The Beatles once said that all you need is love. Well, maybe it isn't all you need, but scientists have long been telling us that love or affection is one of the things (other than food, water and shelter) that animals need to survive. While trying to explain to my mother why it is more important to spend time with my boyfriend than to work on my research project, I looked for some kind of concrete detail as to why love and affection are important. I couldn't do it. Thus began this research project.

For most people, the idea for a research project goes through a period of dormancy before the details of the experiment begin to germinate. In my case, however, the plan for the experiment came shortly after I chose a research project topic. I knew immediately that I needed some animals and I needed to pet a few of them and see what difference it made. Although I would have preferred dogs, cats, or some other playful, lovable, or furry animal, mice were more cost-effective and my mom wasn�t too happy with the idea of having eight dogs. (She wasn�t much happier with the idea of having 18 mice, either).

While I was deciding on the details of my project, I began reading a book called Diet For A New America. Mostly a piece of �vegetarian propaganda,� this book includes descriptions of the conditions under which cattle and pork are raised for consumption. However, it also devoted an entire chapter to stories about animals--especially stories about animals being heroes and such. Most interesting was the section on love and whether or not animals are capable of feeling it. The author made a compelling argument that they are capable of love. This gave me confidence in my project and pointed me toward the research of Dr. Harry Harlow who studied the effects of affection on monkeys.

Ashley Montagu, author of Touching: The Human Significance of the Skin, was intrigued by Harlow�s work, saying that

�In a series of valuable studies Harlow has demonstrated the significance of physical contact between the monkey mother and her infant for the subsequent healthy development of the latter.� (Montagu, *Touching*, p. 31)

Her book was invaluable to me in that it was the only one I found which discussed affection and rodents. She spoke of an experiment done with rats in which they were subjected to a fatal disease. However, many more rats survived the disease than the scientists thought possible. They investigated further and found that the test rats �...had been drawn from two separate colonies, and that the greater number of the survivors came from what was called the Experimental Colony. In this colony the animals were customarily petted and gentled. In contrast, the animals exhibiting the higher mortality rate were drawn from ... a group whose only human contact was that incident to routine feeding...� (ibid., 12). In addition, a scientist named Weininger �found that male rats gentled for three weeks following their weaning at twenty-three days had, at forty-four days, a mean weight twenty grams higher than the ungentled control group; furthermore, the growth of the gentled was greater than that of the ungentled rats� (ibid., 25-26).

This research, in addition to some other research I did on mice in general, gave me a basic knowledge I needed to begin my experiment as well as some advice as to how to do my project based on the experiments done by others.

I knew that I needed to separate the mice into two groups--one to be petted and the other not. We went to the pet store and I wanted to buy at least a dozen mice but my mom talked me down to eight. I wanted mice from the same litter but that was impossible so we picked out eight that had been born at the same time and were about the same size; they were very small, about a week or ten days old. We bought these eight mice and the necessary equipment: 2 identical cages, 2 identical exercise wheels, 2 identical food dishes and 2 identical water bottles. I bought a bag of �fine quality pine shavings� and mouse food. Total: $70.80.

With that, I set up the cages in my bathtub and began to ask the question, �Do we really need love?�