The Dead Grandmother/Exam Syndrome and the Potential Downfall Of American Society.

It has long been theorized that the week prior to an exam is an extremely dangerous time for the relatives of college students. Ever since I began my teaching career, I heard vague comments, incomplete references and unfinished remarks, all alluding to the "Dead Grandmother Problem." Few colleagues would ever be explicit in their description of what they knew, but I quickly discovered that anyone who was involved in teaching at the college level would react to any mention of the concept. In my travels I found that a similar phenomenon is known in other countries. In England it is called the "Graveyard Grannies" problem, in France the "Chere Grand'mere," while in Bulgaria it is inexplicably known as "The Toadstool Waxing Plan" (I may have had some problems here with the translation. Since the revolution this may have changed anyway.) Although the problem may be international in scope it is here in the USA that it reaches its culmination, so it is only fitting that the first warnings emanate here also.

The basic problem can be stated very simply**: A student's grandmother is far more likely to die suddenly just before the student takes an exam, than at any other time of year.**

While this idea has long been a matter of conjecture or merely a part of the folklore of college teaching, I can now confirm that the phenomenon is real. For over twenty years I have collected data on this supposed relationship, and have not only confirmed what most faculty had suspected, but also found some additional aspects of this process that are of potential importance to the future of the country. The results presented in this report provide a chilling picture and should waken the profession and the general public to a serious health and sociological problem before it is too late.

As can be seen in Table 1, when no exam is imminent the family death rate per 100 students (FDR) is low and is not related to the student's grade in the class. The effect of an upcoming exam is unambiguous. The mean FDR jumps from 0.054 with no exam, to 0.574 with a mid-term, and to 1.042 with a final, representing increases of 10 fold and 19 fold respectively. Figure 1 shows that the changes are strongly grade dependent, with correlation coefficients of 0.974 for mid-terms and 0.988 for finals. Overall, a student

who is failing a class and has a final coming up is more than 50 times more likely to lose a family member than an A student not facing any exams.

	CURRENT GRADE					
Next exam	**A**	**B**	**C**	**D**	**F**	**Mean**
None	0.04	0.07	0.05	0.05	0.06	0.054
Mid-term	0.06	0.21	0.49	0.86	1.25	0.574
Final	0.09	0.41	0.96	1.57	2.18	1.042

Table 1: The mean number of family deaths/100 students for periods when no exam is coming up, the week prior to a mid-term exam and the week prior to finals. Values are corrected for the number of students in each grade class and the relative frequency of mid-terms and finals.

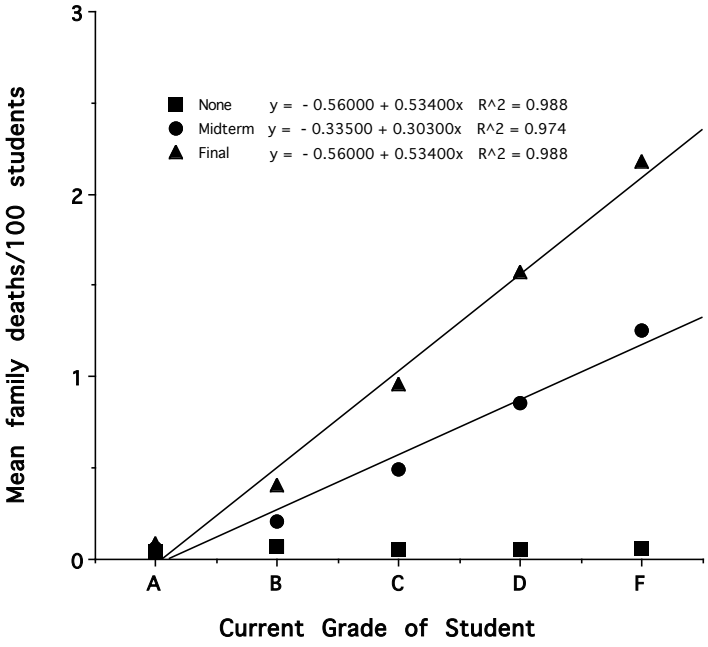

Figure 1. Graph of data in Table 1, showing the relationship between exam, student grade and FDR. The equation for the simple linear regression on each is shown, as is the correlation coefficient.

Only one conclusion can be drawn from these data. Family members literally worry themselves to death over the outcome of their relatives' performance on each exam. Naturally, the worse the student's record is, and the more important the exam, the more the family worries; and it is the ensuing

tension that presumably causes premature death. Since such behavior is most likely to result in high blood pressure, leading to stroke and heart attacks, this would also explain why these deaths seem to occur so suddenly, with no warning and usually immediately prior to the exam. It might also explain the disproportionate number of grandmothers in the victim pool, since they are more likely to be susceptible to strokes. This explanation, however, does not explain why grand*fathers* are seldom affected, and clearly there are other factors involved that have not been identified. Nonetheless, there is considerable comfort to be had in realizing that these results indicate that the American family is obviously still close-knit and deeply concerned about the welfare of individual members, perhaps too much so. As some colleagues have expressed some degree of skepticism over my interpretation of these data, I have extended the scope of my research into the phenomenon. Using readily available sources (including the National Census Bureau and *The National Enquirer*) have examined the relationship between education and family structure. Interestingly, there appears to be no correlation between FDR and the size of the extended family (Table 2). Either large families worry less on a per capita basis than do small families, or there is a single "designated worrier" in each family, who bears the brunt of the danger. The exceptionally high death rate among grandmothers (24 times greater than for grand fathers) suggests the latter explanation is correct. If not, then people from very small families would be well advised to discourage other family members from attending college, since the potential risk becomes excessive with so few members to share the danger.

Number in family, excluding student	0	1	2-3	4-8	8-15	16-30	30+
Mean FDR	<0.01	0.66	0.71	0.62	0.73	0.64	0.68

Table 2. Mean FDR for all exam periods and all student GPAs over the last decade. Families ranging in size from 1-30+ show no significant correlation (0.04) between family size and FDR. The figure for students with no family would have been zero, except for a single family-less student (a member of the baseball team) who tragically lost at least one grandmother every semester for four years.

The problem is clearly far more pervasive than most people realize. For example, if one examines the percentage of the population attending college and the mean divorce rate on a country by country basis, there is a very strong positive correlation between the two. The United States has the highest percentage of its population attending college and also the world's