Applying Experimental Economics to AssessUnethical Behavior fromAPart-Time, Non-TraditionalMBA Program

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Abstract

Using a sample of fifty-one MBA students from a part-time, non-traditional institute in the United States, this present study showed that a much higher percentage of individuals from the group with penalty self-report that they missed two or less in their first attempt on each homework compared to their counterparts. From the self-report scores and the audits with penalty, two individuals stated that they missed no question on the homework sets for each exam, but the person missed five on Exam 1 and 3 on Exam 2 and the other person missed four on Exam 1 and 3 on Exam 2. From the group without penalty, five individuals missed more questions on their respective exam compared to the self-reported number of questions on their respective sets of homework for each exam. This implies that a higher number of individuals from the group without penalty showed unethical behavior in their self-reporting. But for organizational-interest, the findings showed that the two groups, based upon the performance on the exams, showed that penalty or no penalty have no effect on the overall group performance from the z-test of the difference between the two population means.

Key Words:*Corporate unethical behavior, academic cheating, self-interest paradigm in economics*

1. Introduction

Ethics at the organizational and individual levels has been of considerable interest to researchers over the past four decades and has been asserted to be an important problem facing both academia and corporations in recent years. The issue of ethics has recently become the focus of media attention created by the unethical and criminal behaviors by executives from Enron, Arthur Anderson, Tyco, Global Crossing and WorldCom.

In the wake of the corporate scandals, a group of prominent management professors have published critical articles in management journals blaming that business schools are teaching such economic concepts as agency theory and profit maximization (Adler, 2002; Ferraro, Pfeffer and Sutton, 2005; Ghoshal and Moran,1996; Ghoshal, 2003; Ghoshal, 2005; Mintzberg, 2002). For instance, Goshal (2005: 75) states that: "MBA students are not alone in having learned, for decades, these theories of management. Thousands--indeed, hundreds of thousands--of executives who attended business courses have learned the same lessons, although the actual theories were often not presented to them quite so directly. Even those who never attended a business school have learned to think in these ways because these theories have been in the air, legitimizing some actions and behaviors of managers, delegitimizing others, and generally shaping the intellectual and normative order within which all day-to-day decisions were made."According to Ferraro, Pfeffer and Sutton (2005), the assumptions of social science theories not only influence but determinewhat individuals do, experience and think. Further claimed by Ferraro, Pfeffer and Sutton (2005) is that a self-fulfilling prophecy is created through negative theoretical assumptions about human motives and behavior, highlighting specially the assumption of self-interest in

economics, being reinforced and diffused through the social norms and institutional design, that in turn determine individual behavior.

In the wake of these scandals, especially after the collapse of Enron, in a 2005 survey of 91 business schools, there had been almost a 60% increase since 2001 requiring at least a course in ethics, business and society, or corporate responsibility; now fully 54% of the business schools surveyed required such a course (Pulley, 2005).In spite of increased emphasis on teaching business ethics in business school curricula, American business schools have continuously been experiencing large scales of student cheating at the graduate and undergraduate levels in recent years. For example, the largest cheating scandal ever at Duke University's Fuqua School of Business in 2007 involved 34 first-year MBA students on a take-home open-book exam they were supposed to work on individually (Damast, Business Week, April 30, 2007; Keenan and Sullivan, Bloomberg, May1, 2007). In 2004, several University of Maryland's business school professors set up a sting operation for the final exam after learning that a large number of students cheated on the midterm (McGeeney and Serrill-Robins, Amherst Student Online, February 5, 2003). What is more surprising is dozens of Texas A&M University Mays Business School's ethics students cheated on an ethics test in 2007 (Huffman, theeagle.com, May 8, 2007). One of the large cheating occurred in 2010 at the University of Central Florida University Business School where close to 600 students in a senior-level business course must retake a mid-term exam after a professor was tipped off to cheating (Zaraoza, The Orlando Sentinel, Nov. 9, 2010).

In the present study, we introduce the ethical behavior game to two Survey of Economics classes in the same academic year, one class with penalty for unethical behavior and the other, without penalty, so that we can draw reasonable inferences: perception of organizational cultures, reward systems and an individual's concern for the successful performance are more powerful agents that overwhelm the honor system and ethical codes of conduct to a certain number of subjects, regardless of the groups. We had atotal sampleof fifty-one non-traditional MBA students comprised of twenty-seven in the group with penalty and twenty-four in the group without penalty. The rest of the paper is organized as follows. First, the theoretical framework and predictions are outlined. Second, the experimental design is discussed. Finally, the findings and conclusion are presented.

2. Experimental design and method

Experimental design

Gary Becker (1968) in his seminal work of the economics of crime and enforcement shows that a rational decision-maker will violate a costly law if the expected benefit of doing so is greater than the costs of getting caught. Applying the Becker's idea, individuals in our two subject pools possess multiple goalsthat enhance their satisfaction or utility. Because theyface more severe scarcity of time due to their full time jobs, energy and money and because there are several avenues to achieve goals, these individuals have to make rational choicesamong goals and among means of achieving these goals.This implies that the individual then will choose a utility maximizing set of goals and means of achieving these goals within the personal resource constraints.

Pertaining to our experiment, an individual receives a total of 60 possible points towards the final course grade determination (see Charts 1 and 2). The maximum points can be treated as income. The price of doing homework for the group pool without penalty is time spent on the homework and the price for the other group with penalty is time spent and point deduction from the sets of homework. Immediate goals of a subject depending on which pool he or she belongs are: (1) getting a total of 60 possible points; (2) trying to reduce the price in terms of time spent on the homework and of not losing any points due to missing exam questions. What are their ultimate goals? The individual's ultimate goals can vary depending on their circumstances in the MBA program. Most of the students in the MBA survey of economics course are conditionally admitted, are nontraditional, have either a full-time or part-time job, and married or single with children. Moreover, if they maintain 3.0 from the first four-courses (12 semester hours) taken, they can be admitted to a regular MBA program without taking GMAT. Hence, getting an A or a B in the course is their objective.

In its simplest form, an individual is assumed to receive an income I where I = 60 points and must choose how much of this income to declare to the professor. The individual pays point price of p if reported, while no point price is paid on under-reported income. However, the individual will be audited with a certainty for both groups. In the audit, all the under-reported income of a subject may become discovered if he or she misses questions on the exam that come from the homework (A). If caught by missing an exam question from the homework sets, an

individual must pay a penalty at the rate of g = 3 points if he or she comes for a groupwith penalty, while an individual pays no penalty if he or she comes for the group without penalty (See Charts1 and 2).

The individual's income I_m if caught for under-reporting equals$I_m = I - g(A)$, while if under-reporting is not caught, income $I_m = I$. $I_m = I_n$ as in the case for an individual in the group without penalty whose income is $I_n = I$.

What we hypothesize is thatat the group level both groups will under-report their scores on their self-reporting forms and will study those homework questions carefully in order to accomplish their goal of getting an A or a B in order not to take GMAT.However, at the individual level, the group without penalty will have a higher incident of under-reporting their self-reporting scores than their counterparts,because they do not have to incur additional costs besides their time costs.

Method

This experiment was conducted in theone-semester Survey of Economics course at an institution accredited by AACSB International in two semesters in the same academic year. To prevent possible information sharing among students, we designated the first semester for the group without penalty and the second semester for the group with penalty so that at soon as the experiment is over, students must be informed that they will not be penalized for missing questions on the exam that come from the homework sets for a particular exam in order to maintain a consistent grading policy.To carry out the experiment on unethical behavior, both classes were instructed to abide by the honor system and ethical codes of conduct, and if we have a meeting of mind, then raise your hand. All raised their hand to honor the verbal contract.

Once we agreed that there was a meeting of mind, we showed both classes how to properly prepare the answer sheet for the three attempts and their self-scoring of the homework in the spreadsheet. Students have three attempts to score 90 or higher without going back to the answers on the homework platform. If one scores 90 or higher, one does not have to do the second attempt. Note thateach set of homework comprised of multiple choice questions was designed similar to a WebCT exam format by the authorson one of the author's homepage. To access the homework, the subject must use their unique user name and password.

The following information was given to both groups. The breakdown of the credit for a particular homework assignment is as follows: if one scores 70-79%, one receives 60% credit on that particular homework; 80-89%, 80% credit; and 90-100%, 100% credit.Moreover, when you come to take the examination, submit the records of self-scoring of the homeworksets before picking up the exam. Also informed both classes wasthat the exam will be composed of two parts – multiple choices and essay. On the multiple choice part, there will be 32 questions of which ten multiple choice questions will come from the sets of homework for that particular exam. In one class with penalty, we went a step further by stating that for each missed question that comesfrom the sets of homework for that particular exam, three points will be deducted from the 30possible points that one can earn by making 90 or higher on each set of homework pertaining to a particular exam. If one misses all ten questions, one will lose all 30 points. For the other class, there is no penalty even if one misses all ten questions on the exam that comefrom the sets of homework. In other words, the student who scored 90 or higher on each set of homework will receive full 30possible points from the sets of homework pertaining to that exam (see Charts 1 and 2).

3. Results

As summarized in Table 1, a much higher percentage of individuals from the punished group report that they missed 2 or less in their first attempt at each homework compared to their counterparts. On homework sets 1, 2 and 3, about 63%, about 44% and about 44% from the group with penalty respectively reported that they missed 2 or less in their first attempt compared to about 29%, 33% and about 41% from their counterparts. However, for homework set 4, about 41% of the individuals from the group with penalty reported they missed 2 or less while about 42% reported from the group without penalty. One can get the same information from Figures 1-10.

Table 2 shows the number of individuals who did not miss any homework question on each exam. In terms of percentages, the group with penalty has the higher rate of getting 0 question missed compared to its counterpart. However, on the second exam, the group without penalty has higher rate of 0 question missed compared to its counterpart.From the self-report scores and the audits with penalty, 2 individuals stated that they missednoquestion on the homework sets for each exam, but the person missed 5 on Exam 1 and 3 on Exam 2 and

the other person missed 4 on Exam 1 and 3 on Exam 2. This implies that 2 individuals possibly exhibited unethical behavior in the self-reporting scheme.

From the group without penalty, 5 individuals missed more questions on their respective exam compared to the self-reported number of questions on their respective sets of homework for each exam. This implies that higher number of individuals showed unethical behavior in self-reporting.

Results of the two groups, based upon the performance on the exams, showed that penalty or no penalty have no effect on the overall group performance based upon the z-test of the difference between two population means. Since the null hypothesis of no difference between the two groups at the 5% level, we infer that self-interest may have played the role whether a person misseda question or questions on the exam, regardless of the group setting.

4. Summary and conclusion

Our experimental design allows us to examine ethical behavior of the two groups regarding whether an individual's self-reporting of the scores on the homework sets audited or not. There is a higher rate of unethical behavior from the group without penalty compared to their counterpart based upon the records of self-reporting and audit. This implies that penalty or punishment can be a deterrent to possible unethical behavior that may be committed by an individual.For organizational-interest, the findings of the two groups, based upon the performance on the exams, showed that penalty or no penalty have no effect on the overall group performance. However, self-interest may have played the role onwhether a person missed a question or questions on the exam that come from the homework, regardless of the group setting.

From the experiment, we deduced that perception of organizational cultures, reward systems and an individual's concern for the successful performance are powerful that they soon overwhelm the honor system and ethical codes of conduct, thus leading to an increased propensity to commit unethical behavior. Moreover, one can further deduce that unethical behavior observed in the study may have much to do with the subject's personality type and personal bias. Therefore, economic concepts or assumptions are not breeders of greed and guile. The assumption of self-interest becomes an observable trait of human-beings and becomes a valid assumption in human behavior. One should also ask:Why would individuals engage in the act of unethical behavior despite the knowledge that it could come back to haunt them? In this context, Ashforth and Anand (2003) elegantly raise an important question of how a person who is a loving parent, thoughtful neighbor and devout churchgoer is able to engage in workplace corruption?

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Chart 1: Reward and Punishment

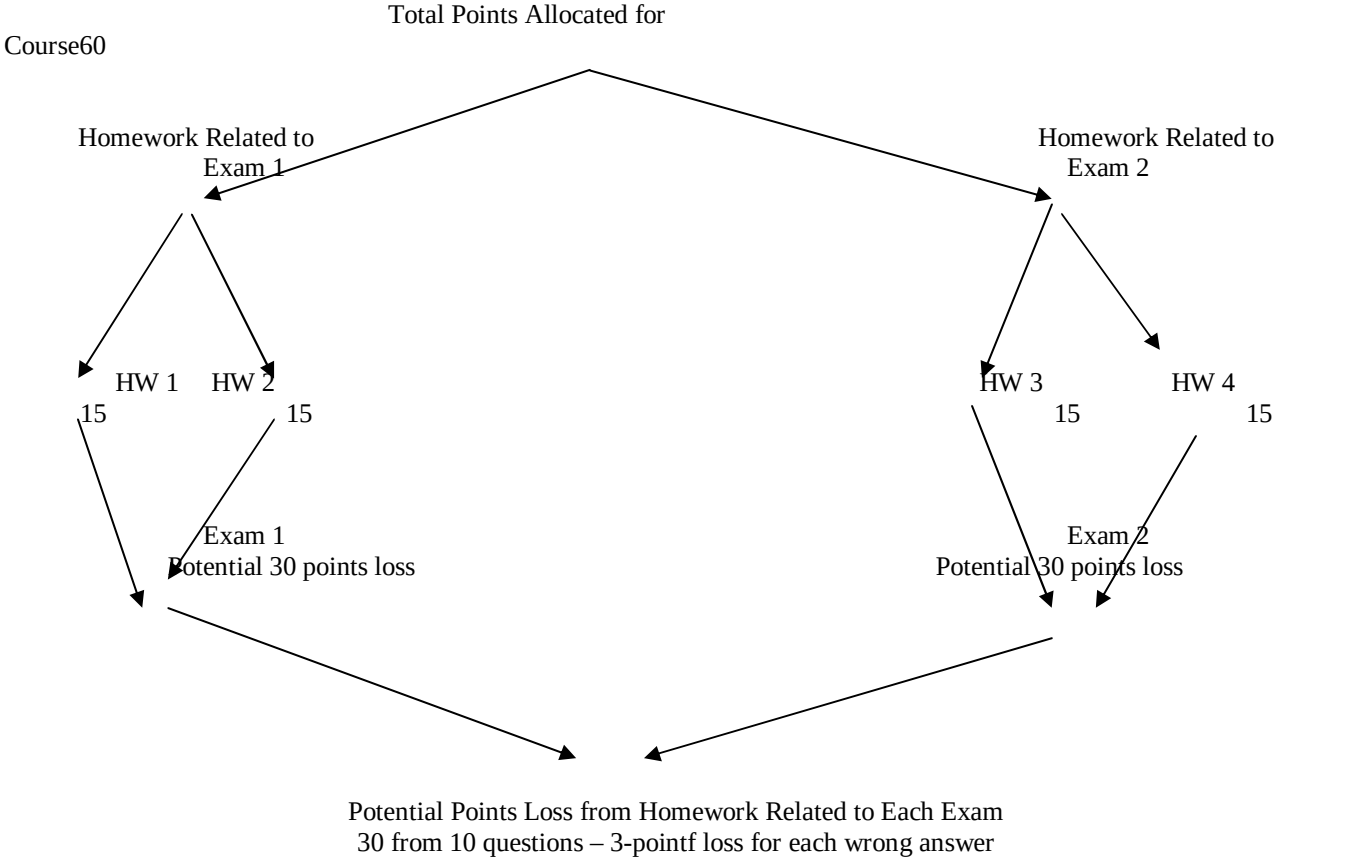


Chart 2: Reward and No Punishment

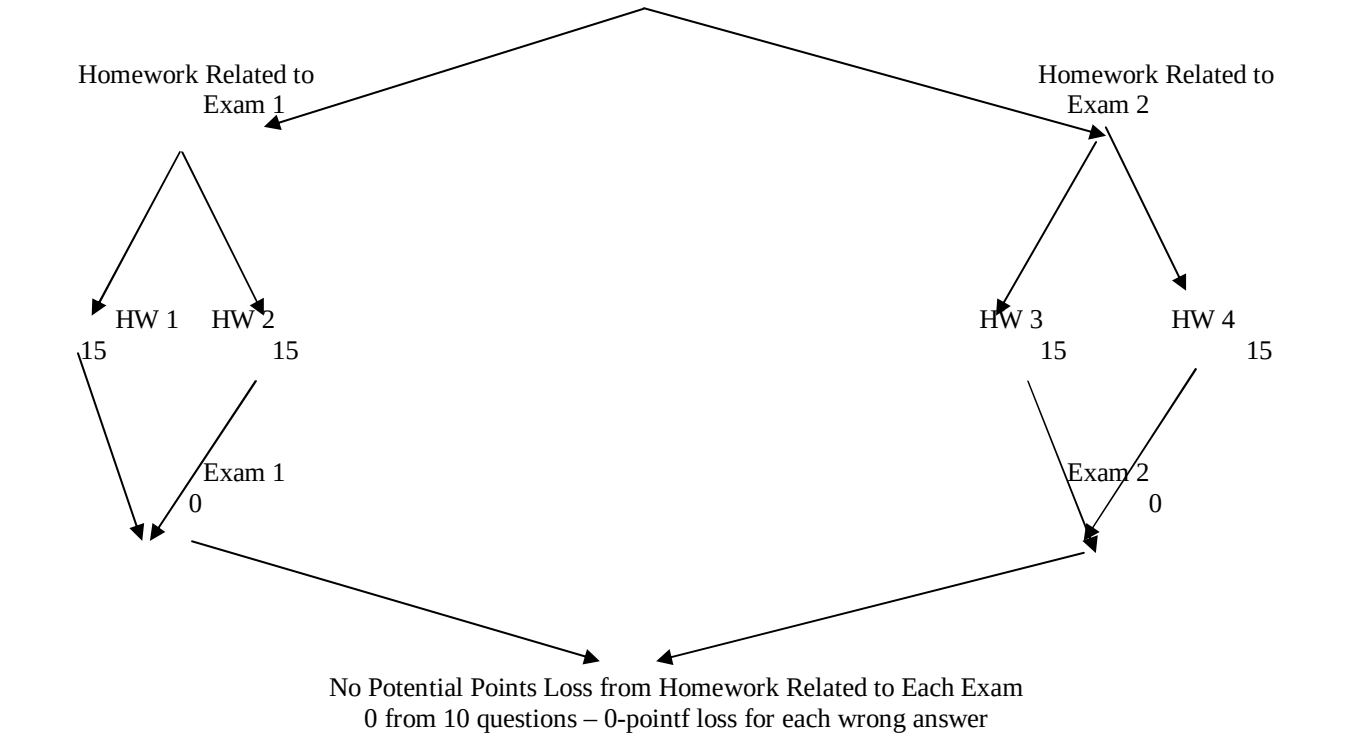
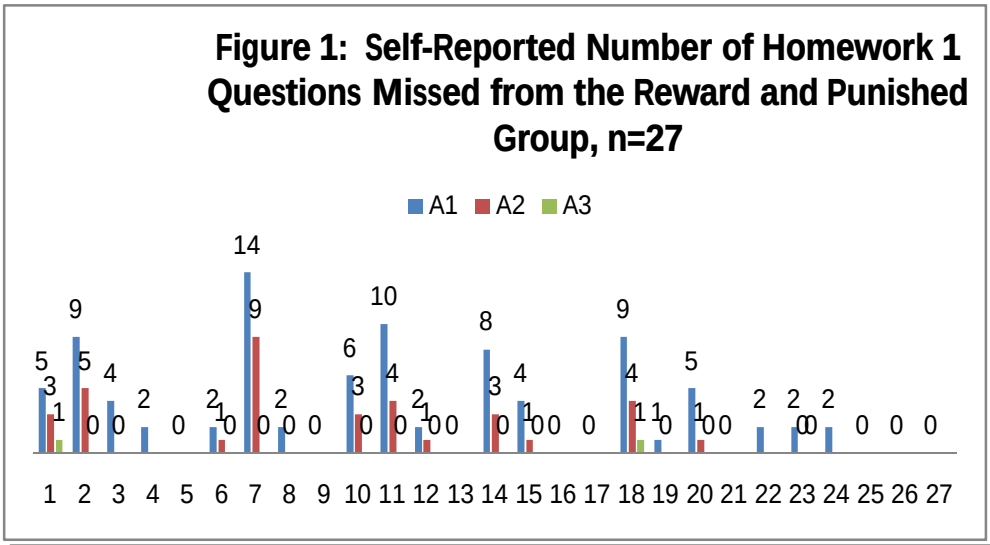


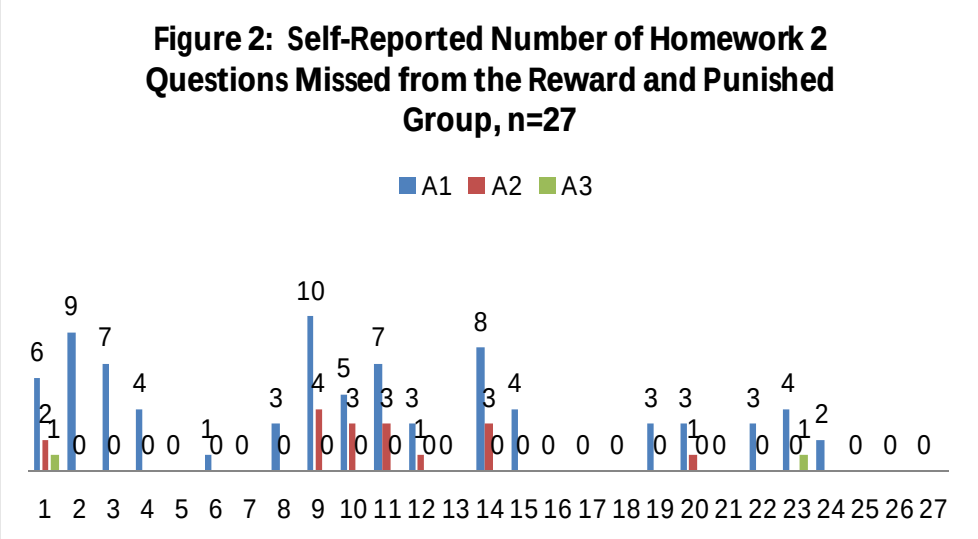
Table 1: First and second attempt of each homework set by each group

	Reward with Punishment				Reward without Punishment			
Homework	First Attempt	%	Second Attempt	%	First Attempt	%	Second Attempt	%
HW1	17	62.96296	10	37.03704	7	29.16667	17	70.83333
HW2	12	44.44444	15	55.55556	8	33.33333	16	66.66667
HW3	12	44.44444	15	55.55556	10	41.66667	14	58.33333
HW4	11	40.74074	16	59.25926	10	41.66667	14	58.33333

Table 2: Audited Via Inclass Exams

	Punished Group		Unpunished Group	
	missing		missing	
Audited	0	%	0	%
Exam 1	19	70.37037	16	66.66667
Exam 2	18	66.66667	17	70.83333





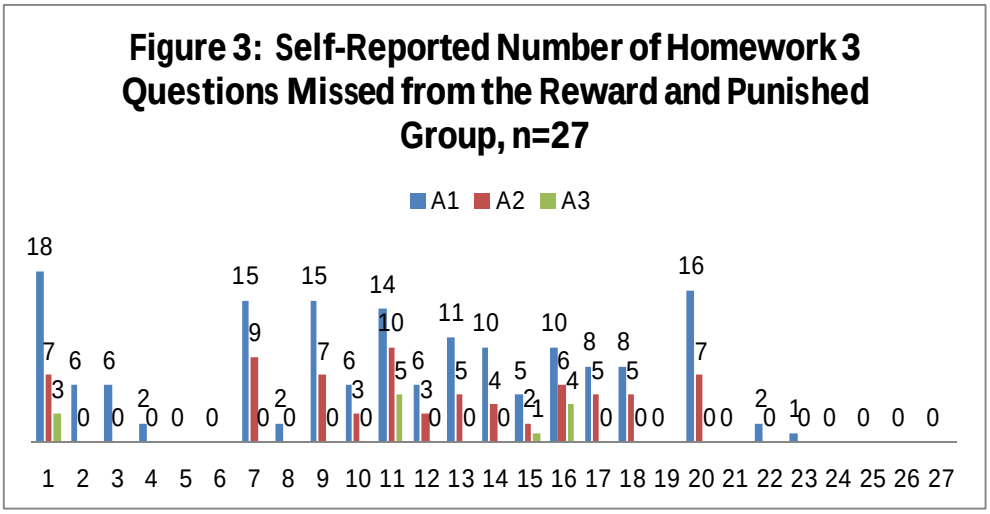


Figure 3: Self-Reported Number of Homework 3 Questions Missed from the Reward and Punished Group, n=27
A1 A2 A3

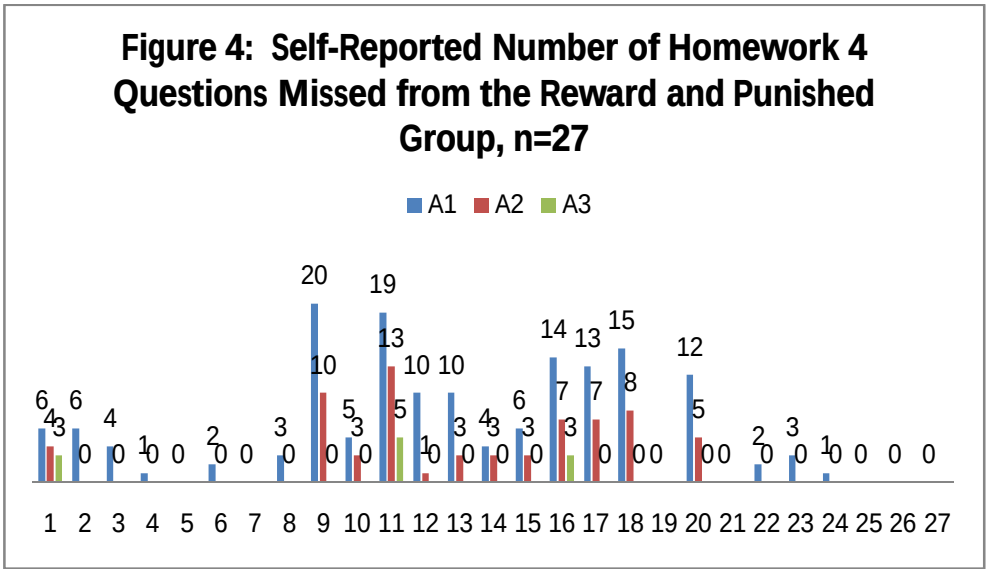


Figure 4: Self-Reported Number of Homework 4 Questions Missed from the Reward and Punished Group, n=27
A1 A2 A3

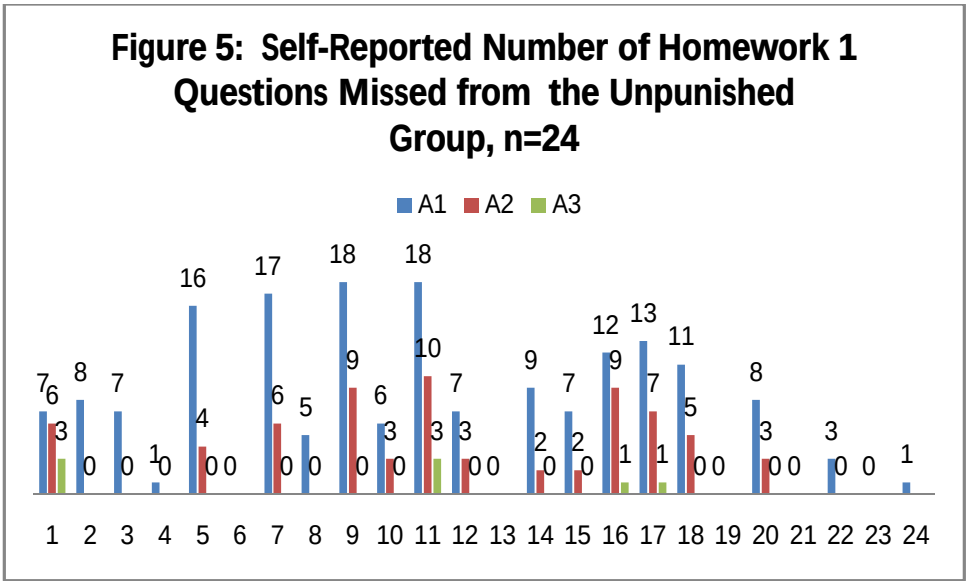


Figure 5: Self-Reported Number of Homework 1 Questions Missed from the Unpunished Group, n=24
A1 A2 A3

Figure 6: Self-Reported Number of Homework 2 Questions Missed from the Unpunished Group, n=24

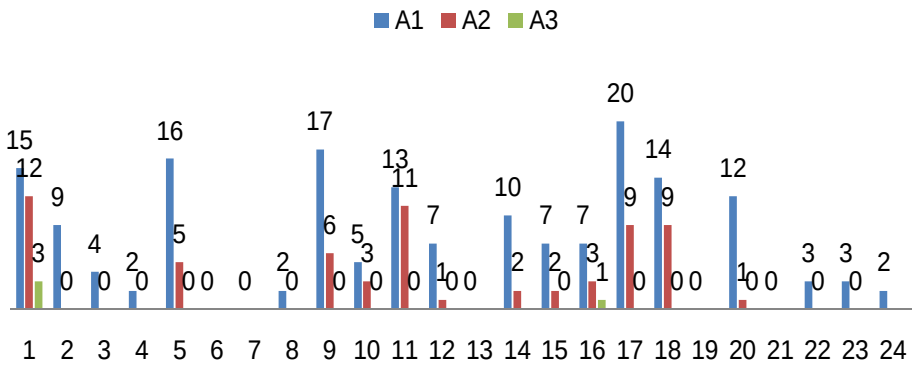


Figure 7: Self-Reported Number of Homework 3 Questions Missed from the Unpunished Group, n=24

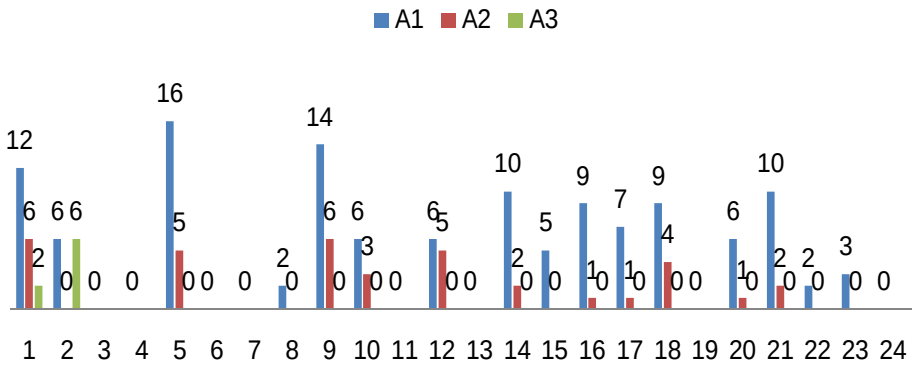
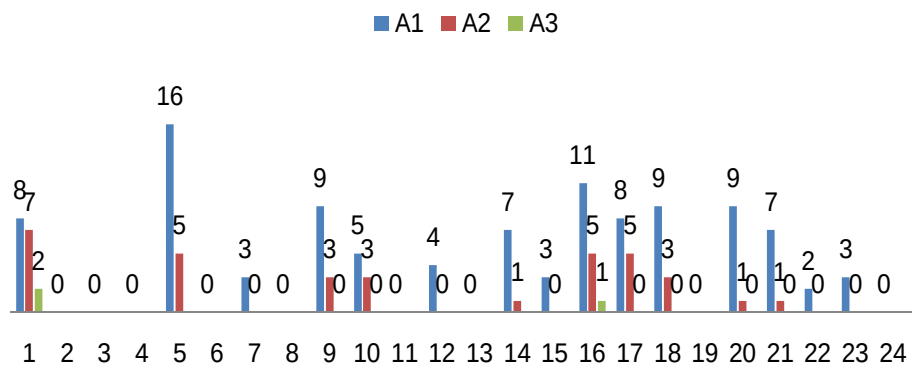


Figure 8: Self-Reported Number of Homework 4 Questions Missed from the Unpunished Group, n=24



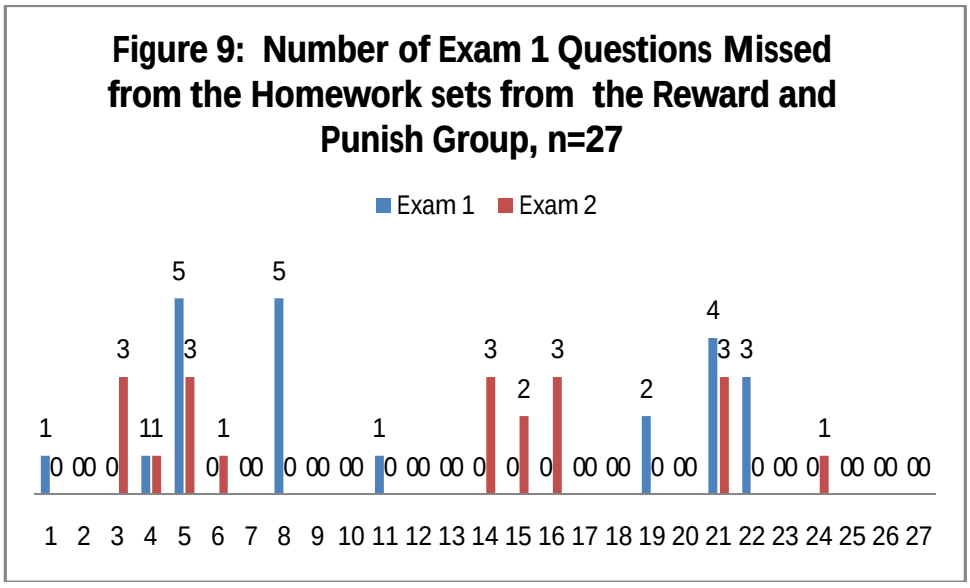


Figure 9: Number of Exam 1 Questions Missed from the Homework sets from the Reward and Punish Group, n=27
Exam 1
Exam 2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

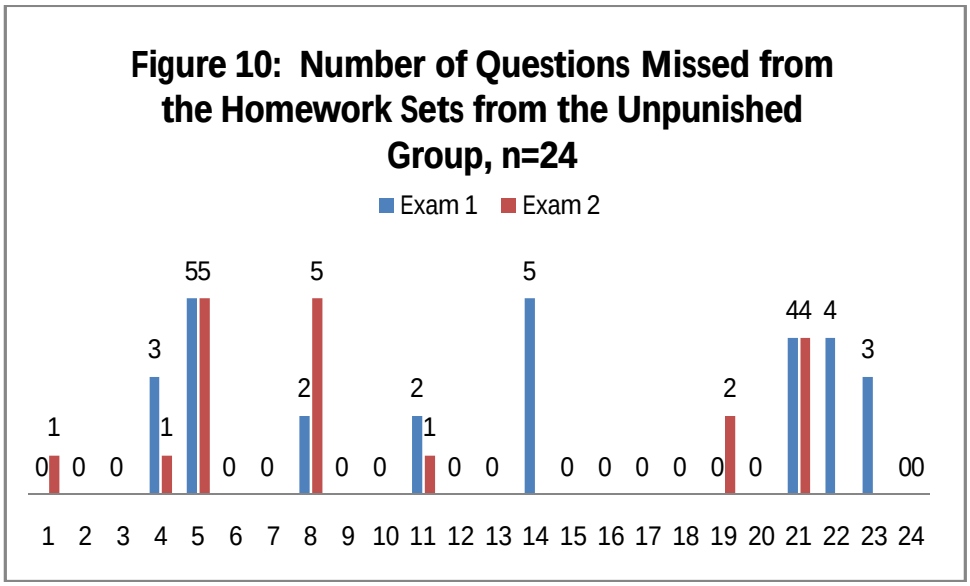


Figure 10: Number of Questions Missed from the Homework Sets from the Unpunished Group, n=24
Exam 1
Exam 2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24