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Examining Stress and Pet/Stuffed Animal Attachment Levels with College Students

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#### Abstract

Research shows that stress affects over 50% of undergraduates' health on university campuses (Crump & Derting, 2015). One of the reasons is due to the developmental transition between college and adulthood, which is usually confronted with stressful situations as students prepare to adapt in the new environment (Kim, Noh, & Park, 2015). While pets and stuffed animals are popular in society, there has been little research conducted to investigate if owning pets and/or stuffed animals relates to lower stress levels. The first hypothesis was to determine if pet ownership relates to lower perceived stress in college students. The second hypothesis was to determine if stuffed animal ownership relates to lower perceived stress in college students. Researchers also investigated if college students have a similar attachment level between pets and stuffed animals. There were some significant correlations discovered that provided new information on pet/stuffed animal attachment. Further implications of the results will be discussed.

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The transition from adolescence to adulthood with college students is constantly challenged with stressful situations as they prepare to adapt socially and to attain a varied set of developmental tasks (Kim, Noh, & Park, 2015). The reduction of supporters, such as friends from high school and family, may add to the already stressful situation as you transition to college (Hudd, Dumlao, Erdmann-Sager, Murray, Phan, Soukas, & Yokozuka, 2000). Research has discovered that college students endure increased stress with amplified class workload (89%), change in living environment (83%), change in social activities (78%), change in eating habits (77.5%), and change in sleeping habits (76%) (Shudifat & Al-Husban, 2015).

Interacting with pets, especially dogs, is noticeably different from interacting with people because dogs are highly responsive, provide unconditional love, and alleviate tension (Kurdek, 2008). Emotional well-being and overall health can improve due to bonding with a dog or any other pet which can reduce stress and blood pressure (King, 2012). Research revealed that people who have high emotional attachment to pets are similar in how they feel for their mothers, siblings, best friends, and significant others (Kurdek, 2008). This research indicates that having an attachment to pets improves an individual's coping skills because animals can increase their emotional well-being (Kurdek, 2008).

A source of comfort and reassurance for many people are animals, especially pets (Crump & Derting, 2015). Animal-assisted interventions provide psychological and physiological advantages, including improvements in depression, loneliness, blood pressure, and stress (Crump & Derting, 2015). Research shows neurotransmitters (e.g., oxytocin, endorphins) that promote relaxation, inner-peace, self-esteem, nurturing, and over well-being can be released through the emotional attachment and physical contact with animals (Crump & Derting, 2015).

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Taking a companion animal to college is not always an option because of certain circumstances in college dormitories that prohibit owning live animals (Barlow, Cromer, Caron, & Freyd, 2012). In this instance, a comparable form of comfort could be provided by stuffed animals such as teddy bears that could otherwise be derived from companion animals (Barlow et al., 2012). Previous research has found that high dissociative college students viewed stuffed animals as friends and were more likely to take them to bed than low dissociators (Barlow et al., 2012). This suggests that students beginning college can utilize stuffed animals as comfort objects to help during life transitions (Barlow et al., 2012).

The idea of examining the relationship between pet attachment and/or stuffed animal attachment with college students led researchers to wonder if college students have a similar attachment level between pets and stuffed animals. Researchers were also curious if owning a pet and/or stuffed animal made a difference in how college students manage or address their stress. The first hypothesis of this study was to investigate if pet ownership relates to lower perceived stress in college students. The second hypothesis was to investigate if stuffed animal ownership relates to lower perceived stress in college students. Researchers hypothesize that pet/stuffed animal ownership will relate to lower perceived stress in college students.

## Method

## **Participants**

Eighteen undergraduate students (16 females and 2 males; average age=19) from a mid-sized university in the Southwest were recruited. The sample consists of 44.4% Caucasian, 16.7% Black/African American, 33.3% Latino/a or Hispanic, and 5.6% Other. In this research study, participants volunteered to receive extra credit or in order to fulfill a course requirement for a psychology class.

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Descriptive Data. A demographic form asking information about each participant's gender, age, ethnicity, college year, college major/minor, current college credit hours, current living place, and hours of employment was administered to participants.

Perceived Stress. The participants completed the 14-item Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983). The PSS is a perceived stress scale used to assess stress levels during the last month. Participants responded to items such as "In the last month, how often have you felt that you were unable to control the important things in your life?" on a Likert-type scale ranging from 1 (never) to 5 (very often). The original 14-item PSS scale utilized a Likert scale from 0 (never) to 4 (very often), but researchers wanted to modify the scale from 1 to 5.

Pet Attachment. The participants completed the 35-item Pet Attachment and Life-Impact Questionnaire (PALS; Cromer & Barlow, 2013). The PALS was used to assess pet attachment level of participants. Participants responded to items such as "My pet is part of my family" on a Likert-type scale ranging from 1 (not at all) to 5 (very much).

Stuffed Animal Attachment. The participants completed a revised version of the 35-item Pet Attachment and Life-Impact Questionnaire (PALS) with replacing the word pets to stuffed animals in the questions. The stuffed animal questionnaire (SAQ) assessed the stuffed animal attachment level of participants. Participants responded to items such as "My stuffed animal is part of my family" on a Likert-type scale ranging from 1 (not at all) to 5 (very much).

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As participants entered the classroom, they were instructed to sign in on the sign-in sheet and were assigned a seat. Participants were given a consent form and upon signed completion of the form, participants were given instructions on completing the materials. Participants were given a folder containing the 3 questionnaires and a demographic form. First, participants were asked to complete the Perceived Stress Scale, followed by the Pet Attachment and Life-Impact Questionnaire, and the revised Pet Attachment and Life-Impact Questionnaire with stuffed animals as the topic (SAQ). Participants were then asked to complete a demographic form. Lastly, after the participants checked that all questionnaires were answered and completed, the participants were debriefed and dismissed.

#### **Results**

A bivariate correlation was conducted between Perceived Stress Scale score (PSS score), pet love, pet regulation, pet personal growth, pet negative impact, stuffed animal love, stuffed animal regulation, stuffed animal personal growth, and stuffed animal negative impact. By examining at attachment levels, there were four factors that defined attachment on the PALS and SAQ questionnaire: love, regulation, personal growth, and negative impact. There was a positive correlation between pet love and pet regulation, r=0.83, p<0.001. Individuals who reported higher scores on pet love (M=4.22, SD=0.53) are significantly more likely to regulate the pet more (M=3.63, SD=0.75). As love for the individual's pet increases, regulating the pet also increases. Researchers also found a positive correlation between pet love and pet personal growth, r=0.81, p<0.001. Individuals who reported higher scores on pet love (M=4.22, SD=0.53) are significantly more likely to grow personally because of the pet (M=3.49, SD=0.68). As love for the individual's pet increases, pet personal growth also increases. A

Running head: STRESS LEVELS & PET/STUFFED ANIMAL ATTACHMENTS positive correlation was found between pet personal growth and pet regulation, r=0.73, p<0.001. Individuals who reported higher scores on regulating the pet (M=3.63, SD=0.75) are significantly more likely to grow personally because of the pet (M=3.49, SD=0.68). As pet regulation increases, pet personal growth also increases. A positive correlation was found between stuffed animal love and stuffed animal regulation, r=0.93, p<0.001. Individuals who reported higher scores on stuffed animal love (M=1.80, SD=0.63) are significantly more likely to regulate the stuffed animal more (M=1.51, SD=0.71). As love for the individual's stuffed animal increases, regulating the stuffed animal also increases. Researchers also found a positive correlation between stuffed animal love and stuffed animal personal growth, r=0.75, p<0.001. Individuals who reported higher scores on stuffed animal love (M=1.80, SD=0.63) are significantly more likely to grow personally because of the stuffed animal (M=1.47, SD=0.54). As love for the individual's stuffed animal increases, stuffed animal personal growth also increases. A positive correlation was found between stuffed animal personal growth and stuffed animal regulation, r=0.74, p<0.001. Individuals who reported higher scores on stuffed animal regulation (M=1.51, SD=0.71) are significantly more likely to grow personally because of the stuffed animal (M=1.47, SD=0.54). As stuffed animal regulation increases, stuffed animal personal growth also increases. A significant negative correlation was found between stuffed animal love and PSS score, r=-0.51, p<0.03. Stuffed animal love (M=1.80, SD=0.63) is less likely to have an effect on perceived stress scores (M=41.33, SD=8.42). Researchers also found a negative correlation between stuffed animal regulation and PSS score, r=-0.56, p<0.02. Stuffed animal regulation (M=1.51, SD=0.71) is less likely to have an effect on perceived stress scores (M=41.33, SD=8.42). No significant data were found supporting either hypotheses that owning a pet and stuffed animal would relate to lower stress levels in college students.

#### Discussion

Two purposes of this study was to investigate if pet/stuffed animal ownership relates to lower perceived stress in college students. No significant correlations were found to support these hypotheses. Researchers also wanted to examine the relationship between pet attachment and/or stuffed animal attachment with college students and if college students have a similar attachment level between pets and stuffed animals. Researchers were able to find significant data about similar attachment levels between pets and stuffed animals. Six positive correlations were discovered with attachment towards pets and stuffed animals.

Even though the data did not support the two hypotheses of owning pets and stuffed animals would relate to decreased stress levels, attachment level towards pets was significant. Researchers were able to identify significant data that supports the attachment level that college students exhibited towards pets. The data showed that college students, who are very attached to their pet, are significantly more likely to love the pet more, become more responsible in regulating the pet, and grow personally because of the pet. Siegel (1995) has investigated the importance of pet ownership with adolescents and found that having sole responsibility toward the pet amplified how important the pet had become. It may be possible that college students who are pet owners would be more responsible than students who are not pet owners. Benefits of pet responsibility may extend to the classrooms and other activities such as staying on schedule with the classes or coming into class on time.

Researchers were also able to discover significant data that supports the attachment level that college students demonstrated towards stuffed animals. The data showed that college students, who are very attached to their stuffed animal, are significantly more likely to report more love towards the stuffed animal, become more responsible in regulating the stuffed animal,

Running head: STRESS LEVELS & PET/STUFFED ANIMAL ATTACHMENTS and grow personally because of the stuffed animal. Researchers noticed that the significant data with pet attachment and stuffed animal attachment were similar in the type of factors that were positively correlated. Data showed that college students did have a similar attachment level between pets and stuffed animals because the factors on the positive correlations were the same. To assist individuals adjusting to change, such as transitioning to college, significant object/possession attachments offer needed support (Kleine & Baker, 2004). With adults, attachment to objects are mostly utilized to aid life transitions, such as death of a relative, divorce, or moving to a new city (Kleine & Baker, 2004). It could be speculated that individuals who are transitioning to a bigger/newer area would want to bring an object that is valuable, precious, and can comfort the individual during the new transition, such as a stuffed animal. However, attachment is a complex concept because it usually has a distinction between the "private and public sides of the self", so that's why bringing a significant object, such as a stuffed animal, to an unfamiliar place can be complicated because of this reason (Kleine & Baker, 2004). Future research on how to comfort new freshman with their transition into college could be for universities to provide a representative university stuffed animal during the orientation time span. In case the freshman are too embarrassed to bring their own stuffed animal to college, this idea could provide a solution, without having the uncomfortable feeling associated with it.

Researchers found two negative correlations, which were stuffed animal love/regulation and perceived stress scores. The data showed that stuffed animal love/regulation was less likely to have an effect on perceived stress. Researchers discovered that stuffed animal love/regulation had no effect on perceived stress, but did have an effect on attachment level with college students. While this research study showed two negative correlations with stuffed animal

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Lastly, it was determined that only 1 of the 18 participants scored other than a 1 on the Stuffed Animal Questionnaire (SAQ). From this data, it is possible that stuffed animals play different roles for individuals: utilizing the object for comfort functions, creating a bond, utilizing the object for relieving stress, or it holds many precious memories (Kleine & Baker, 2004). In this research study, we found that the participants focused more on the attachment with stuffed animals rather than utilizing the stuffed animals for stress relievers.

## Limitations

Some limitations were present in this study. One of the limitations was the small sample size. Having a larger sample size may have resulted in more significant data. The reason why the sample size was small was because of the limited amount of time to perform the study. Other limitations were the uneven distribution of males and females and the participants were mainly freshman. Another limitation was the time of study because it conflicted with another class time for many college students. However, this study did bring significant data in the attachment levels toward pets and stuffed animals.

# Concluding Remarks

Based on what we know, no other study has been done to determine if pet/stuffed animal ownership relates to lower perceived stress in college students. Although researchers did not find any significant data for their hypotheses, they did find significant positive correlations in the attachment levels toward pets and stuffed animals with college students. Results revealed that

Running head: STRESS LEVELS & PET/STUFFED ANIMAL ATTACHMENTS college students have similar attachment levels between pets and stuffed animals, associating with these specific factors: love, regulation, and personal growth. This information supports previous studies with attachment to objects/possessions by multiple researchers (Kleine & Baker, 2004).

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