

## The effect of the Middle East conflict on the use of animals in training, research and testing in Israel

Tamir Lousky

InterNICHE – The International Network for Humane Education  
21<sup>st</sup> Yehuda ha Levi st., Rehovot 76534, Israel  
Phone: +(97)-2-52-3871618, tlousky@gmail.com

---

### Abstract

For over 70 years, the Middle East conflict, which in recent years has focused on the Israeli-Palestinian conflict, has been causing severe loss of life and resources to all those involved. The impact and intensity of the conflict are such that civilians are preoccupied constantly and continuously with it. Coping with such a conflict requires many psychological adjustments, changes in societal beliefs, and adoption of specific individual and social practices, including the pursuit of security. The issue of security has become the main preoccupation of Israeli society as well as a societal value which plays a major role in many decisions made in the country. In this work we demonstrate how these issues affect the use of animals in scientific procedures in Israel. For that objective, analyses were performed for the annual animal use statistics for the military and security sector and the industrial and academic sectors in 2000-2004 and for the Prevention of Cruelty to Animals (Animal Experimentation) Act (1994). The results indicate that the conflict and the security issue created by it has both a direct and an indirect effect on the use of animals in Israel, demonstrated accordingly by: (a) a correlation between the number of conflict victims and the number of large mammals used, and (b) by the fact that security-oriented experiments are continuously attributed a higher priority both ethically and legally, that effectively places them beyond the regulations which moderate all other animal experiments in Israel.

**Keywords:** animal experimentation, security, military, Middle East conflict

---

### Introduction

For over 70 years, the Middle East conflict, which in recent years has focused on the Israeli-Palestinian conflict, has caused severe loss of life and resources to all those involved. The extent and severity of the conflict is such that civilians are preoccupied continuously with it, a fact which reflects in the cognitive repertoire of society members and on the public agenda (Bar-Tal, 1998; Bar-Tal, 1991).

Coping with such a conflict requires many psychological adjustments and the acquisition of societal beliefs, which include the pursuit of security (Bar-Tal, 1998; Bar-Tal and Jacobson, 1998). The latter societal belief is enhanced by the specific history of the Jewish majority in Israel. The issue of security has become the main preoccupation of the Israeli society as well as a societal value which plays a major role in many decisions made in the society (Bar-Tal, 1998; Bar-Tal, 1991; Bar-Tal and Jacobson, 1998). These beliefs strongly affect every sphere of public life (Bar-Tal, 1998).

Political, social, educational, and cultural institutions are extensively mobilized to promote these societal beliefs, by focusing on them,

emphasizing them, basing norms on them, and turning them into main values (Bar-Tal, 1998). These values serve as anchors which define the social consensus.

In this context, we have chosen to qualitatively and quantitatively assess whether and how this situation might affect the use of animals in the country.

One of the first answers to this question can be deduced by analyzing the law which addresses the regulation of animal experiments in Israel: the Prevention of Cruelty to Animals (Animal Experiments) Act (1994) (referred to herein as the animal experiments act). This law includes the 3Rs principle of reduction, refinement and replacement, and prohibits the use of animals when "reasonable" alternatives are available. The animal experiments act is enforced by the National Council of Animal Experiments (NCAE), who in turn oversees the activity of 54 institutional ethics committees (IECs), operating in academic and industrial facilities.

In contrast to this, the regulation of the use of animals by the military and the security sector (MSS) has been defined in a specific chapter in the animal experiments act (chapter 4, articles 18-21), where it is excluded from normal regulation. This sector has

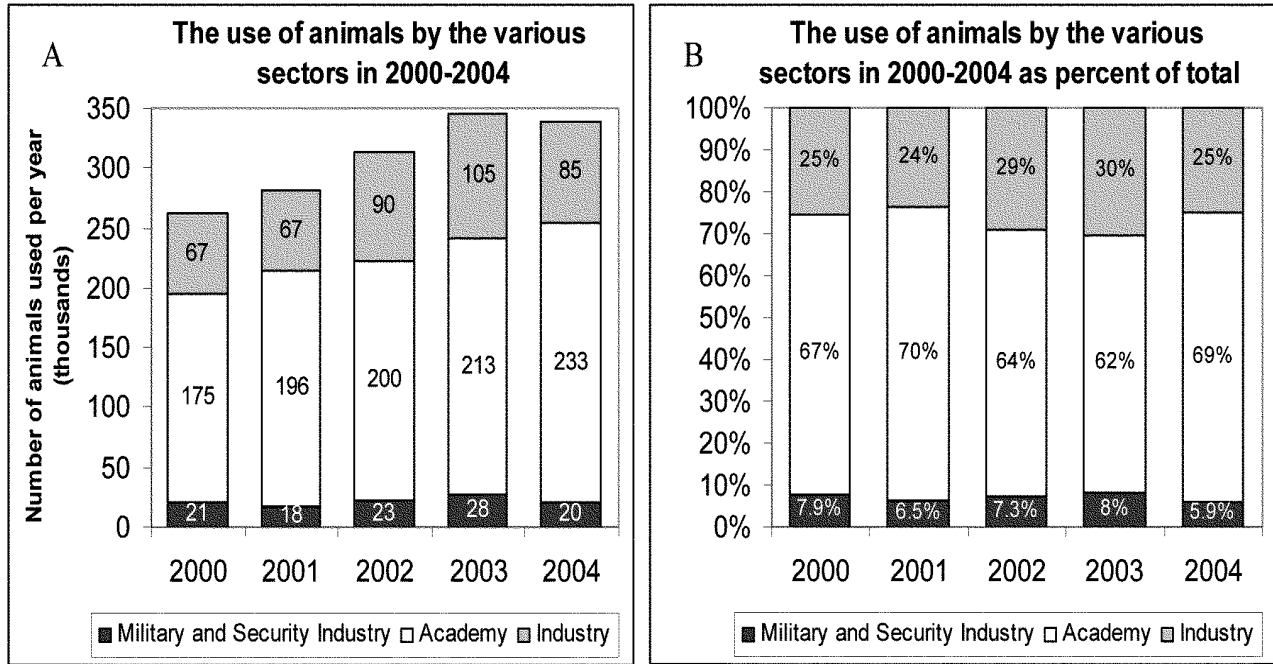


Fig. 1: The use of animals by the military and security sector, the industrial sector and the academic sector in Israel in 2000-2004. A) The number of animals used by each sector in 2000-2004. Values in boxes and the Y axis are presented in thousands. B) The contribution of the various sectors to the total use of animals.

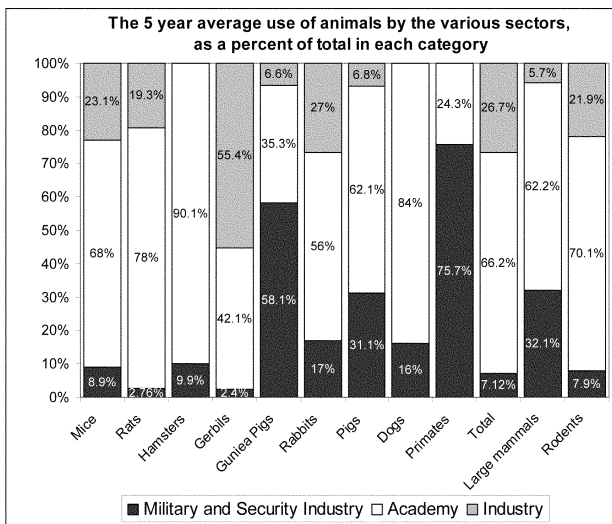


Fig. 2: A 5 year average of the use of animals by the military and security sector, the industrial sector and the academic sector in Israel in 2000-2004, as the percent of the total use of animals, specified by species and species-groups.

an independent ethics committee, responsible for regulating animal use in 4 facilities. This committee is not under the NCAE and is not required to report to it, and it does not include any members of the general public or representatives of animal protection organizations. According to article 20 in the law, the MSS's committee is permitted to disregard the rules and regulations specified in the animal experiments act, if it is convinced that national security requires it.

It is worth noting that this committee only started

operating in 1997, two years after the animal experiments act came into effect. It has refused to provide any information on its activity until 2006 (Azulai, 2006), when it released the animal use statistics from 2000-2004, which allowed a comparison with the statistics from the industrial and academic sectors (IAS), and which in turn provided a basis for this work.

Examining the possible effects of the Middle East conflict on the use of animals can be made in several ways, limited by the accessibility of relevant information. In this work, we have attempted to do this in two ways: firstly, by comparing the use of animals by the MSS and the IAS; and secondly, by testing for a correlation between the use of animals by the MSS and the number of Israeli terror casualties, which might hint at a more direct effect of the conflict on the use of animals.

## Materials and methods

### Comparative analysis of the animal use statistics in 2000-2004

The annual statistics of the use of animals by the IAS have been downloaded from the NCAE's website (NCAE, 2005). The 2000-2004 animal use statistics by the MSS have been supplied courtesy of Mr Sagi J Agmon, on behalf of the Israeli Society for the Abolition of Vivisection. Graphic presentation and analysis of this data has been made with Microsoft's Excel 2003.

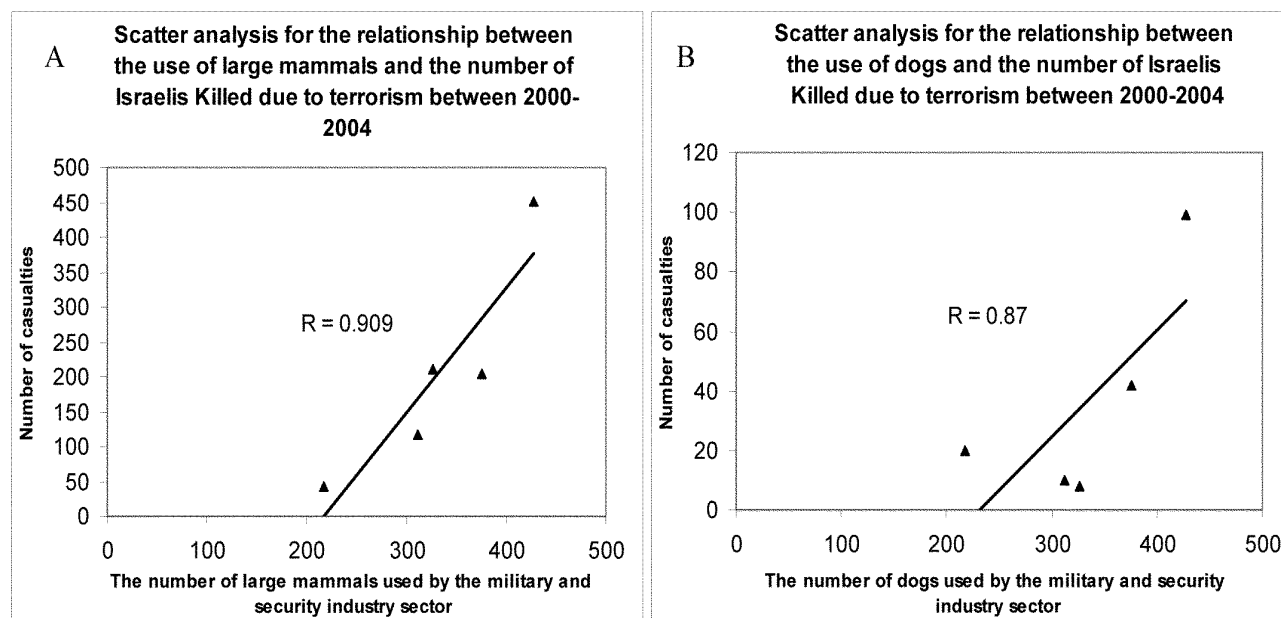


Fig. 3: Correlation analysis between the number of Israelis killed due to terrorism and the number of large mammals (A; includes dogs, pigs and primates) and dogs (B) used by the military and security industry sector in 2000-2004.

### Statistical analysis and correlation analysis

The number of Israelis killed as a result of terrorism, as defined and reported by the Israel Security Agency (ISA), has been downloaded from the website of the International Institute for Counter-Terrorism (ICT) (Israel Security Agency, 2007). A Pearson's correlation analysis between this data and the number of animals used in experiments by the different sectors has been made with Microsoft's Excel 2003 data analysis toolkit.

### Results

#### Comparative analysis of the animal use statistics in 2000-2004

Between the year 2000 and 2004, the total number of animals used in Israel ranged between 260-340 thousand animals per year (figure 1A). The MSS used between 18.3-27 thousand animals, comprising 5.9% (2004) to 8% (2003) of the animals used annually (figure 1B). On a 5 year average, the MSS used 7.12% of the animals. This value is consistent with the portion the MSS comprises from of the total number of institutes authorized to use animals (4 out of 58, or roughly 7%). Though the size of the 4 MSS facilities has not been disclosed, this correlation suggests that the use of animals by the MSS is proportional to the number of facilities it has.

However, when specific species are considered, it is clear that the MSS uses more of some species or groups of animals than would be expected (figure 2). This is particularly clear with regard to the use of guinea pigs and large mammals such as pigs, dogs and primates: in a 5 year average, the MSS is responsible for using 58% of the guinea pigs, 31% of the pigs, 16% of the dogs and a staggering 75.7%

of the primates used in Israel. On average, the MSS uses four times more primates than the other sectors combined, despite the fact it is far smaller than either the industrial or academic sectors. If summed up, 32% of the large mammals in Israel are used by the MSS.

#### Analysis of the correlation between the number of terror victims and the number of animals used in 2000-2004

A correlation analysis was performed between the number of terror victims and the number of animals of various species and groups used by the MSS in the same year range. A correlation was not found for the total number of animals used annually, but a high degree of correlation was found with the number of dogs (87%, figure 3B) and to the number of large mammals (combining dogs, pigs and primates) used (90.9%, figure 3A). Interestingly, when making the same analysis for the IAS, a strong negative correlation was found with the use of large mammals (-96.1%, data not shown).

### Discussion

This work was designed to gauge the impact of the Middle East conflict on the use of animals in scientific procedures in Israel. Instinctively one would imagine that there should be no such impact, since these two issues are so different. However, previous research has identified the widespread impact the conflict has on many and various fields in Israel, ranging from art and culture to science and politics (Bar-Tal, 1998). The issue of security and the persistent pursuit of actual or perceived security best reflects the impact that the Middle East conflict has on Israeli society.

The data presented here also demonstrates that this issue influences the use of animals in scientific procedures, directly and indirectly.

As previously mentioned, the first clear example of this is the phrasing of the animal experiments act, which excludes the MSS from normal legal regulation.

A comparison of the use of animals in the MSS and IAS reveals that the use of large mammals is much more frequent in the MSS. The use of primates is especially frequent, and disproportionate to the size of the MSS. There is a lack of information regarding the type of experiments performed by the MSS, and this situation makes it difficult to provide non-speculative explanations to some of the results presented here. However, the comparative analysis might suggest that the principle of refinement is not effectively enforced in the MSS, as demonstrated by what might be unnecessarily frequent use of large mammals and primates in particular. Also, as the use of large mammals is considered less publicly acceptable, this data also suggests that experiments which are considered less ethical are more easily authorized in the MSS. Less strict regulation normally results in weaker adherence to the rules, and the above mentioned data suggests that this is the case here.

Nevertheless, a lack of information regarding the nature of the experiments conducted by the MSS makes it impossible to ignore the possibility that it requires more large animals.

A correlation analysis between the number of terror victims and the number of animals used by the MSS revealed that there is a strong correlation of 90.9% to the use of large mammals. When considering individual species, the number of dogs best correlates with the number of terror victims ( $r = 0.87$ , figure 3B). One explanation for the latter observation is that in years of frequent terrorist attacks there is an elevated use of dogs for trauma training.

An alternative explanation which takes into account the correlation with the use of large mammals in general, is that in years of frequent security threats, more funds are allocated by the government to the MSS. As the budget is limited, a flow of funds to the MSS usually comes at the expense of other sectors, including the academic sector. Thus, this could also explain the strong negative correlation ( $-96.1\%$ ) between the number of terror victims and the use of large mammals (which are more expensive) in the IAS.

## Acknowledgments

This work was partially supported by Dr Andre Menache, and he has the author's warm thanks for his generosity.

The author would also like to thank InterNICHE Co-ordinator Nick Jukes for his assistance in the preparation of the manuscript and the Israeli Society for the Abolition of Vivisection for providing the original MSS statistics, which was sent to them by the Israeli Ministry of Defense.

## References

- Azulai Y. (2006) The security system conducts animal experiments. Haaretz 12 July, 2006.  
Accessible online at: <http://news.walla.co.il/?w=/938959>
- Bar-Tal D. (1991) Contents and origins of the Israelis' beliefs about security. *International Journal of Group Tensions* 21, 237-261.
- Bar-Tal D. (1998) Societal Beliefs in Times of Intractable Conflict: The Israeli Case. *International Journal of Conflict Management* 9, 22-50.
- Bar-Tal D and Jacobson D. (1998) Psychological Perspective on Security. *Applied Psychology* 47(1), 59-71.
- Israel Security Agency. (2007) The Israel Security Agency's 2006 report asserts that Hamas has taken over the Gaza Strip with the support of Hezbollah and Iran. Accessible at: <http://www.ict.org.il/apage/9927.php>
- NCAE. 2005. The use of animals by the industrial and academic sectors in Israel between 2000 and 2004, National Committee of Animal Experiments report, Ministry of Health, Israel. Downloadable from: <http://www.health.gov.il/Download/pages/animal2000-2004.pdf>