

## **Role of Dogs in Life Satisfaction and Stress Reduction: A Comparative Study**

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**Abstract:** *The objective of the study was to compare the stress levels and life satisfaction between dog owners and non-dog owners. Present study was based on assumption that dogs have a vital role in maintaining the psychological health of human beings. A sample size of 100 was decided i.e. 50 for dog owners and 50 for non-dog owners. Further, a qualitative data collection via semi structured interview conducted. Participants were selected from higher socioeconomic background and varied in age from 20yrs to 30 yrs. Random stratified sampling was done. Satisfaction with life scale by Diener (1985) was used to measure life satisfaction and Perceived Stress Scale by Cohen was used to measure stress in participants. The study showed lower levels of stress and high life satisfaction in participants having dogs as compared to participants not having dogs*

**Keywords:** *stress, life satisfaction, dogs*

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### **I. Introduction**

Life satisfaction is the way a person perceives his or her life and how much he or she has optimistic view about his or her life. It is a measure of subjective well-being and may be perceived in terms of mood, satisfaction with interpersonal relations with others and with achieved goals, self-concepts, and self-perceived ability to cope with day to day life hassles. It is having a suitable attitude of one's life as a whole rather than an assessment of current mood and emotions. Life satisfaction has been adjacent relation to economic standing, educational qualification, experiences, and residence, as well as many other topics. Life satisfaction can also be seen as a conceptualizing the mental schemas of happiness or subjective well-being. It also involves judgments of achieving of one's needs, goals, and wishes. This view is essentially based by seminal studies of the founding fathers of the life satisfaction research movement: Andrews and Withey (1976). Diener et al. (Diener, Emmons, Larsen & Grif fi n 1985) defined life satisfaction as "a cognitive judgmental process dependent upon a comparison of one's circumstances with what is thought to be an appropriate standard thus, the lower the incongruity between the perception of life achievements and some standard, the higher the life satisfaction.

Most current definitions state that stress is the cognitive and somatic response and adaptation to our bodies to the real or perceived changes and challenges in our lives. Sometimes our body reacts to any kind of response which is caused by any real or perceived physical social or psychological event, in short by a stimulus. The stimulus which takes toll on a person is known as a stressor. Stress can also disturb our physical or mental equilibrium. It's an ever-present part of life. "Fight-or-flight" response can be prompt through a stressor in life, causing hormones such as adrenaline and cortisol to surge through the body. A little bit of stress, known as "eustress," can be motivating and necessary for people to function properly—it keeps the individual active and alert. But negative or "distress" can have detrimental effects on health as it can be demotivating and disabling for a person. Importantly, stress is in the eye of the beholder: Each person's unique combination of genetics, life experiences, personality, and ability to cope with stressors determines what opinion the person forms about an event and what conclusion he or she makes of it. What "stresses out" one person may not even bother the next person. Stress can have many physical ill effects on a person such as cardiovascular diseases, hair loss, weight gain, diabetes, digestive problems etc. Stress can also affect a person's psychological health negatively in many ways such as lack of concentration, lack of sleep, migraine, tension headaches, lost libido etc. Stress is an contributes heavily to mental disability and emotional dysfunction in developed nations as well as in nations which are now industrializing. Environmental stressors including divorce, marital conflict, economic hardships etc. have been linked to many mental disorders particularly depression and anxiety. Evidences have shown that individuals moving from adolescence to adulthood face increased stressors of all kind.

### **Benefits of Petting Dogs:**

A study conducted by Albet and Bulcroft in The United States Of America in 1988 stated that Affection to pets is highest among never-married, divorced, widowed and remarried people, childless couples, newlyweds, and empty-nesters. Never-married, divorced, and remarried people, and people without children present, are also most likely to anthropomorphize their pets. In several other countries, it is now recognized that human–dog interactions lead to physical and physiological reactions such as a release of feel-good hormones (e.g., serotonin), a reduction in physiological indicators of stress e.g., high blood pressure( Allen, 2003; Anderson, Reid, & Jennings, 1992), a decrease in problems related to coronary heart disease ( Headey, 1998; Patronek & Glickman, 1993;), and fewer minor health problems and physician visits (Rowan & Beck, 1994; Serpell, 1991;).

A study of Bushman and Barbara A. (2014), stated that dog owners perceived their dogs as a source of motivation for physical activity. There was a reported sense of responsibility to exercise their dog and a sense of guilt if they didn't. Some owners reported feeling physically forced into exercise because their dog was so persistent and eager to play. This exercise causes dog owners to be less obese putting them less at risk for diabetes, high blood pressure, heart disease and high cholesterol. Simply having the obligation to walk a dog increased the health of the owners.

Dog owners also proved to have less stress, anxiety and depression. This was measured by psychological tests and heart rate. Dogs act as social support and provide companionship which allows for owners to be more comfortable and confident about their lives. Endless and unconditional love that dogs give causes their owners to be optimistic and have better self- esteem. Living with a dog gave owners a subconscious feeling of protection, decreasing anxiety, as well.

Another study conducted by Knight and Edwards (2008), also stated many positives of dogs on human beings especially the elderly. Dogs were treated as family members by many. Dogs were also described as therapists by many people as they comforted them whenever they were in depressed mood. Dog owners also felt safe, protected and secured with dogs around them. Owners also reported never feeling lonely with their dog around. In another study, this one in the United States, 23 938 Medicare enrollees were divided into pet owners and non–pet owners. The pet owners, especially the dog owners, had visited physician less frequently than non–pet owners. Moreover, more doctoral visits were associated with stressful life situations among the non–pet owners, but not among the pet owners. This study suggested that owning a pet helped intervene stress.(Siegel J, 1990).

Animals also reduced state-anxiety. The anxiety-reducing effect of petting an animal can be said for both the soft friendly animals and to the strong and ferocious ones. Animals may also reduce anxiety and trigger happiness in people who don't pet animals, because there are many people who don't own pets but love to play with other animals. Dogs can also provide comfort and become a support system in people's lives in rough patches of time such as divorce or death of a loved one. Dogs also behaves as a crucial part of life for people who don't have kids as they help them to divert their minds and give them an opportunity to nurture. In clinical practice it helps to be aware of how significant a pet may be to a client. Dogs not only positively influence the their owner's relationship with others and contributed to their owner's self-growth and increased happiness. Dogs also help people to initiate change in their lives and behavior and resolve problems of feeling lonely and aloof by viewing the dog as part of nature and finding a reconnection to self and others through a mindful interaction with their dog. Dogs also have positive vibes and also maintain cheerful and active environment around the owner.

### **Animal Assisted Therapy (AAT) and Dogs:**

The Delta Society, one of the largest organizations responsible for the certification of therapy animals in the United States, has published the following widely cited definitions of animal-assisted therapy and animal-assisted intervention.

AAT is a goal-oriented intervention in which an animal that meets specific criteria is an important aspect of the treatment process. AAT is performed by a health or psychological professional with specialized knowledge within the scope of practice of his/her profession. Key features include specified goals and objectives for each individual and monitored progress.

Animal-assisted activity: AAA provides different procedures and ways to enhance quality of life through motivational, educational, recreational, and/or therapeutic benefits. AAAs can be administered in a diversity of environments by especially proficient professionals, paraprofessionals, and/or volunteers who expertise in the same meet specific criteria. Here, treatment goals are not specific; detailed notes and case history is not required; visit content is spontaneous.

A study provides strong evidence that pain in children can be reduced by administering AAT on them. Children who experienced AAT reported four times greater pain reduction as compared to those who just relaxed for 15 min. The results indicate that being in the therapy group was the only variable steadily inclined

towards pain reduction. Clinically, the results are also significant. One individual reported a reduction of pain from a level of eight to zero without the use of analgesics for at least 3 hours (Braun et al., 2009). A pilot study conducted by Barker et al. in 2005 found a significant reduction in serum and salivary cortisol in healthcare professionals following the interaction with therapy dogs. Study also stated stress reduction in healthcare professionals may occur after as little as 5minutes of interaction with therapy dogs.

A study showed that social engagement of the autistic children and their families was mediated by therapy and service dogs. This analysis showed that an experience of emotional connection between an autistic child and family members can be afforded by child dog interactions,(Solomon, 2010). Powerful, positive force on children's physical health, psychological wellbeing, social interaction and academic achievement in classrooms and hospitals can also be seen through interaction of therapy dogs with children. (Jalango, Astorino, Bomboy,2004).

## II. Objective

The objective of the current study was to examine the stress and life satisfaction in dog owners and non-dog owners.

## III. Significance

Most studies on human animal relationship are based on western context. Stress levels are rising in today's growing India specially in metropolitan cities due to work load, lifestyle changes etc. ultimately leading to cardiovascular diseases, migraine and other health related problems. Relaxation techniques which are in practice now a days are time consuming and people need to be patient to practice them and find a time slot in their schedule which becomes difficult due to today's lifestyle.

Hence, some kind of relaxation technique which gets mixed up or engrossed in people daily routine and separate time slot is not mandatory for it. Petting a dog can be one such method. Although dogs are owned by many people it is fairly not popular. Animal assisted therapy and therapy dogs can be used in clinical setting as a different approach for treatment and rehabilitation for people who have inclination towards dogs. This research can generate hypothesis for further research as much of the research is needed in this stream specially in Indian context.

## IV. Method

### Sample

Sample consisted of 50 dog owners and 50 non dog owners. Random stratified sampling was done to select the participants. All participants were from higher socio-economic group and varied from 20 to 30 years of age. Although sample was dominated by females. Most participants were unmarried.

### Tools and Techniques

This comparative study was done between dog owners and non-dog owners. Questionnaires were given to participants of both the groups respectively. PSS and Satisfaction with Life scale were used to measure the variables.

PSS is a five point rating scale developed by Cohen et.al (1983) ranging from 0-4.(never, almost never, sometimes, fairly often, very often). PSS has ten items out of which item no. 4, 5, 7, 8 are positive items and rest are negative items. Hence, item no.s 4, 5, 7, 8 needed reverse scoring. The lesser the score on PSS, lower the stress of the participant. Score on PSS below 13 signifies normal stress level and scores near or above 20 indicates high stress level and a need for relaxation techniques.

Satisfaction With Life scale given by Diener(1985), have five items and all of which are positive items. So no reverse scoring was needed. The higher the score more satisfied the participant is. Score above 30 signifies high life satisfaction and scores below 10 signifies low life satisfaction.

Further, a semi structured interview was conducted for 30 pet owners to record their experiences with their pet and to record their day to day dealing with stress.

## V. Result And Discussion

This study was planned to examine the role of dogs in life satisfaction and stress reduction. Data were collected using standardized tools and techniques and following results were found.

**Table 1: Descriptive Statistics, N=50**

	Group	Mean	Std. Deviation
Life satisfaction	dog owner	26.50	5.38
	non dog owner	22.62	5.04
Perceived Stress	dog owner	16.02	4.16
	non dog owner	18.60	3.36

Table indicates that dog owner scored more on life satisfaction and less on perceived stress in comparison to participants those who have no dogs.

**Table 2: t-value effect size of life satisfaction**

	Mean	t-value	effect size
Dog owners	26.50		
Non dog owners	22.62	3.72**	0.74

\*Significance at level  $p < 0.01$

**Table 3: t-value and effect size of Perceived Stress**

	Mean	t-value	effect size
Dog owners	16.02		
Non-dog owner	18.60	3.40**	0.68

\*Significance at level  $p < 0.05$

The t-values of both, life satisfaction and perceived stress are significant. Effect size of LS was found to be 0.744 and of PSS was 0.685. As per the classification given by Cohen, the effect size was Medium. Hence, it may be said that there was a significant role of pets in life satisfaction and stress reduction. Similar results were found in the study of Barker and Dawson (1998) which showed reduced state anxiety in the hospitalized psychiatric patients by Animal Assisted Therapy. This study was also in congruence with the study of Jalango, Astorino and Bomboy (2004), which showed positive effects of therapy dogs in children’s well-being and learning. A study (Knight and Edwards, 2008) also showed improved well-being, reduced loneliness and stress in elderly. Our study also shows similar effects of dog ownership in youth. Participants shared their experiences regarding their relationship with their dog. As told by participants, their dogs helped them to deviate themselves from the stressors. Whenever participants petted their dogs, they felt relaxed as if all of their tension was oozing out. “Not a day goes when I forget to pet my dog or I ignore him just because I had a busy day? No, he deserves all my love and care as she reverts back the same. It makes me so calm at times”, said one participant. They felt dogs were their companion in the hills and vallies. Even if person was in stressed situation, they felt happy with their dog’s unconditional positive regard towards them. One of the participant feels, “sometimes humans fail to understand others’ emotions but dogs never fail. Even if they don’t speak; they have their own way of conversing with us.” Dogs have been such important part of their lives that they can’t imagine their lives without their pets. Another participant stated, “it is the best part of the day when I come home from work and my dog comes and play with me, licks my feet. I just can’t live without him.”

Whenever participants faced problems in family or in their workplace, their dogs understood that there is something wrong with them and helped them cheer up. This created a positive environment in their homes. “My grandfather was in depression lately and we gave him a Beagle dog. He became so busy and engaged with him that there was no room for his depressed feelings and negative thoughts. He always plays with him and keeps him like his best friend.” stated one of the interviewee.

Most participants felt that dogs helped to maintain positive vibes in the house. Those family members who didn’t play with the dog also felt attached to the pet and tried to take care of him in any way possible even if they don’t touch it. All the participants felt same that pet plays a vital role in their high life satisfaction. One participant’s grandmother recently died and she said that it was very helpful to have her dog around her at that time. “It was great to have him around that time. Bruno (the dog) really proved to be of great help to cope up with that bad time. It was seen that dog owners were more willing to participate in the study than non-dog owners.” They said that it was really good that their love for their pets is being recognized and examined. Participants of younger age loved to play with their dogs as they thought that it kept them active and fit. “It gets really exhausting to play with Simba but its real fun!” they said that their dog is their best friend and their black diary too. They could share any secret with them and felt relieved. Most participants said that not only they loved their pet a lot but their dogs also love them equally and unconditionally. “She is so loving and so giving in nature that she always gives you positive regard and loves but never asks for anything in return” said a participant. Even if participants didn’t feel connected to their pets they still felt responsible towards them like their family members.

Another benefit stated by participants of having a dog is security. Participants have a lot of sense of security with their dogs around. Participants felt much more secure with their pets as if was fine right then. They even did not worry of thefts or burglary with their dogs at home, especially with fighter dogs, hunter dogs and guard dogs. Participants felt secure for their younger family members whenever they are alone at home with their dogs. Most participants had a viewpoint that their dogs played a major role in maintaining their optimistic for their life. However, they could specify the certain way their dogs helped. Some participants preferred forgetting about any adverse event occurred in their life as a coping strategy; others preferred resolving it or facing it till it got neutral for them. Former participants stated that dogs helped them a lot to cope from adverse

event by helping them forget it. They got engaged with their dog and spent a lot of time with them so as to divert their mind from negative thought process and bend it towards happiness and positivity.

Overall, dogs are a great part of their lives and they influence a portion of their owners' lives in a positive and constructive way. No negative events or pessimism was reported by dog owners regarding their dog, except when their pet falls ill or they fear of his death.

## **VI. Conclusion**

The purpose of this study was to study the role of dogs in stress reduction and life satisfaction. A comparative study was done on dog owners and non-dog owners us satisfaction with life scale and PSS scale. There was significant difference between life satisfaction and stress levels of dog owners and non-dog owners. Dog owners were very much satisfied with their life and with their lives and their relationship with their dog as well. Dog owners also had a lower level of perceived stress. They felt that dogs are selfless creatures and show unconditional positive regard to their owner. Their dogs helped them a lot in reducing stress levels and remaining calm. Their dogs also helped in maintaining some level of physical activity which helped them remain fit and regulate mood. Overall dogs help a lot in their owners' health and well-being.

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