	P 2	P 3	P 4
Age	48 years	45 years	49 years	51 years
Duration of marriage	30 years	29 years	31 years	30 years
Education		Diploma	Masters	
Job	educator	Housekeeper	Housekeeper	Teacher
Injury in wife	1987	1986	1986	1985
Number of Children	2	1	2	1

To evaluate the first research question, the score of each subject was examined in the overall satisfaction subscale during baseline see table (2), intervention and follow-up were, Enrich marital satisfaction scale scores in each of four subjects before and during treatment sessions is nearly constant baseline and In

the case of the Overall improvement of the participants was 95.62 % , which increased to 98.3% after 2 months of follow up. So Overall satisfaction scores during psychotherapy sessions, subjects were significantly elevated.

Table 2. Overall satisfaction subscale scores of participants

	P 1	P 2	P 3	P 4
Average of Baseline scores	16.67	19.33	18	18.83
Second Week	18	21	22	19
Twelfth Week	36	35	36	35
Percent recovery	116%	81%	100%	85.5%
Percent improvement in overall			95.62%	
Followup 1	36	35	36	36
Followup 2	36	36	36	36
Percent improvement	91.2%	100%	86%	116%
Percent improvement in overall			98.3%	

To evaluate the Second research question, the score of each subject was examined in the Religious Orientation subscale during baseline see table (3), intervention and follow-up were, During the sessions , subjects ' scores on the religious orientation has been no significant change . Percent overall

improvement after 2 months of treatment and follow-up was only 12%, so the acceptance and commitment therapy based on religious orientation were not improved.

Table 3. Religious Orientation subscale scores of participants

	P 1	P 2	P 3	P 4
Average of Baseline scores	13	10.67	7.83	11.83
Second Week	12	10	7	12
Twelfth Week	12	13	10	11
Percent recovery	-0.08%	22%	28%	0.07%
Percent improvement in overall			12%	
Followup 1	12	13	11	11
Followup 2	12	13	10	11
Percent recovery	-0.08	22%	28%	0.07%
Percent improvement in overall			12%	

To evaluate the Third research question, the score of each subject was examined in the Children and Parenting subscale during baseline, see table (4) intervention and follow-up were Subscale of the ENRICH marital satisfaction scale in relation to the child before intervention was above average and is nearly constant during the baseline sessions The

third participant scores during the intervention sessions, but did not change any other participants 3 scores increased Percent overall and 2-month follow-up after treatment was 36% that Indicating a partial improvement participants.

Table 4: Children and Parenting subscale scores of participants

	P 1	P 2	P 3	P 4
Average of Baseline scores	10.67	14	9	11.67
Second Week	11	14	10	11
Twelfth Week	15	14	15	16
Percent recovery	41%	0	67%	37%
Percent improvement in overall			36%	
Follow-up 1	15	14	15	16
Follow-up 2	15	14	15	16
Percent recovery	41%	0	67%	37%
Percent improvement in overall			36%	

To evaluate the Fourth research question, the score of each subject was examined in the sex subscale during baseline, intervention and follow-up were. Sex subscale scores in four subjects before and

during the intervening minimum of five baseline sessions were almost constant, see table (5) during the experimental sessions, participants ' scores have not changed sex.

Table 5. sex subscale scores of participants

	Baseline 1	Second Week	Twelfth Week	Followup 1	Followup 2	Percent improvement	Percent improvement in overall
P 1	5	5	5	5	5	0	
P 2	6.67	7	6	6	6	0.1%	0.025%
P 3	5	5	5	5	5	0	
P 4	5	5	5	5	5	0	

To evaluate the Fifth research question, the score of each subject was examined in the Incidental or

occasional disagreements and conflicts subscale during baseline,table(6) intervention and follow-up

were, Enrich marital satisfaction scale scores in each of four subjects before and during treatment sessions is nearly constant baseline and In the case of the Overall improvement of the participants was 92.1%,

which increased to 103% after 2 months of follow up. So Overall satisfaction scores during psychotherapy sessions, subjects were significantly elevated

Table 6: Incidental or occasional disagreements and conflicts subscale scores of participants

	P 1	P 2	P 3	P 4
Average of Baseline scores	11	11	11.67	10.33
Second Week	12	12	11	11
Twelfth Week	18	21	20	25
Percent recovery	64%	91%	71.4%	142%
Percent improvement in overall			92.1%	
Follow-up 1	18	21	20	26
Follow-up 2	19	22	23	25
Percent recovery	73%	100%	97%	142%
Percent improvement in overall			103%	

To evaluate the sixth research question, the score of each subject was examined in the Selfishness and poor interpersonal subscale during baseline, table (7) intervention and follow-up were, Enrich marital satisfaction scale scores in each of four subjects before and during treatment sessions is nearly

constant baseline and In the case of the Overall improvement of the participants was 57.13%, which increased to 59% after 2 months of follow up. So Overall satisfaction scores during psychotherapy sessions, subjects were significantly elevated.

Table 7: Selfishness and poor interpersonal subscale scores of participants

	P 1	P 2	P 3	P 4
Average of Baseline scores	9	9	8	9
Second Week	10	9	9	8
Twelfth Week	14	12	13	15
Percent recovery	56%	43%	62.5%	67%
Percent improvement in overall			57.13%	
Follow-up 1	14	12	13	15
Follow-up 2	14	12	13	16
Percent recovery	56%	43%	62.5%	78%
Percent improvement in overall			59%	

Discussion

In this study, acceptance and commitment therapy showed high effectiveness on overall satisfaction, interpersonal relations and occasionally disputes and conflicts. It seems clients can solve their problems and have a happier life with increasing acceptance of internal experiences such as thoughts and feelings about her husband and creating goals according to her values and commitment. Actively and effectively cope with thoughts and feelings, avoiding the Avoidance, changing of attitude toward themselves and their individual stories in which role of victim is imposed for themselves, review the values and life goals and finally commitment to different goals are main factors considered in this approach. By simple sensory exercises, participants will be familiar with the concept of mindfulness and its benefits in daily

life. During the sessions the role of learning through experience was emphasized in compare to learning of theoretical knowledge and benefits of cognitive diffusion was emphasized rather than labeling or judgment. Abandon judgment and evaluation in marital relations can reduce conflicts.

Percentage improvement of participants, especially the first and the fourth in religious orientation subscale shows acceptance and commitment therapy (ACT) had no effect on compatibility of religious orientation. Explanation of this result is in the pre-test scores; in fact the scores of 3 participants were high before the intervention and the third participants scores improve slightly after the intervention. Also one of the reasons for going to war in Iran was religious beliefs of warriors that make veterans and their family more resistant and

reduce pain of disability. Results of the study indicate that acceptance and commitment therapy (ACT) improve relationship with children by three participants but third participant didn't show any improvement. Improvement percentage of participants is 41%, 0%, 67%, 36%. The overall improvement percentage after intervention is 36% and did not change after 2 month follow-up. Improvement percentage of 4 participants is different. Second participants score in baseline has good situation, the participant has a 28 years old boy which has resided in Tehran because of education and the workplace, so this participant has no problem in parenting.

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Veteran spouse's sexual satisfaction subscale scores did not change because in this study participants were spouses of veterans in the lumbar spinal cord injuries that make sexual disorder, inability to control the bladder and bowel.

Conclusion

Acceptance and commitment therapy (ACT) is effective on improving marital satisfaction spouses of veterans with spinal cord. However, it is recommended that the ACT approach will compared with other approaches.