

**It's Your Lucky Day:
Program Evaluation**

**Jackie Lemaire, M.Sc.
Susan de Lima, BA
&
David Patton, Ph.D.**

September 2004

Addictions Foundation of Manitoba

The Addictions Foundation of Manitoba is responsible for providing rehabilitation and prevention services for Manitoba citizens relating to substance use and problem gambling. The aim of our *research* is to better inform rehabilitation practice, public education, and health policy. Research fostered by the foundation contributes to a better understanding of how individuals, families and communities can most effectively respond to harm associated with substance use and problem gambling.

VISION:

Leading the way to an addiction free society

MISSION:

To contribute to the health and well being of Manitobans by reducing the harm associated with alcohol, other drugs and gambling through education, prevention, rehabilitation and research.

VALUES:

- We respect the dignity of each individual
- We are guided by ethical standards and integrity
- We are client centered in our service
- We endorse relationships with the self help community
- We contribute to the development and sustainability of healthy communities
- We encourage partnerships with other organizations
- We promote continuous improvement, life long learning, research and best practice
- We support early intervention and harm reduction

TABLE OF CONTENTS

LIST OF TABLES/FIGURES	4
1. EXECUTIVE SUMMARY	5
2. INTRODUCTION.....	6
3. PROGRAM DESCRIPTION	8
4. METHODOLOGY.....	9
5. RESULTS.....	11
5. 1. Results: Analysis by Grade 7s and Grade 8s.....	11
5. 2. Results: Analysis by Grade	14
5. 3. Results: Student Satisfaction	19
5. 4. Results: Qualitative Analysis	19
5. 5. Results: Summary	21
6. DISCUSSION	22
7. REFERENCES.....	23

LIST OF TABLES/FIGURES

TABLE 1: Number of Students in Each Grade by Condition.....	9
TABLE 2: Evaluation Design	10
TABLE 3: Program Objectives and Questions	10
FIGURE 1: Mean Score Correct (%) from Pre to Post-test by Condition	11
FIGURE 2: Percent Correct for Question 11	12
TABLE 4: Comparison of Control and Experimental Group	13
FIGURE 3: Mean Score Correct (%) from Pre to Post-test by Condition for Grade 7.....	14
TABLE 5: Comparison of Grade 7 Control and Experimental Group	16
FIGURE 4: Mean Score Correct (%) from Pre to Post-test by Condition for Grade 8.....	17
TABLE 6: Comparison of Grade 8 Control and Experimental Group	18
FIGURE 5: Percent of Students (Experimental Post) Who Enjoyed the Session.....	19
Appendix A	25
Appendix B	28
Appendix C	30
Appendix D: Part One	32
Appendix D: Part Two	42
Appendix D: Part Three	52

1. EXECUTIVE SUMMARY

The “It’s Your Lucky Day” education program was developed to provide factual and reliable information to middle years (grade 7 and 8) students and to prevent possible harms from gambling. The session is a multi-media/interactive presentation that includes classroom discussion facilitated by a Prevention Education Consultant from the Addictions Foundation (AFM). Twenty classes were randomly selected from Manitoba (14 from Winnipeg, 4 from the Western region and 2 from the Northern region) to become part of the experimental study. Classes were randomly assigned to either an experimental or a control group that did not receive the session before the post-test. Pre and post tests with 17 questions measured the programs’ 5 objectives (definition of gambling, myths and fallacies of gambling, how gambling works, signs of problem gambling and awareness of AFM services). Overall, students in the experimental group (who received the session before the post test) were significantly more likely to answer the questions correctly at the post test (83% from 63%) than students in the control group. Students are learning the material for most of the objectives, especially “how gambling works” and “myths related to gambling”. Grade seven students are more likely to learn the material and enjoy the session as compared to grade eight students. Some suggestions for change include a more challenging version for grade 8 students, less time spent on material already known (definition of gambling), and the development of promotional materials that could be accessible to all students. Overall, “It’s Your Lucky Day” resulted in increased knowledge for most of the program objectives and students indicated enjoyment of the program.

2. INTRODUCTION

Over the past decade gambling opportunities in Canada have rapidly expanded. For example, between 1993 and 2003 the growth of the gambling industry in Canada notably surpassed the growth of non-gambling industries (as cited in Odegaard, 2004). The average amount spent per household on at least one gambling activity increased from \$462 to \$570 (with controls for inflation) between 1998 and 2002 (Statistics Canada, 2004). As a result of gambling expansion and accessibility, concern has been expressed that there will become a substantial increase in the number of individuals presenting with issues related to problem gambling.

A number of provinces have conducted prevalence surveys over the past few years in an effort to document the proportion of the population experiencing problems due to gambling (for a review please see the Alberta Gaming Research Institute, 2004). Based on the problem gambling screen used, individuals are classified into various groups such as “severe/problem”, “moderate”, “low-risk” or “non-problem” gambler. For example, based on the Canadian Community Health Survey Cycle 1.2, Statistics Canada (2004) identified Manitoba as having 90.6% non-problem gamblers, 5.3% low risk gamblers, 3.3% moderate risk gamblers and 0.8% problem gamblers. The most recent figures from Statistics Canada (2004) also identified the following factors that significantly increase the risk of experiencing a gambling related problem:

- gender (men are at a greater risk),
- education (those with less education) and
- racial background (Aboriginals are almost three times as likely to be at risk for problem gambling).

Since a lack of education is one of the significant predictors of problem gambling, prevention strategies may help to alleviate and/or prevent future harm due to problem gambling. For this reason “It’s Your Lucky Day” was developed to bring gambling education to the classroom and to provide youth with the tools they need to gamble responsibly.

Research consistently shows that most youth have participated in some form of gambling; often at a very young age (Derevensky, Gupta & Della Cioppa, 1996). Although the majority of youth gamble for fun and entertainment, there are a few who go on to develop problems. In fact, numerous prevalence studies suggest that youth gamblers have higher problem gambling rates than the general population. For example, Shaffer, Hall and Vander Bilt (1997, 1999) found that adolescents and college students were at significantly greater risk for gambling problems than was the adult population. Adlaf and Lalomiteanu (2000) found that 5.8% of Ontario students in grades 7 through 13 could be classified as problem gamblers with an additional 7.5% at-risk. These rates are higher than what is found in the adult population which is a concern as most of these youth have not yet reached the age to legally access some of the more addictive forms of gambling, such as video lottery terminals (VLTs).

There are also a number of important psychological correlates of problem gambling. For example, youth problem gamblers have been found to have lower self-esteem (Gupta & Derevensky, 1998), higher rates of depression (Nower, Derevensky & Gupta, 2000), and are at heightened risk for suicide ideation and attempts (Gupta & Derevensky, 1998). Because

gambling is becoming more accessible, it becomes good social policy to educate our youth about its associated risks. Adolescents need to know how gambling works and the myths and fallacies that surround this form of entertainment. They need to become ‘informed consumers’ so that as they are faced with decisions about gambling, they will have the tools to make the correct moves with respect to responsible gambling.

To help achieve this goal, the Addictions Foundation of Manitoba (AFM) and Manitoba Lotteries Corporation (MLC) partnered to develop a gambling prevention program that is integrated with the grade 7 and grade 8 curriculum to expose students to how gambling works, common myths surrounding gambling and the signs of problem gambling. This exciting multi-media prevention initiative is the first in Manitoba. Some youth gambling prevention programming do exist elsewhere (Alberta Alcohol and Drug Abuse Commission, 1996; Nova Scotia Department of Health, 1997; Shaffer, Hall, & Vander Bilt, 1996; Svendsen & Griffin, 1994), however, most do not measure outcomes so it is difficult to test the effectiveness of these programs. A notable exception is the work of Ferland, Ladouceur & Vitaro (2002) who tested the effectiveness of a video designed to correct misconceptions and increase knowledge about gambling on grade 7 and grade 8 students. Their findings suggest that the combination of a lecture/activities and a video (multi-media) provided the best intervention to reduce gambling misconceptions. This helped inform the development of the current multi-media session entitled, “It’s Your Lucky Day”.

3. PROGRAM DESCRIPTION

“It’s Your Lucky Day” is a fun and interactive multi-media gambling education and awareness program that began in January of 2004. It was developed for middle years students (grade 7 and grade 8) and is delivered in the classroom by AFM Prevention and Education Consultants (PECs). The goals of the program are to provide factual and reliable information to middle years students and to prevent possible harms from gambling. The program is complemented by a website¹ (www.luckyday.ca) that includes information on gambling, community resources and an interactive quiz that students can take to test their knowledge of gambling. The session is approximately 45 to 60 minutes in length.

Youth input was considered at an early stage of development of the program via focus groups. These groups consisting of 28 students aged 11 to 15 from both rural and urban Manitoba provided feedback and input into the program and website. Initially, the website was going to be developed and launched as a second phase of the program. However, feedback received by youth participating in the focus groups indicated that the first place they would go for information or help would be to a website. It then became clear that a website that provided gambling information and community resources would be a key component of a more comprehensive prevention strategy. Preliminary results show that in a two week period (July 14 to July 27th) there were 738 hits to the website with the most popular pages accessed being: “What is Gambling”, “Myths”, and “Problem”.

The school curriculum was also reviewed as to the appropriateness and suitability of the program and website content. The goals and objectives of the program have lent themselves extremely well to the health, math, and english curriculum. Students are encouraged to explore areas such as risk taking, decision making, coping skills, problem solving, harm reduction, randomness and probability. For example, students are taught key concepts such as randomness, odds, house advantage and risk-taking/decision making as a part of the health curriculum. After a brief discussion and application of these concepts, students are given the option to gamble a chocolate loonie on a pick and win game. Students are reminded of the concept of randomness and the odds of winning such games. Following the pick and win game the participants process decision making in general and then relate it to gambling situations. The mathematical facts about gambling are also highlighted and discussed.

¹ The website was not evaluated. However, the number of ‘hits’ to the website were tracked over specific time periods.

4. METHODOLOGY

As “It’s Your Lucky Day” is a pilot project, an evaluation component was developed to test the program’s effectiveness. During the fall of 2003, PECs and research staff worked together to develop an evaluation framework. The evaluation was designed to measure the key priority areas of the program (definition of gambling, how gambling works, myths/fallacies around gambling, signs of problem gambling and community resources).

The population chosen for the pilot evaluation was all Manitoba public schools with grade seven and grade eight classes with 20 or more students as of January of this year. Regional staff (Winnipeg, Western and Northern) were instructed to compile a list of all schools in their region that met the population criteria. Classes were randomly selected from the list using the stratified random sampling method to ensure appropriate provincial representation. In total there were 20 classes in Manitoba that participated. Fourteen classes were from Winnipeg, 4 from the Western region and 2 from the Northern region. Measures were also put into place to ensure that an equal number of grade seven and eight classes were assigned to control and experimental groups. For the most part numbers were relatively equal, however, there was a natural decrease in numbers at the post-test due to absences. Statistical tests (Anova: F-tests) were performed to check for significant differences in comparison groups (i.e., between experimental and control groups). The only significant difference at the pre-test was on objective 2 (identifying myths related to gambling) meaning that the experimental group knew significantly more about gambling myths at the pre-test than the control group (normally we would expect that at pre-test the knowledge levels would be equal for experimental and control groups). Otherwise, the random assignment method employed ensured that the groups were at an equal level prior to the delivery of the program. Table 1 shows the condition and grade breakdown of the sample.

TABLE 1: Number of Students in Each Grade by Condition

Time	Grade 7 (n=373)		Grade 8 (n=521)		Total
	Exp	Ctrl	Exp	Ctrl	
Pre	105	79	120	152	456
Post	101	88	147	102	438
Total	206	167	267	254	894

Once the schools had been selected, the staff contacted each school to determine if they would like to participate in the evaluation (see Appendix B for a copy of the letter provided to each school). Teachers were assured that the purpose of the evaluation was to test the effectiveness of the program and not the students themselves. Participating schools were also promised confidentiality within the final report.

An experimental design with pre and post testing was used. The experimental group received the pre-test, the intervention and then the post-test. The control group was given the pre-test and then the post-test one month later. The control group then received the educational program. This was the most ethical route to ensure that all participating schools received the intervention. Only youth gambling and gambling staff that had training in the program delivery were authorized to deliver the program. Table two shows the evaluation design.

TABLE 2: Evaluation Design

Condition	Step 1	Step 2	Step 3	Step 4
Experimental Group	Pre test	It's Your Lucky Day (Intervention)	Time (1 month)	Post test
Control Group	Pre test	Time (1 month)	Post test	It's Your Lucky Day (Intervention)

The pre and post test questionnaire was developed through a joint effort of the research and gambling staff of AFM (see Appendix A for a copy of the questions). Questions had to be concrete, relevant to the session and easily comprehended at the grade 7 and grade 8 reading level. Due to the similarity in program objectives and sample, some questions were borrowed from Ferland, Ladouceur & Vitaro (2002). Table 3 shows program objectives and examples of the questions. Once step 4 was completed, all data was entered via Microsoft Excel. Data was then converted to SPSS version 11.5 for analysis. F-tests (Anova) were used to test for significant differences between and within groups. Analysis was completed on all subjects and by grade level.

TABLE 3: Program Objectives and Questions²

Objectives	Number of Questions and Example
Definition of Gambling	3 (i.e. If I bet money on a pool game, it isn't really gambling)
Myths Related to Gambling	5 (i.e. If I try harder at gambling, I will get better and win money)
How Gambling Works	4 (i.e. "House advantage" is a term that means, over time, people eventually win back their gambling losses)
Signs of Problem Gambling	4 (i.e. Some people buy lottery tickets every week but are not addicted to gambling)
AFM's Gambling Services	1 (i.e. The AFM has a website for gambling information called "www.feelingluckytoday.com")

² See Appendix C for a copy of the accountability model used to summarize and link the activities of the program to the short-term and long-term goals.

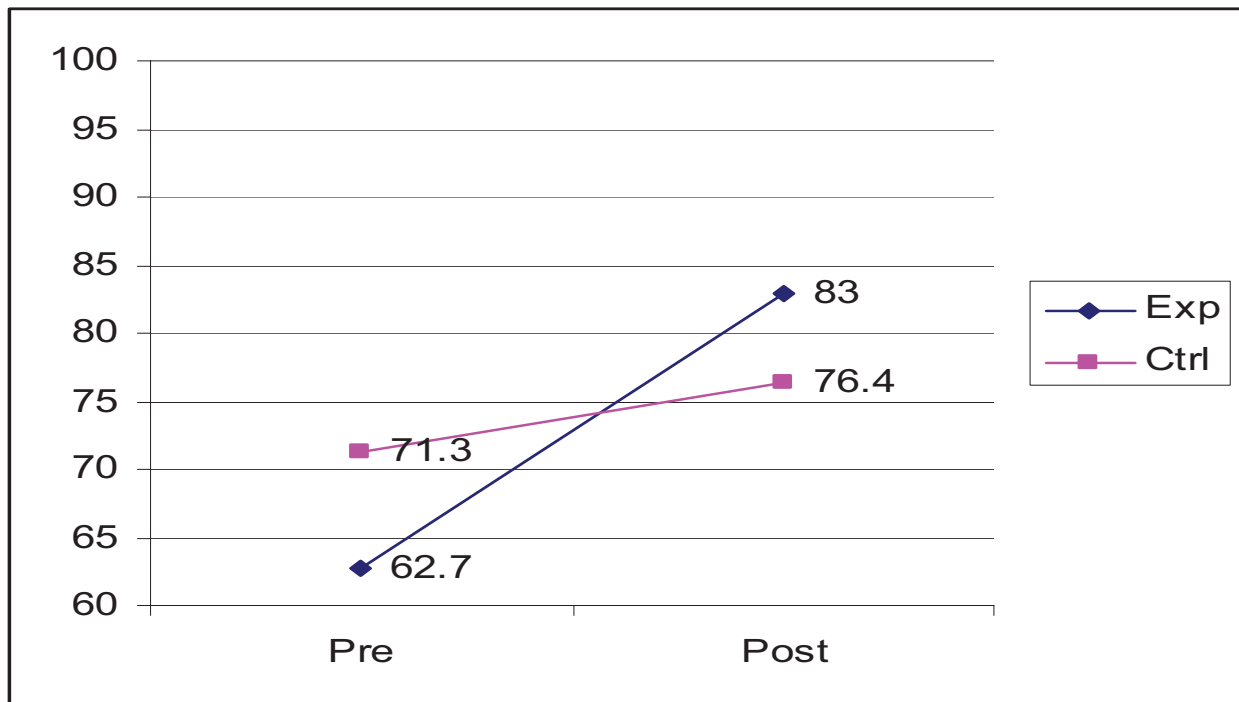
5. RESULTS

In order to maintain anonymity, students were not matched to their test results. Therefore, F-tests (Anova) were used to check for significant differences between the experimental and control groups. In order to control for age confounds, the results were divided into three groups: analysis by grade 7s and grade 8s and analysis by grade.

5. 1. Results: Analysis by Grade 7s and Grade 8s

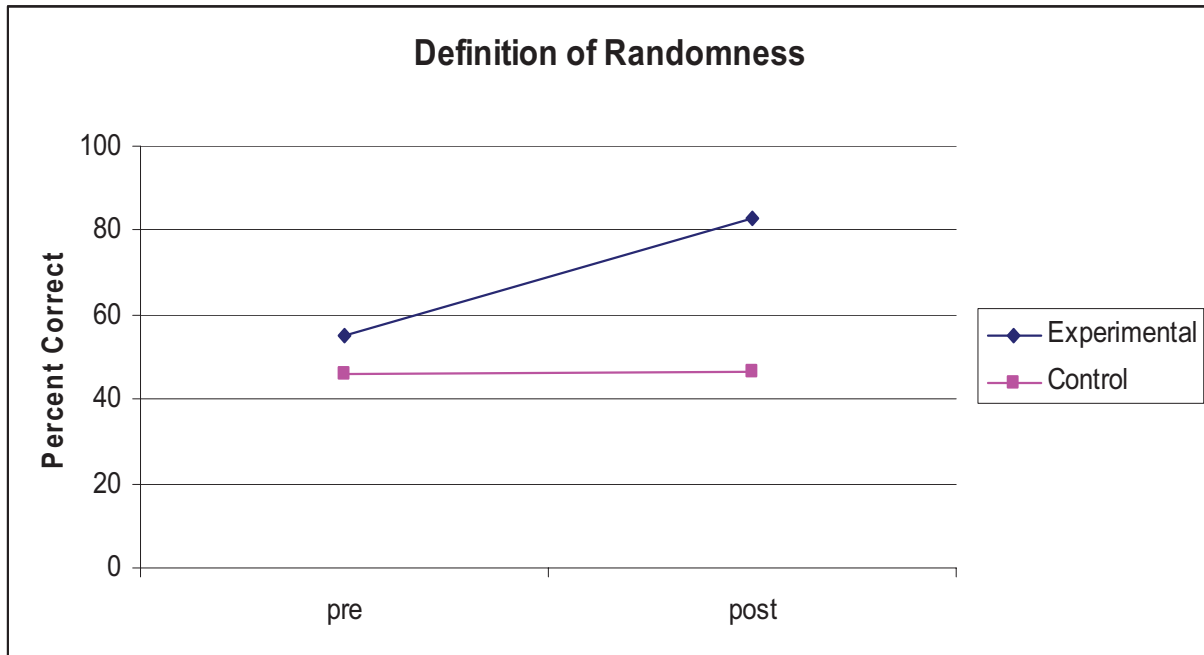
Analysis with all subjects (grade 7 and grade 8) in the experimental group revealed significant differences from pre to post for the majority of the objectives (students are learning the material). Figure 1 shows the percentage of questions answered correctly from pre to post test by condition. Overall, while the experimental group knew 62.7% of the material at the pre-test, 83% of the questions were answered correctly at the post-test. The control group did not increase knowledge of the material from pre to post-test (71.3% to 76.4%) but they scored higher on the pre-test compared to the experimental group. A closer look into each objective separately also revealed some interesting findings (see Table 4 on page 13). For example, 87.6% of the experimental group knew the basic definition of gambling (objective 1) at pre-testing. However, at post-testing this percentage increases to almost 95% of subjects. Although this number is relatively high to begin with, suggesting that most students already know what gambling is, it does suggest that students who don't know about gambling have learned the material for this objective. While only 59.4% of students in the experimental group knew how to properly identify myths related to gambling (objective 2), almost 90% answered this objective correctly at post-testing. This shows a very significant change in knowledge over time.

FIGURE 1: Mean Score Correct (%) from Pre to Post-test by Condition



There were also significant increases for objective 3 (how gambling works) as 93% of students were able to correctly answer the questions at post-test (versus 78.5% at the pre-test). For example, Figure 2 shows a question from objective three at pre and post-testing. While just over half correctly answered the question about randomness at pre-testing, 83% of the students answered it correctly at the post-test. Mean score changes in objective four (signs of problem gambling) was not significant over time. In other words, students in the experimental group were not significantly more likely to know about the signs of problem gambling after the program. One reason that there was no change in objective four may be related to the subjective interpretation of problem gambling signs (i.e., some individuals may feel that buying lottery tickets every week is a sign of problem gambling). In addition, students were significantly more likely to answer objective 5 (AFM gambling services) incorrectly from the pre to post-test. This means that students were more likely to incorrectly identify the website companion to the multi-media session at post-testing. Discussion with a facilitator revealed that AFM services, including the website, were often mentioned to the students at the end of the session. When the session was wrapping up students were too busy getting ready for the class change and may not be paying attention. In addition, students were not given any promotional material for the website which may have helped them remember the name of the web-site. Most web-site names sound very similar to each other (www.luckyday.ca versus www.feelingluckytoday.com) so the suitability of this question as part of the evaluation is debatable.

FIGURE 2: Percent Correct for Question 11



Students in the control groups did not show any increases in knowledge gain for any of the objectives, however, they were more likely to answer the website question incorrectly at the post test. A question by question analysis is included in Appendix D: Part One.

TABLE 4: Comparison of Control and Experimental Group

Objective	Condition	Ctrl Group Mean Score (%)	Exp Group Mean Score (%)
1. Definition of Gambling (question 1, 12, 16)	Pre-test	88.3	87.6
	Post-test	90.7	94.6*
2. Problem Gambling Myths (question 4, 5, 7, 8, 13)	Pre-test	47.4	59.4
	Post-test	51.0	89.8*
3. How Gambling Works (question 3, 9, 14, 11)	Pre-test	77.5	78.5
	Post-test	81.8	93.0*
4. Signs Problem Gambling (question 2, 10, 15, 17)	Pre-test	57.5	59.0
	Post-test	55.0	65.3
5. Service Awareness (question 6)	Pre-test	48.0	66.0
	Post-test	11.0*	12.0*
Total (all questions)	Pre-test	71.3	62.7
	Post-test	76.4	83.0*

* Significant difference (Anova) $p < .05$

“An excellent presentation! I myself learned a lot and did some deep thinking as a result and I know my students did too. We need to do more of this type of education”

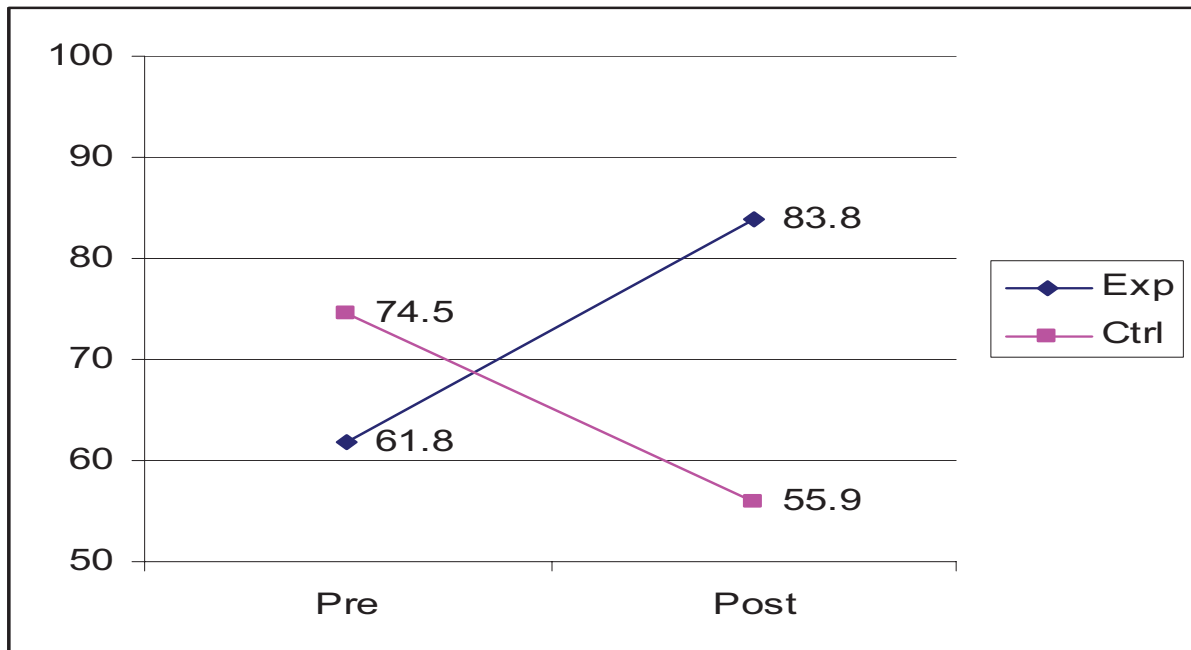
Middle Years School Teacher

5. 2. Results: Analysis by Grade

In previous work delivering alcohol and drug education programs at the junior high school level it has been reported that the grade 7 students are much more receptive to the programming. The grade 8 students tend to be less focussed on the material, more disruptive during presentations and may be less likely to learn the material. As a result, we compared grade 7 and 8 students in order to evaluate whether this effect generalized to the gambling presentation.

Analysis with the grade 7 subjects in the experimental group revealed significant differences from pre to post for the majority of the objectives (Table 5 on page 16 shows results by each objective for grade 7 students). Overall, the students learned the material from the educational program (62% to 84% from pre to post test) compared to the control group (74.5% to 55.9%). Figure 3 present the results for all objectives combined.

FIGURE 3: Mean Score Correct (%) from Pre to Post-test by Condition for Grade 7



Analysis by objective revealed significant changes from pre to post-test. For example, 86% of the experimental group knew the basic definition of gambling (objective 1) before the intervention and at the post-test this percentage increases to (98%) of the subjects. Although this number is relatively high to begin with, suggesting that most grade 7 students already know what gambling is, there was an increase which suggests that students have learned this material. While only 53.4% of students in the experimental group knew how to properly identify myths related to gambling (objective 2), 92.2% answered this objective correctly at post-testing. This shows a very positive change in knowledge over time. There were also increases for objective 3 (how gambling works) with 94.3% of grade 7 students in the experimental group correctly answering the questions at the post-test (versus 81.3% at the pre-test). Mean score differences in objective four (signs of problem gambling) were not significant over time. In other words, students in the experimental group were not more likely to know about the signs of problem gambling from pre to post-testing. In addition, students were significantly more likely to answer objective 5 (AFM gambling services) incorrectly from the pre to post-test. This means that students were more likely to incorrectly identify the website companion to the multi-media session at post-testing. Grade 7 students in the control groups did not show any significant increases in knowledge gain for any of the objectives, however, they were also more likely to answer the website question incorrectly at the post test. A question by question analysis for grade 7 students is included in Appendix D: Part Two.

“I would probably say the most important things I learned were that gambling is random and you can’t really control if you win or lose. Therefore, saying it’s pointless and way too risky to take your chances on. There is no pattern”

Middle Years Student

TABLE 5: Comparison of Grade 7 Control and Experimental Group

Objective	Condition	Ctrl Group Mean Score (%)	Exp Group Mean Score (%)
1. Definition of Gambling (question 1, 12, 16)	Pre-test	87.3	86.0
	Post-test	86.3	97.6*
2. Problem Gambling Myths** (question 4, 5, 7, 8, 13)	Pre-test	32.4	53.4
	Post-test	44.8	92.2*
3. How Gambling Works (question 3, 9, 14, 11)	Pre-test	72.0	81.3
	Post-test	84.5	94.3*
4. Signs Problem Gambling** (question 2, 10, 15, 17)	Pre-test	44.5	59.0
	Post-test	52.0	67.8
5. Service Awareness (question 6)	Pre-test	42.0	58.0
	Post-test	0.0*	13.0*
Total (all questions)	Pre-test	74.5	61.8
	Post-test	55.9	83.8*

* Significant difference (Anova) $p < .05$

** $p < .05$; the experimental group knew more (objective 2 and 4) at the pre-test as compared to the control group.

“That you can’t tell if you’re going to win or not; that no matter how many times you gamble, you’ll lose more than you win”

Middle Years Student

Analysis with all grade 8 subjects in the experimental group revealed significant differences from pre to post for two of the five objectives (Table 6 on page 18 shows the F-test results for grade 8 students). Unlike the grade 7s, grade 8 students did not show a significant increase in knowledge for objective 1 (definition of gambling). Most of the students knew the material at pre-testing (89%) and this percentage did not increase significantly at the post-test (93%). While grade 7 students are still learning this material, information on defining gambling does not appear to be challenging enough for the grade 8 students. While only 65.2% of grade 8 students in the experimental group knew how to properly identify myths related to gambling (objective 2), 88% answered this objective correctly at post-testing. This shows a significant change in knowledge from pre to post-testing. There were also significant increases for objective 3 (how gambling works) and overall (63.2% to 82.3%) from pre to post-testing. Mean score changes in objective four (signs of problem gambling) was not significant over time. In other words, students in the experimental group were not significantly more likely to know about the signs of problem gambling from pre to post-testing. In addition, students were significantly more likely to answer objective 5 (AFM gambling services) incorrectly from the pre to post-test. This means that students were more likely to incorrectly identify the website companion to the multi-media session at post-testing. Grade 8 students in the control groups did not show any significant increases in knowledge gain for any of the objectives, however, they were significantly more likely to answer the website question incorrectly at the post test. Although it appears (from Figure 4) that both the experimental and control group had gains in knowledge, only the experimental group was significant from pre to post. A question by question analysis for grade 8 students is part of Appendix D: Part Three. Figure 4 presents the overall results for the grade 8 students.

FIGURE 4: Mean Score Correct (%) from Pre to Post-test by Condition for Grade 8

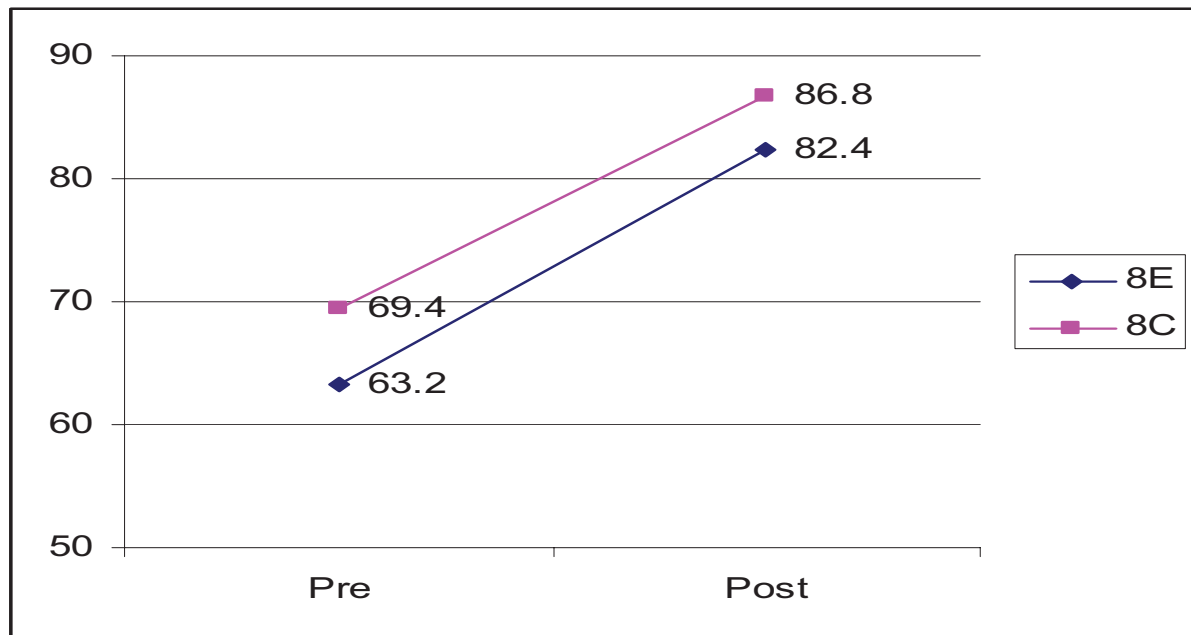


TABLE 6: Comparison of Grade 8 Control and Experimental Group

Objective	Condition	Ctrl Group Mean Score (%)	Exp Group Mean Score (%)
1. Definition of Gambling (question 1, 12, 16)	Pre-test	89.0	89.3
	Post-test	94.0	92.7
2. Problem Gambling Myths (question 4, 5, 7, 8, 13)	Pre-test	55.4	65.2
	Post-test	56.0	88.0*
3. How Gambling Works (question 3, 9, 14, 11)	Pre-test	79.5	76.5
	Post-test	80.3	91.8*
4. Signs Problem Gambling (question 2, 10, 15, 17)	Pre-test	63.3	59.3
	Post-test	57.3	62.5
5. Service Awareness (question 6)	Pre-test	50	69
	Post-test	17*	12*
Total (all questions)	Pre-test	69.4	63.2
	Post-test	86.8	82.4*

* Significant difference (Anova) $p < .05$

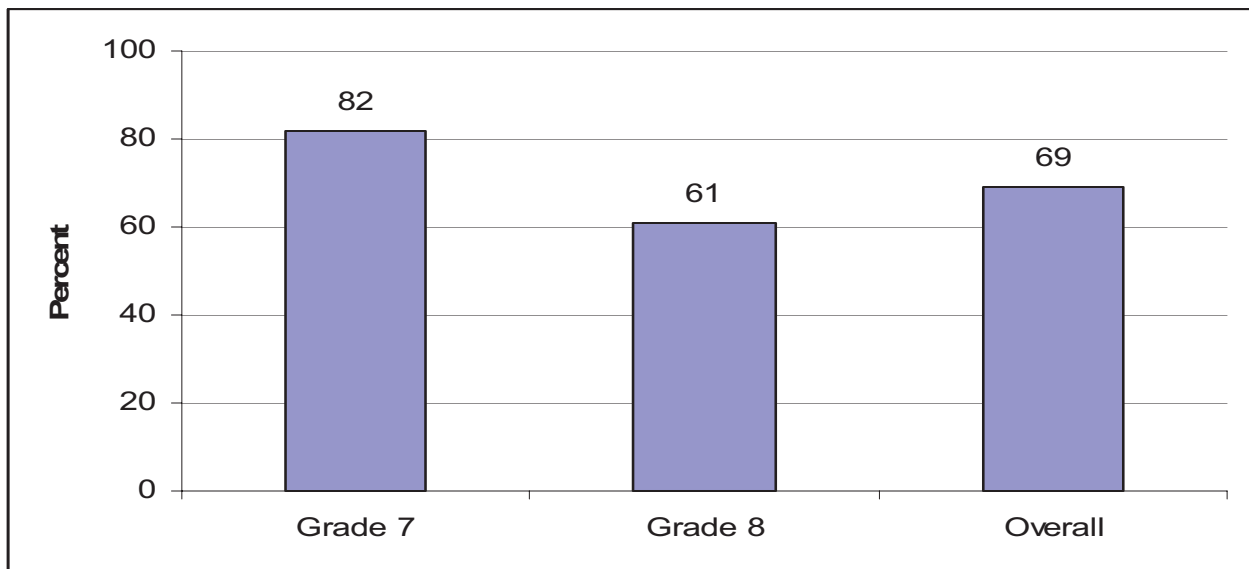
“About house advantage. I learned that most of the money goes to the company who owns the gambling place”

Middle Years Student

5. 3. Results: Student Satisfaction

All students in the experimental group (post test only) were asked if they had enjoyed learning about gambling through the multi-media session. As can be seen from Figure 5, overall, almost 70% of the students enjoyed the session. Although many of the grade 8 students enjoyed the session (61%), the grade 7 students appeared to enjoy the multi-media program more (82%). This may reflect that some of the material from the session is unchallenging for the grade 8s (only 2 objectives were successfully met compared with 3 objectives met for the grade 7 students). Although satisfaction measures can not be relied upon exclusively to guide programming, this is a useful finding that supports the need to maintain student interest in the delivery of new material.

FIGURE 5: Percent of Students (Experimental Post) Who Enjoyed the Session



5. 4. Results: Qualitative Analysis

Wiebe & Falkowski-Ham (2003) suggest that the key to preventing youth gambling problems is to understand the audience. Their research assembled an in-depth profile of youth to guide the development of problem gambling prevention strategies. Among many important findings, their results show that language and examples in prevention are meaningful for youth and may contribute to an increased understanding and retention of problem gambling messages. The AFM also recognizes how important youth feedback is to prevention programs, and as such, various open-ended questions were asked as part of this evaluation.

The students were provided an opportunity on the post-test to include comments about the program. The following are a few examples from the students of things they had learned from “It’s Your Lucky Day”:

“Losing while gambling has nothing to do with how you play”

“This changes my mind about gambling; it teaches me not to get addicted to it”

“I learned what the odds, randomness and chances of winning are”

“I learned what ‘house advantage’ is and the odds you will win when gambling”

“I know now that electronic gambling doesn’t require skill”

“I learned terms like randomness and odds. And that there is a website”

“I learned lots of things like ‘house advantage’ which I didn’t really know existed”

“Well I know that gambling is ok as long as you are not addicted then it can become dangerous”

“Gambling can be just for fun or it can be something serious. Gambling is chance and some are addicted and some are not (I’ve learned these things)”

As can be seen from these examples, many are learning important concepts about how gambling works and myths related to gambling. These findings complement the quantitative analysis which show that some of the objectives were met. Students also identified things that could have been done better during the session. While most felt that nothing could be done better, those that did share information mostly did so about including more games in the presentation, providing more chocolate (chocolate loonies were provided to students during an activity) and hearing from ‘real problem gamblers’. Although this latter suggestion may present some ethical difficulties, there may be an opportunity for someone who has experienced the harmful consequences of problem gambling to share some of their experiences with these students.

If available, teachers were also asked to provide feedback on the session. All teachers agreed that the session fit in well with their curriculum, that the material was age-appropriate and that they themselves enjoyed the program (with 67% *strongly* agreeing with these questions). The following are a few comments directly from some of the teachers who participated:

“The session raises their awareness about the problems that can occur as a result of gambling (addiction). They also see the relevance of mathematics to everyday life”

“They are learning how gambling works and the hands on demonstration showing the odds of winning seems very effective”

“We need more presentation to all students. The lesson was terrific, very concrete, interesting and well-paced”

“It is surprising how much they do know about gambling and the information that was shared”

5. 5. Results: Summary

Overall, students are learning the majority of the material from “It’s Your Lucky Day”. Significant increases in knowledge resulted for defining gambling (grade 7 only), myths relating to gambling and how gambling works. Analysis by grade reveals some interesting findings. Grade 8 students appear to be less challenged by some of the material (objective one) and grade 7 students enjoy the session more (82% versus 61%). Objective four (problem gambling signs) was not successfully met by any of the students. This objective is concerned with recognizing the signs of problem gambling and may contain some questions that are subjective in nature (i.e. “feeling bad about your gambling is common” and “problem gamblers usually tell someone about their gambling”). To complement these findings, researchers from Ontario found that while most youth understand that gambling can create problems, some do not know how to recognize the potential warning signs of problem gambling (Wiebe & Falkowski-Ham, p.2). Including questions that are somewhat open to interpretation (signs of problem gambling) may not be the best ones to use in an evaluation. The last objective was concerned with increasing the awareness of AFM gambling services (“It’s Your Lucky Day” companion website). Unfortunately, all students were more likely to answer this question inaccurately at the post-test. This component of the session was addressed at the very end of the presentation and may explain why it was not retained in the students’ memory. It may be helpful to provide the students with promotional material (something concrete) to increase awareness of AFM gambling services such as the website.

6. DISCUSSION

Most youth have gambled at some point in their lives. While the majority of youth gamble to be with their friends and for fun and entertainment (Lemaire, 2004; Wiebe, 1999), some youth do develop problems with their gambling. “It’s Your Lucky Day” session was developed to provide factual and reliable information to middle years (grade 7 and 8) students and to prevent possible harms from gambling. It is one of a few gambling specific prevention programs in Canada that is multi-media in nature and interactive.

Evaluation results suggest that middle years students are learning the material from the program. Overall, students in the experimental group were more likely to correctly answer the questions at the post-test as compared to the control group. When controlling for grade level, it appears that grade sevens are more challenged by the material (especially objective one; definition of gambling) and they enjoy the session more than grade eight students (82% versus 61%). At the post-test students did not increase their knowledge levels for objective four (signs of problem gambling). Objective four may be difficult to measure as this area is quite subjective in nature. Although there are overt signs of problem gambling (i.e. being in debt, problems with relationships, spending too much time at the casinos/bars), in general, problem gamblers can be secretive about the troubles they are experiencing. Some students who may have problems with gambling or are affected by gambling may have answered the questions for objective four quite differently than those who are not. This raises the possibility that ‘signs of problem gambling’ may not be a good area to evaluate knowledge increase and retention. Objective five was concerned with students internalizing the name of the companion web-site. Unfortunately, students were more likely to answer this answer incorrectly at post-test. Discussion of the website and other AFM services occurs at the very end of the session when students are too busy getting ready for their next class to pay attention.

Based on the increased level of knowledge at post-test for most of the objectives (especially grade seven students) and the qualitative comments from both students and teachers suggesting that the program is teaching them about gambling, it is recommended that this prevention program be delivered to as many students as possible. Question by question analysis reveals that most students already know how to define gambling and are learning key concepts such as ‘randomness’, ‘house advantage’ and ‘odds’. In particular, grade eight students may benefit from a more challenging session. Students are now more likely to identify common misperceptions and myths of gambling. Future delivery of the program should focus more of the session time on ‘how gambling works’, ‘myths and fallacies’ and ‘signs of problem gambling’ versus ‘definition of gambling’. In addition, a promotional item that displays the website (www.luckyday.ca) and other AFM services should be provided to students. For example, a mouse pad could be given to all students (or to a class) at the end of the session so that they would always have the resource accessible.

7. REFERENCES

- Adlaf, E. M., & Lalomiteanu, A. (2000). Prevalence of problem gambling in adolescents: Findings from the 1999 Ontario Student Drug Use Survey. *Canadian Journal of Psychiatry, 45*, 752-755.
- Alberta Alcohol and Drug Abuse Commission. (1996). *Problem Gambling: The Healing Circle*. Edmonton, AB: AADAC Resource Development and Marketing.
- Alberta Gaming Research Institute (2004). *Problem Gambling Prevalence Studies in Canada by Province/Territory*. Retrieved from www.abgaminginstitute.ualberta.ca/agrilibrary/canadian_prevalence.htm on August 23, 2004.
- Derevensky, J., Gupta, R., & Della Cioppa, G. (1996). A developmental perspective on gambling behaviour in children and adolescents. *Journal of Gambling Studies, 12*, 49-66.
- Ferland, F., Ladouceur, R., & Vitaro, F. (2002). Prevention of Problem Gambling: Modifying Misconceptions and Increasing Knowledge. *Journal of Gambling Studies, 18* (1): 19-29.
- Gupta, R., & Derevensky, J. (1998). Adolescent gambling behaviour: A prevalence study and examination of the correlated associated with excessive gambling. *Journal of Gambling Studies, 14*, 319-345.
- Lemaire, J. (2004). *Exploring Gambling Behavior, Familial Influences, and Changes Over Time. A Follow-up to the 1999 Manitoba Youth Gambling Prevalence Study*. Unpublished masters thesis, University of Manitoba, Winnipeg, Manitoba, Canada.
- Odegaard, S. (July 14, 2004). Gambling in Canada. *The Wager: Weekly Addiction Gambling Education Report, 9* (28). Retrieved from the Internet at www.thewager.org.
- Nova Scotia Department of Health. (1997). *Drawing the Line: A resource for the prevention of problem gambling*. Volume 2, Senior High. Nova Scotia: Problem Gambling Services, Nova Scotia Department of Health.
- Nower, L., Gupta, R., & Derevensky, J. (2000, June). *Youth gamblers and substance abusers: A comparison of stress-coping styles and risk-taking behaviour of two addicted adolescent populations*. Paper presented at the 11th International Conference on Gambling and Risk-Taking, Las Vegas.
- Shaffer, H. J., Hall, M. N., & Vander Bilt, J. (1996). *Probability, statistics, and number sense in gambling and everyday life: A contemporary mathematics curriculum*. Billerica, MA: Harvard Medical School Division on Addictions and the Massachusetts Council on Compulsive Gambling.

Shaffer, H. J., Hall, M. N., & Vander Bilt, J. (1997). *Estimating the prevalence of disordered gambling behaviour in the United States and Canada: A meta-analysis*. Boston: Presidents and Fellows of Harvard College.

Shaffer, H. J., Hall, M. N., & Vander Bilt, J. (1999). Estimating the prevalence of disordered gambling behaviour in the United States and Canada: A research synthesis. *American Journal of Public Health*, 89, 1369-76.

Statistics Canada (2004). *Fact-sheet on gambling*: Statistics Canada.

Svendsen, R., & Griffin, T. (1994). *Improving your odds: A curriculum about winning, losing and staying out of trouble with gambling*. Anoka, MN: Minnesota Institute of Public Health.

Weibe, J. (1999). *The AFM Manitoba Youth Gambling Prevalence Study*. A report prepared by the Addictions Foundation of Manitoba.

Wiebe, J., & Falkowski-Ham, A. (2003). *Understanding the Audience: The Key to Preventing Youth Gambling Problems*. A report prepared by the Responsible Gambling Council.

Appendix A

**Addictions Foundation of Manitoba
Middle Years Service Evaluation:**

Thank you very much for taking the time to fill out this evaluation form. Evaluations help us to continually improve our services and our programs.

Instructions

For each statement check off (✓) the most appropriate answer – strongly agree, agree, don't know, disagree or strongly disagree.

	Strongly Agree	Agree	Don't Know	Disagree	Strongly Disagree
Gambling is risking money or valuables on a game, contest or event where the end result totally or partially depends on chance.					
Some people buy lottery tickets every week but are not addicted to gambling.					
Random events can be correctly predicted if I use a computer.					
Bingo players have no control over wins and losses.					
If I am good at playing video games, I will be good at playing electronic forms of gambling like video lottery terminals or slots.					
The Addictions Foundation of Manitoba has a website for gambling information called "www.feelingluckytoday.com"					
If I try harder at gambling, I will get better and win money.					
When I'm betting, I must know the tricks and strategies if I want to win.					
When gambling, the chance that one thing will happen instead of another is called the odds.					
Problem gamblers usually tell someone about their gambling.					
Randomness means that you cannot predict what will happen in a chance game because there is no pattern.					
If I bet money on a pool game, it isn't really gambling.					
If I lose while gambling, it has nothing to do with how I played.					
"House advantage" is a term that					

means, over time, people eventually win back their gambling losses.					
Smart people are less likely to become problem gamblers.					
Playing bingo for money is a type of gambling.					
Feeling bad about your gambling is common.					

For Office Use Only

Pre-Test

Student identifier (number/class/school) _____
 (i.e. 17/7B/Earloxford)

Circle One: Grade 7 Grade 8

Appendix B



<date>

Dear <name>

The Addictions Foundation of Manitoba has developed a multi-media problem gambling prevention program for grade seven and eight students titled “It’s Your Lucky Day”. Prior to offering the program to all Manitoba schools, we would like to investigate whether the “It’s Your Lucky Day” program achieves knowledge gains in the priority areas.

Your school has been randomly selected to participate in the program evaluation that will commence January 2004. The evaluation process will consist of assigning classrooms to either a control or experimental group, implementing a pre-test, delivering the program and then implementing a post-test approximately one month later. A summary report will be available to all schools participating in the evaluation.

Identifier codes will be used on the pre/post tests to manage the process. School and student confidentiality will be maintained as the focus of the evaluation is on determining the effectiveness of the program.

If you are interested in assisting the Addictions Foundation of Manitoba by participating in the evaluation, please contact me at

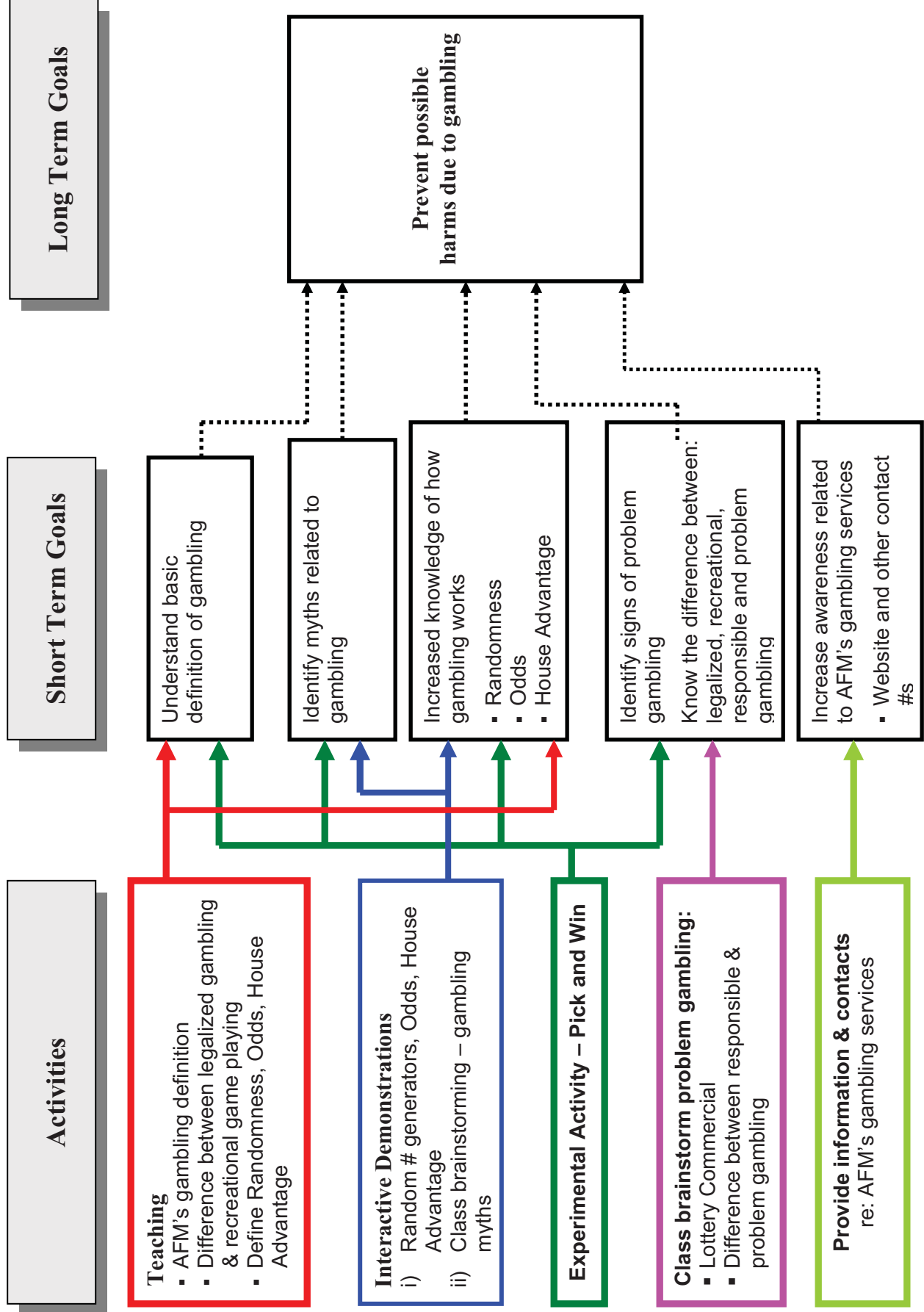
Sincerely,

Prevention and Education Consultant

Appendix C

Accountability Model: Lucky Day

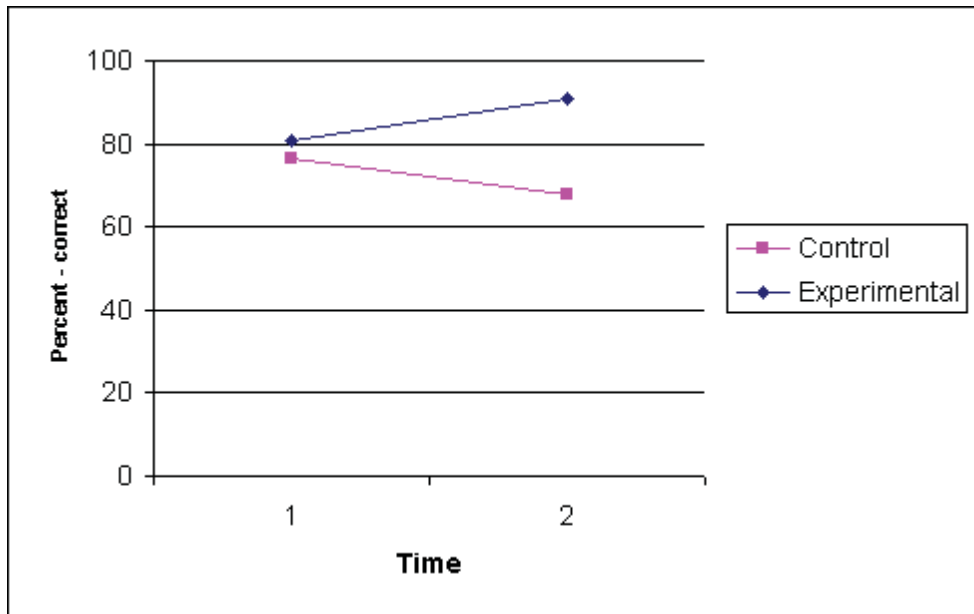
Target: Identified Grade 7 & 8 Students



Appendix D: Part One
Question by Question Analysis
Grade 7s and Grade 8s

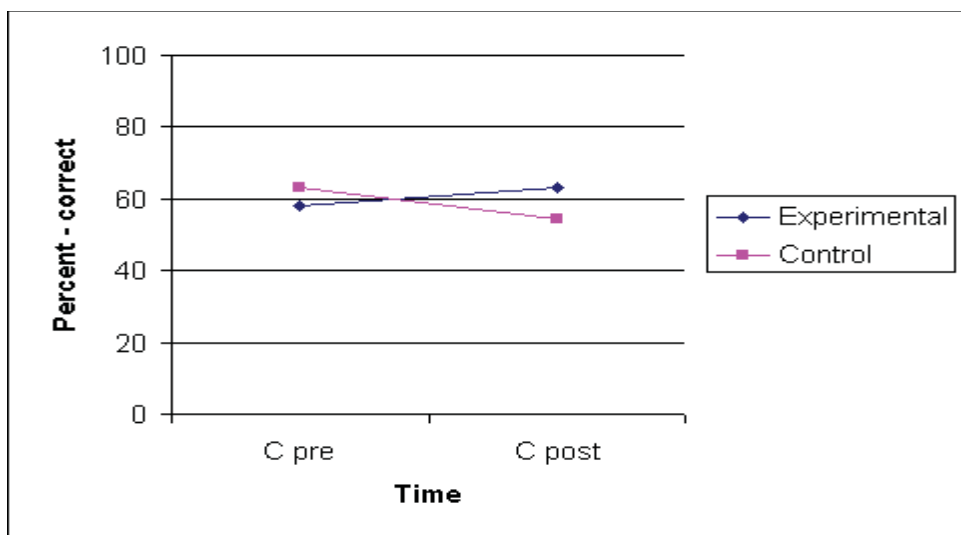
1. Gambling is risking money or valuables on a game, contest or event where the end result totally or partially depends on chance. (agree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	80.9	91.1	4.9	1.2	14.2	7.7
Control	76.6	67.6	0.4	2.7	22.9	29.8



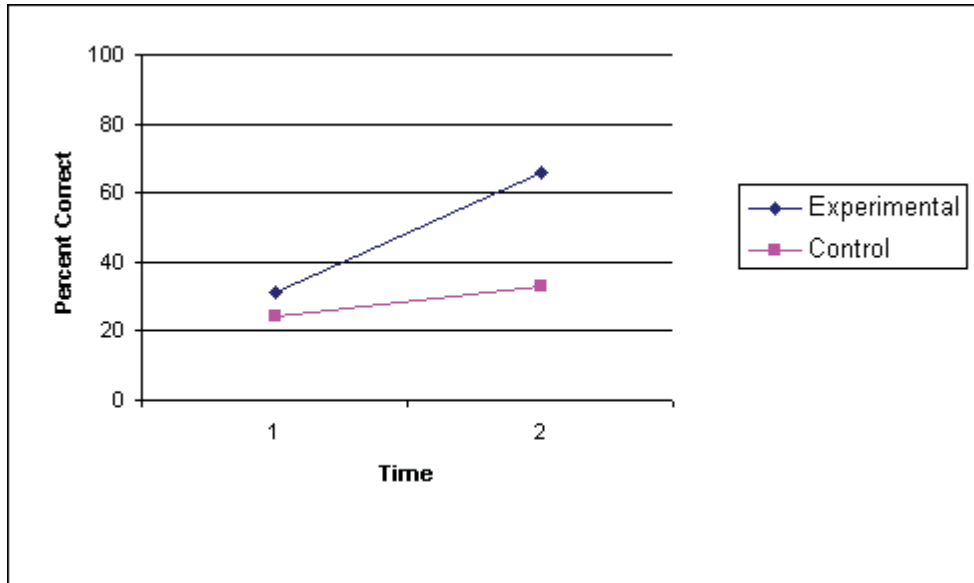
2. Some people buy lottery tickets every week but are not addicted to gambling (agree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	58.2	63.1	24	20.1	17.8	16.8
Control	63.2	54.3	21.2	29.3	15.6	16.5



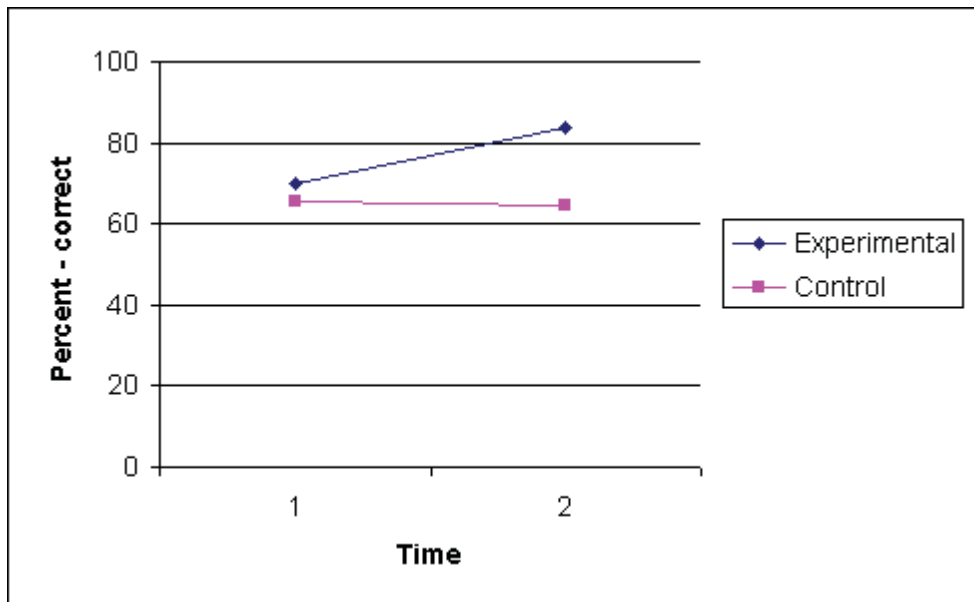
**3. Random events can be correctly predicted if I use a computer
(disagree)**

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	31.1	66	14.4	6.9	54.5	27.1
Control	24.3	32.8	17	18	58.7	49.2



**4. Bingo players have no control over wins and losses
(agree)**

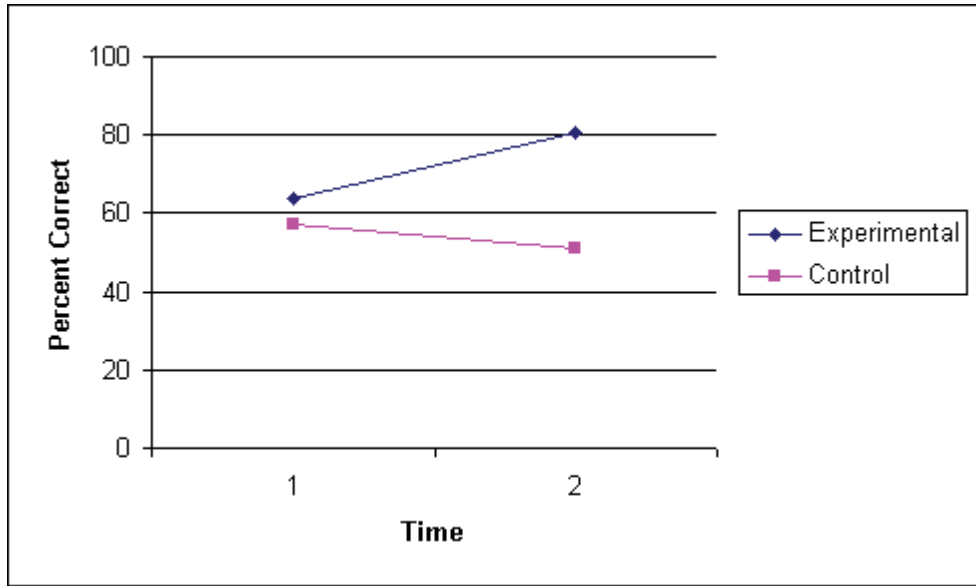
CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	70.1	83.7	18.8	6.5	11.2	9.8
Control	65.7	64.7	22.2	25.1	12.2	10.2



5. If I am good at playing video games, I will be good at playing electronic forms of gambling like video lottery terminals or slots.

(disagree)

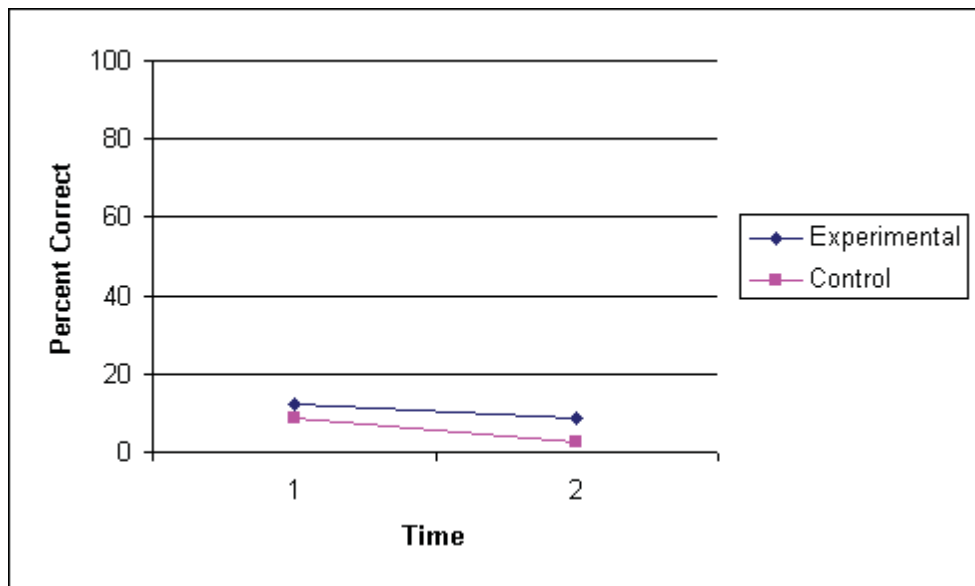
CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	63.6	80.6	18.2	5.2	18.2	14.1
Control	57	50.8	24.8	26.7	18.3	22.5



6. The Addictions Foundation of Manitoba has a website for gambling information called "www.feelingluckytoday.com"

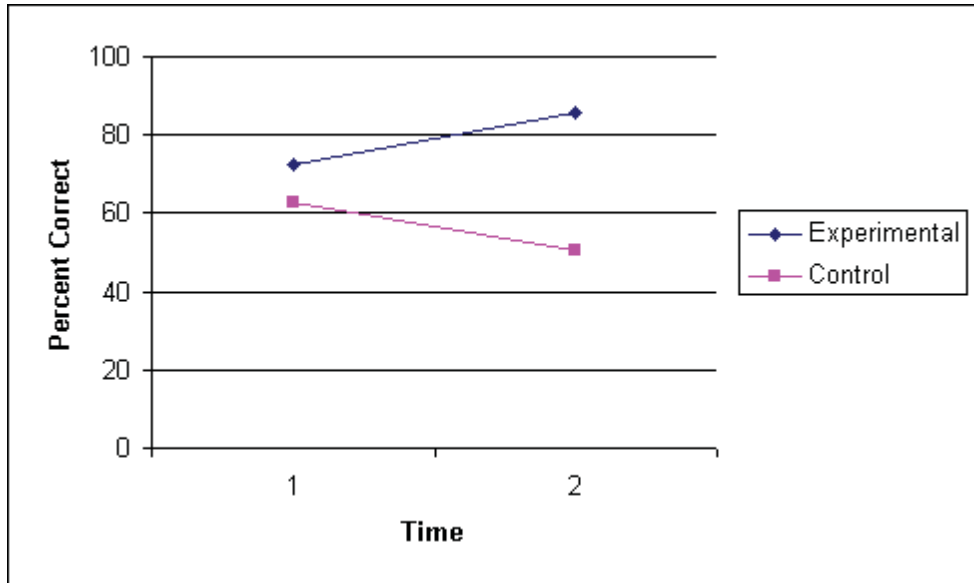
(disagree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	12	8.5	6.2	61.4	81.8	30.1
Control	8.7	2.6	9.5	21.7	81.8	75.7



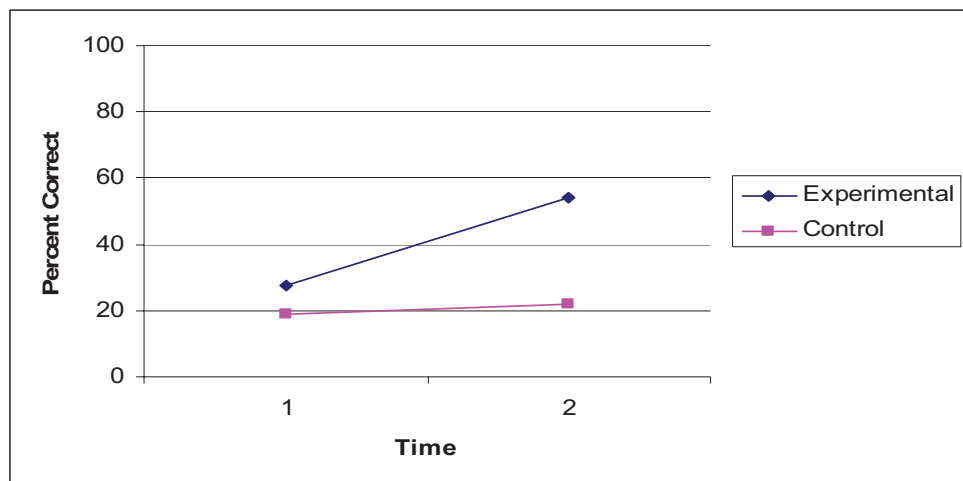
**7. If I try harder at gambling, I will get better and win money
(disagree)**

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	72.3	85.5	17.9	4.8	9.8	9.7
Control	63	50.3	27.4	32.8	9.6	16.9



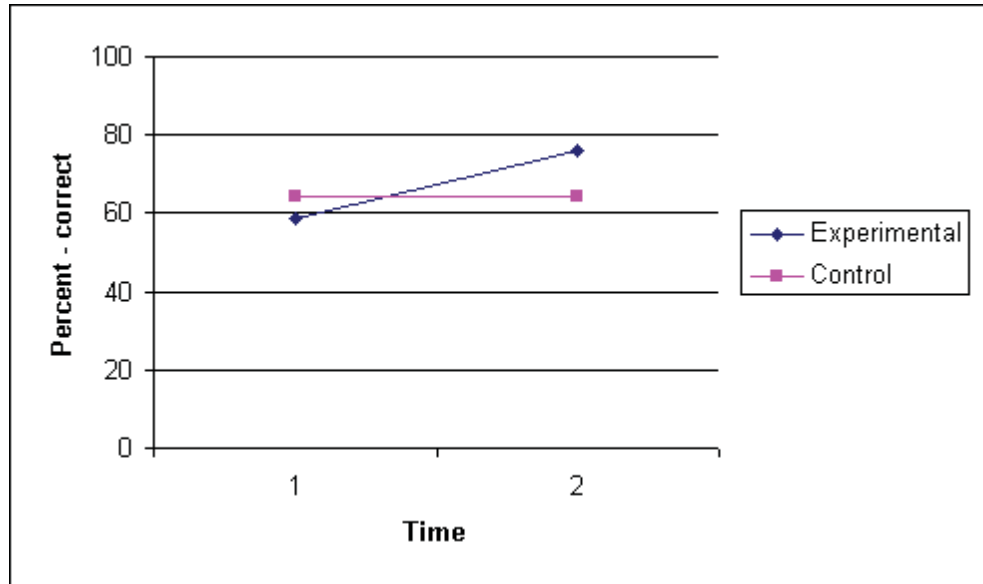
**8. When I'm betting, I must know the tricks and strategies if I want to win
(disagree)**

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	27.7	54.1	44.6	23.2	27.7	22.8
Control	18.7	21.9	54.8	50.3	26.5	27.8



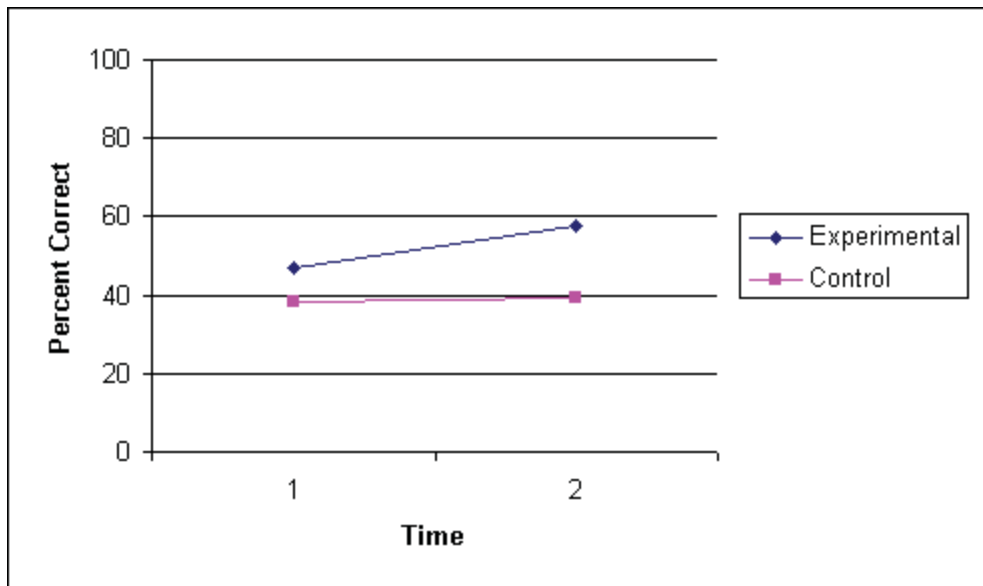
**9. When gambling, the chance that one thing will happen instead of another is called the odds.
(agree)**

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	58.7	75.9	1.8	2.4	39.6	21.6
Control	64.3	64.3	2.2	2.2	33.5	33.5



**10. Problem gamblers usually tell someone about their gambling.
(disagree)**

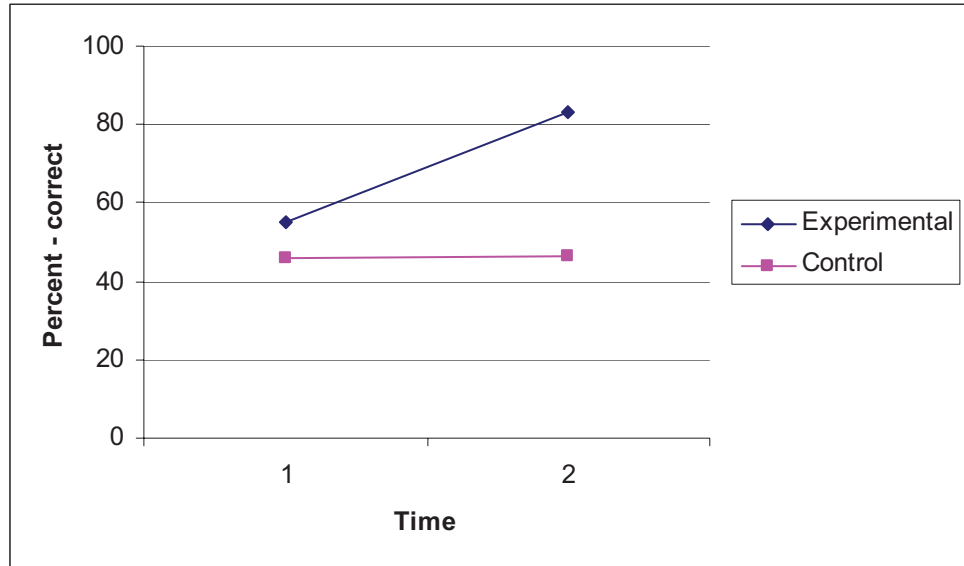
CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	47.1	57.4	22	17.6	30.9	25
Control	38.5	39.2	23.4	22.2	38.1	38.6



11. Randomness means that you cannot predict what will happen in a chance game because there is no pattern.

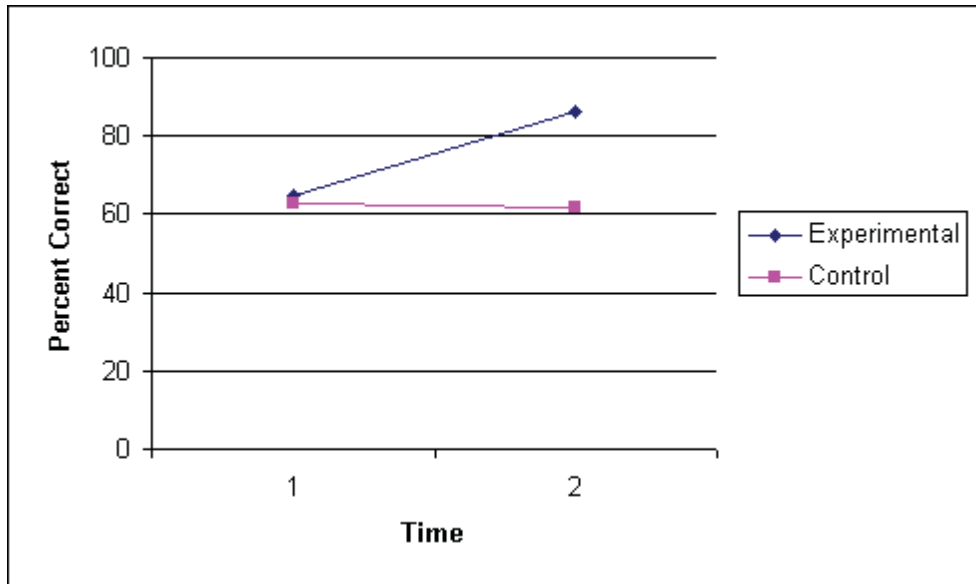
(agree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	55.1	83.1	3.6	2.4	41.3	14.5
Control	46.1	46.3	2.2	4.8	51.7	48.9



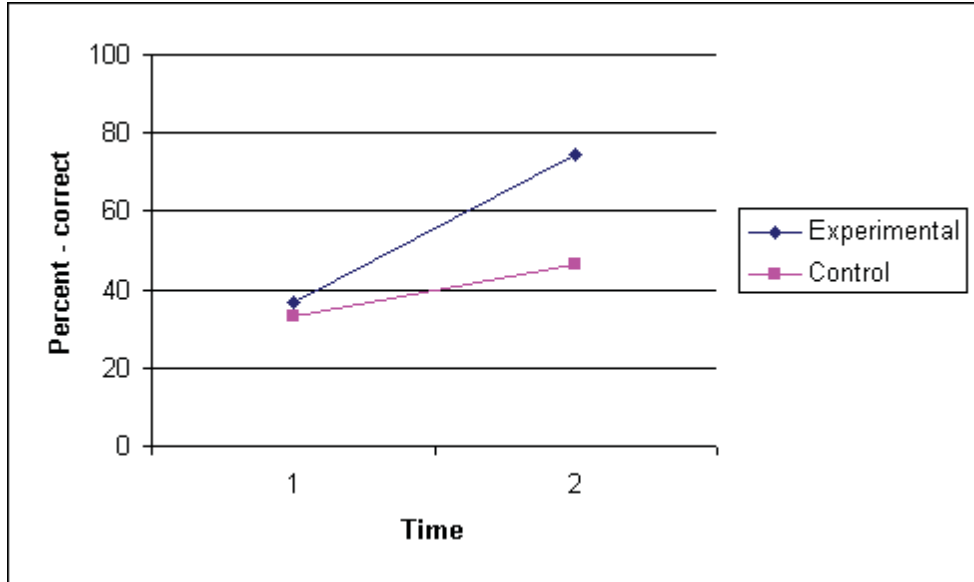
12. If I bet money on a pool game, it isn't really gambling (disagree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	64.9	86.1	21.3	8.6	13.8	5.3
Control	62.6	61.7	23	24.5	14.3	13.8



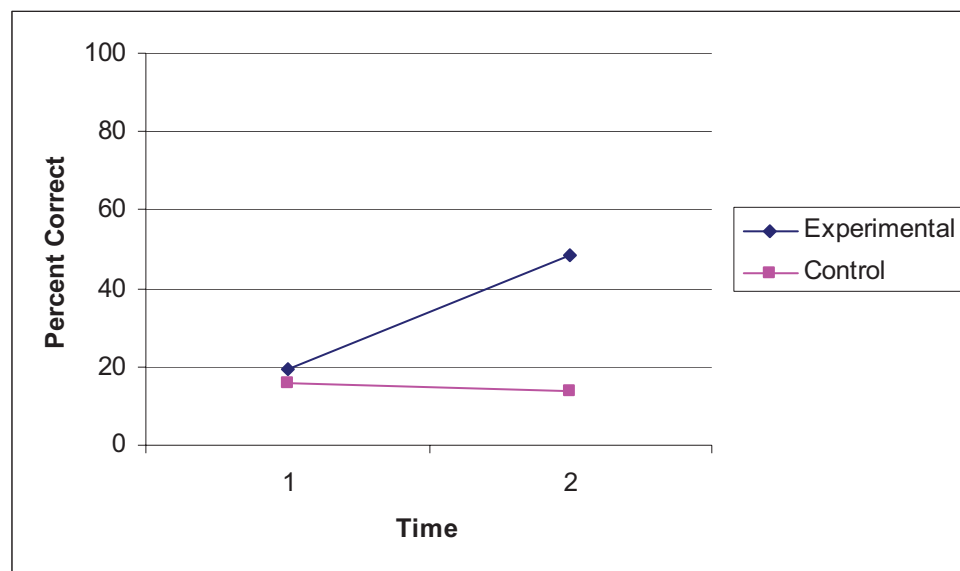
13. If I lose while gambling, it has nothing to do with how I played. (agree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	36.9	74.6	36	14.9	27.1	10.5
Control	33.2	46.6	37.1	37	29.7	16.4



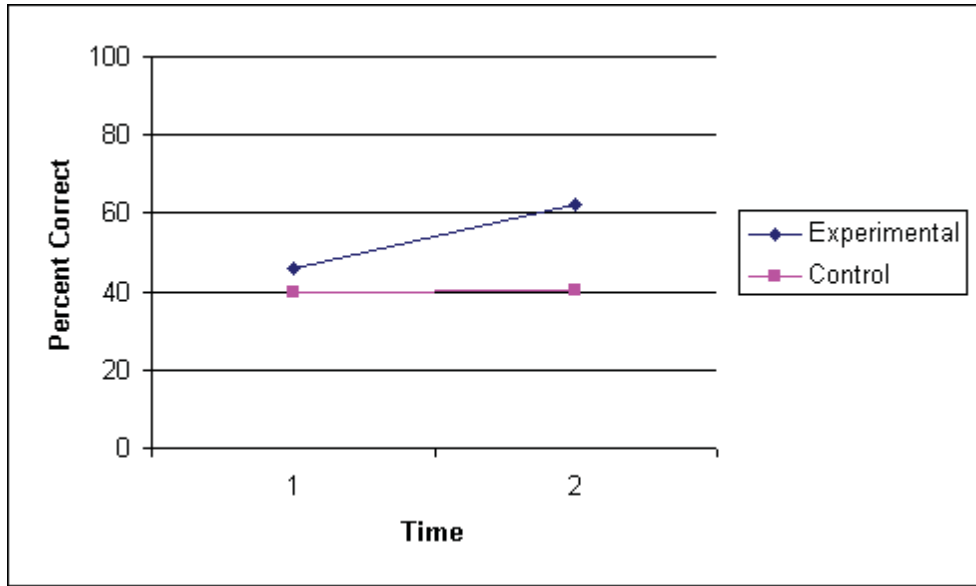
14. "House advantage" is a term that means, over time, people eventually win back their gambling losses. (disagree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	19.6	48.6	13.8	15.8	66.7	35.6
Control	15.6	13.8	16	17	68.4	69.1



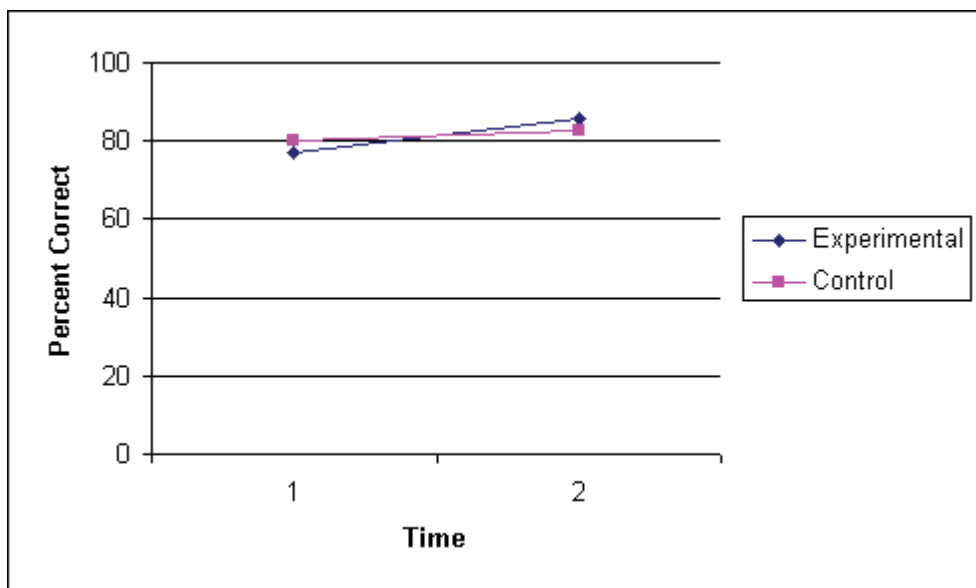
15. Smart people are less likely to become problem gamblers. (disagree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	46	62.5	33.9	20.2	20.1	17.3
Control	40	40.1	40.9	36.4	19.1	23.5



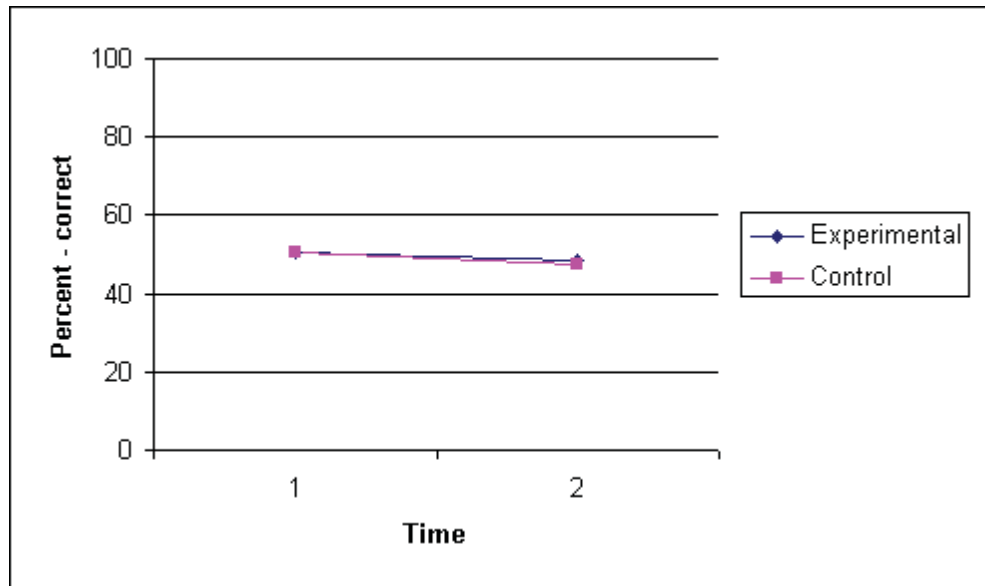
16. Playing bingo for money is a type of gambling (agree).

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	77.1	85.8	9.4	6.9	13.5	7.3
Control	80.1	82.8	9.5	7.5	10.4	9.7



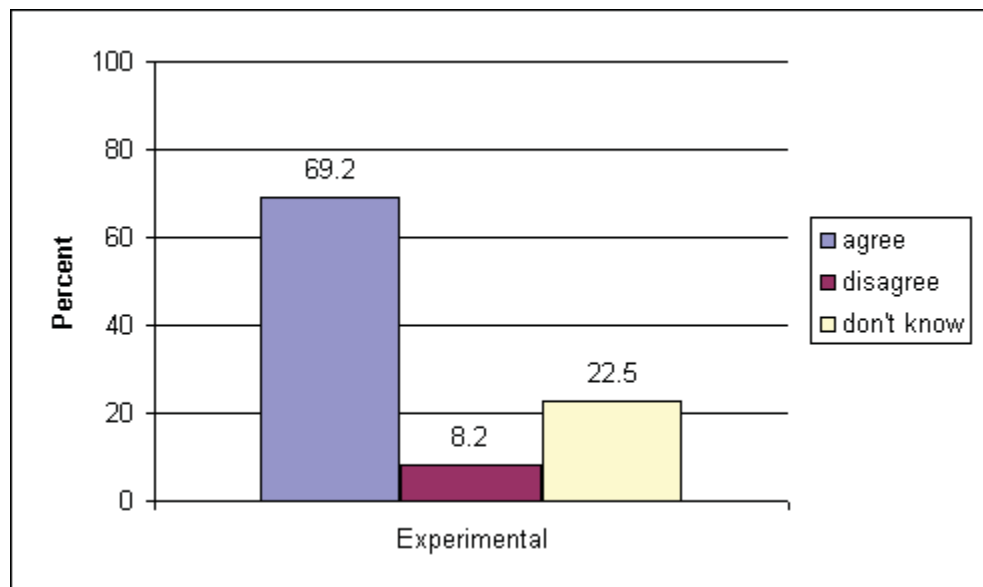
17. Feeling bad about your gambling is common. (disagree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	15.6	19	50.4	48.4	33.9	32.7
Control	11.3	10.1	50.6	47.6	38.1	42.3



18. I enjoyed learning about gambling through the session (exp. post test only)

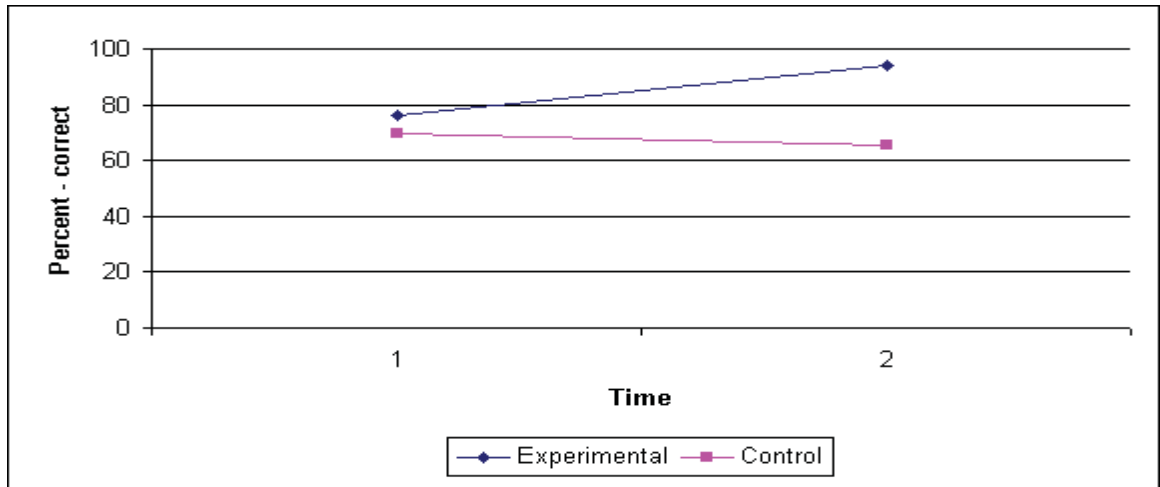
CONDITION	agree	disagree	don't know
Experimental	69.2	8.2	22.5



Appendix D: Part Two
Question by Question Analysis
Grade 7s

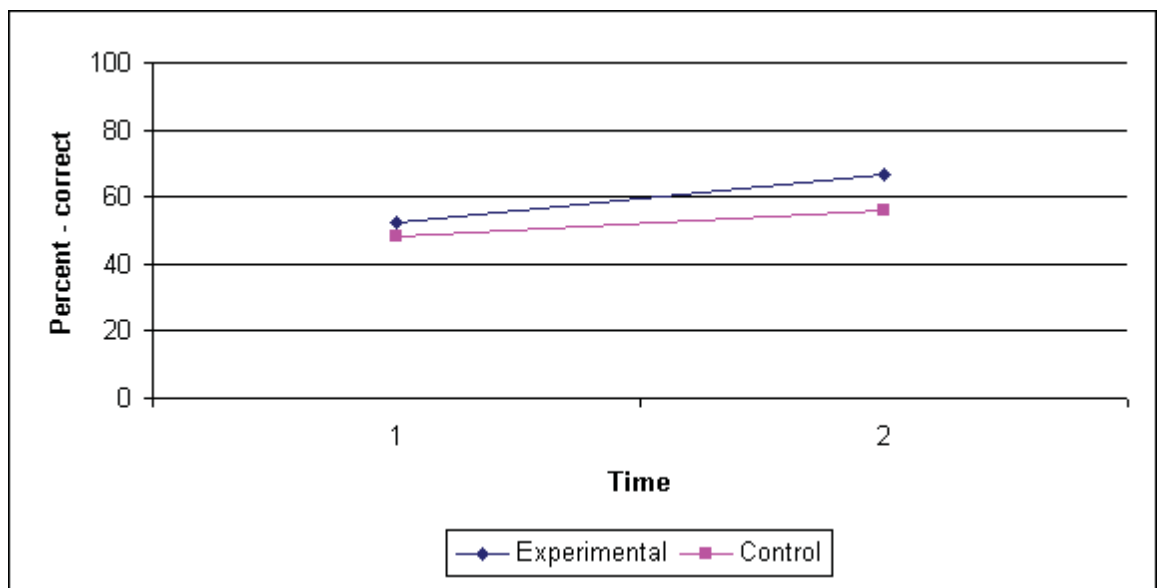
1. Gambling is risking money or valuables on a game, contest or event where the end result totally or partially depends on chance. (agree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	76.2	93.9	5.7	1	18.1	5.1
Control	69.6	65.5	0	2.3	30.4	32.2



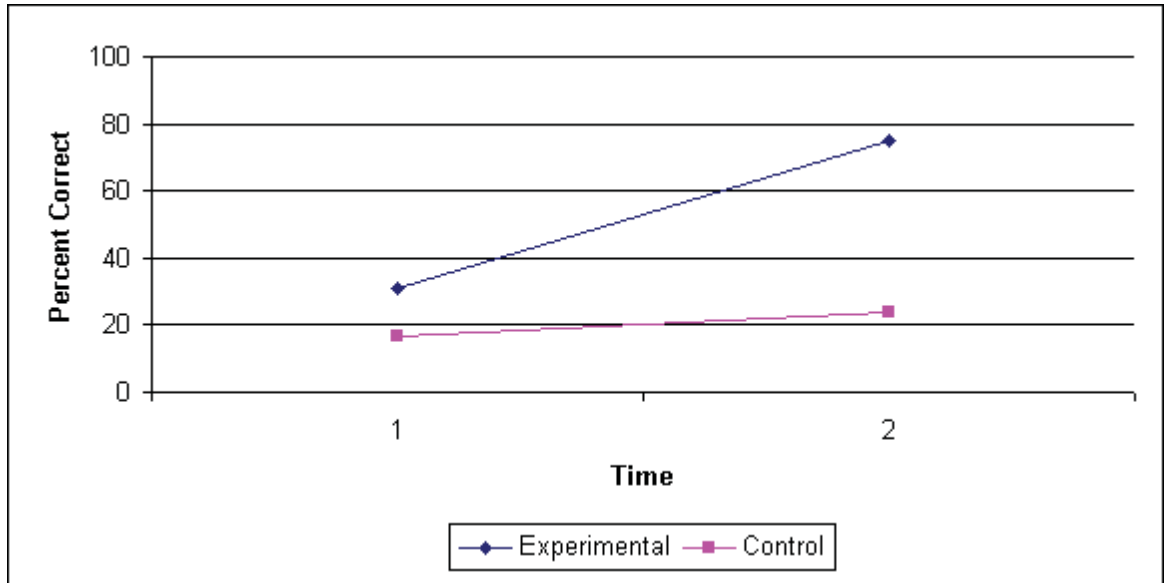
2. Some people buy lottery tickets every week but are not addicted to gambling (agree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	52.4	66.7	25.7	19.2	21.9	14.1
Control	48.1	55.8	32.9	29.1	19	15.1



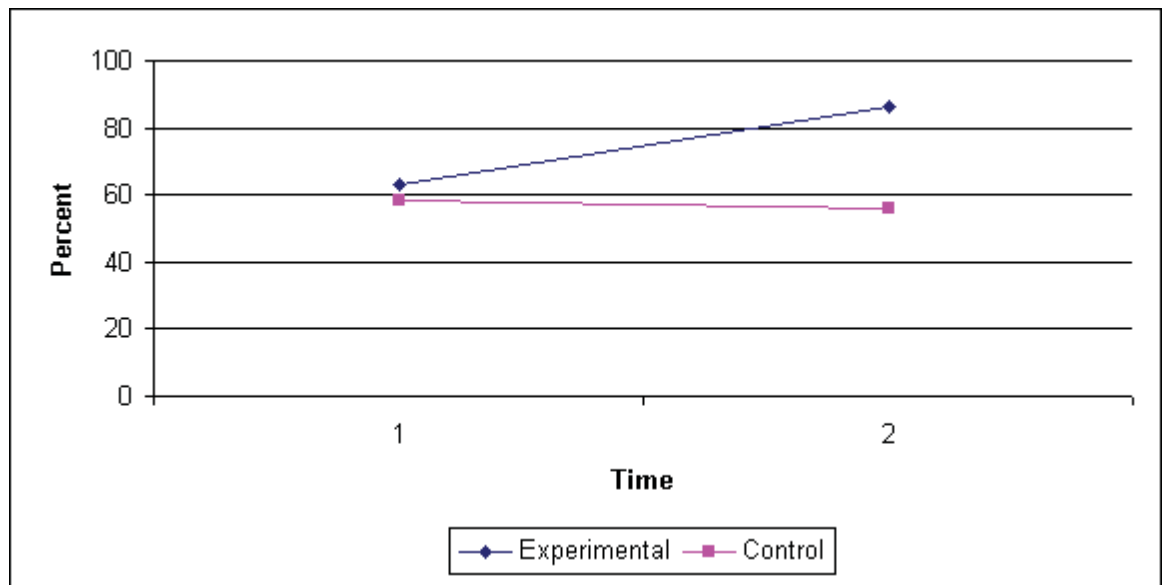
**3. Random events can be correctly predicted if I use a computer
(disagree)**

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	30.8	75	12.5	2	56.7	23
Control	16.7	23.9	12.8	17	70.5	59.1



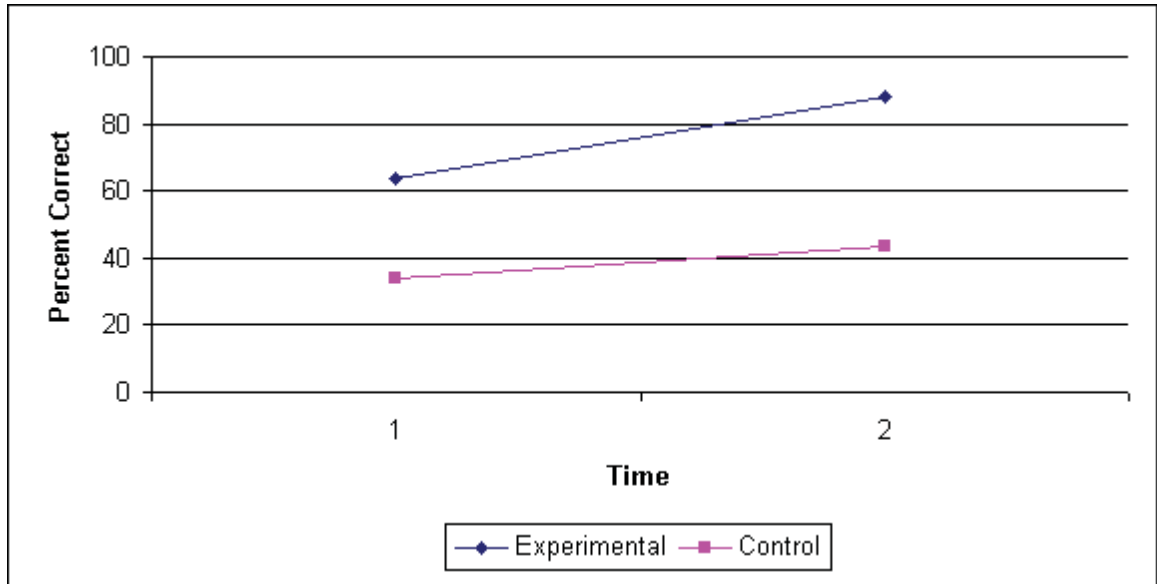
**4. Bingo players have no control over wins and losses
(agree)**

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	62.9	86.1	28.6	7.9	8.6	5.9
Control	58.2	55.8	31.6	27.9	10.1	16.3



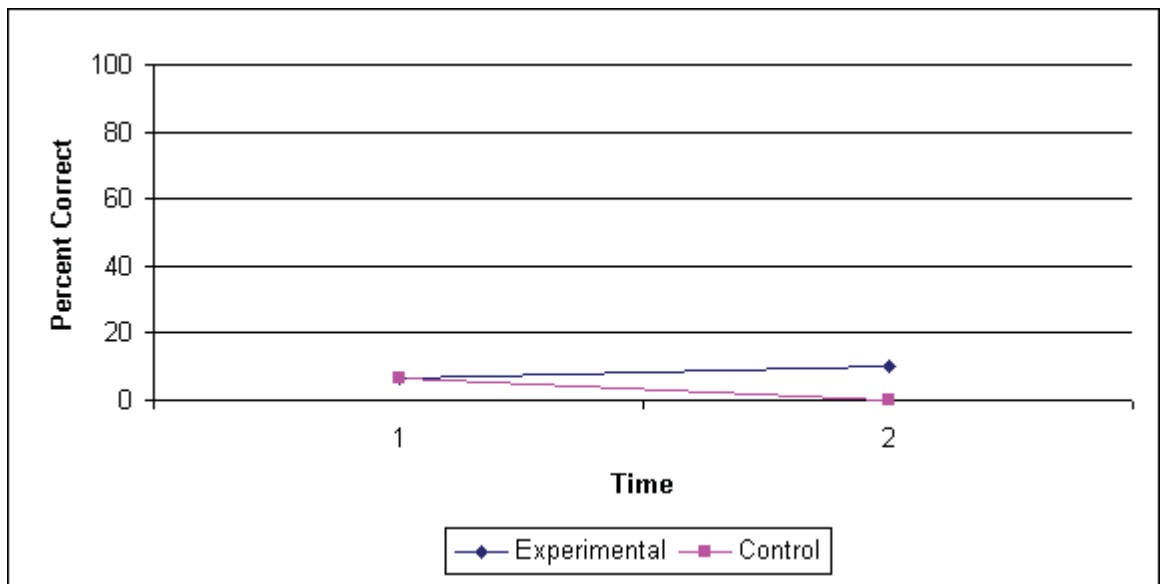
5. If I am good at playing video games, I will be good at playing electronic forms of gambling like video lottery terminals or slots. (disagree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	63.8	88.1	21	2	15.2	9.9
Control	34.2	43.7	32.9	28.7	32.9	27.6



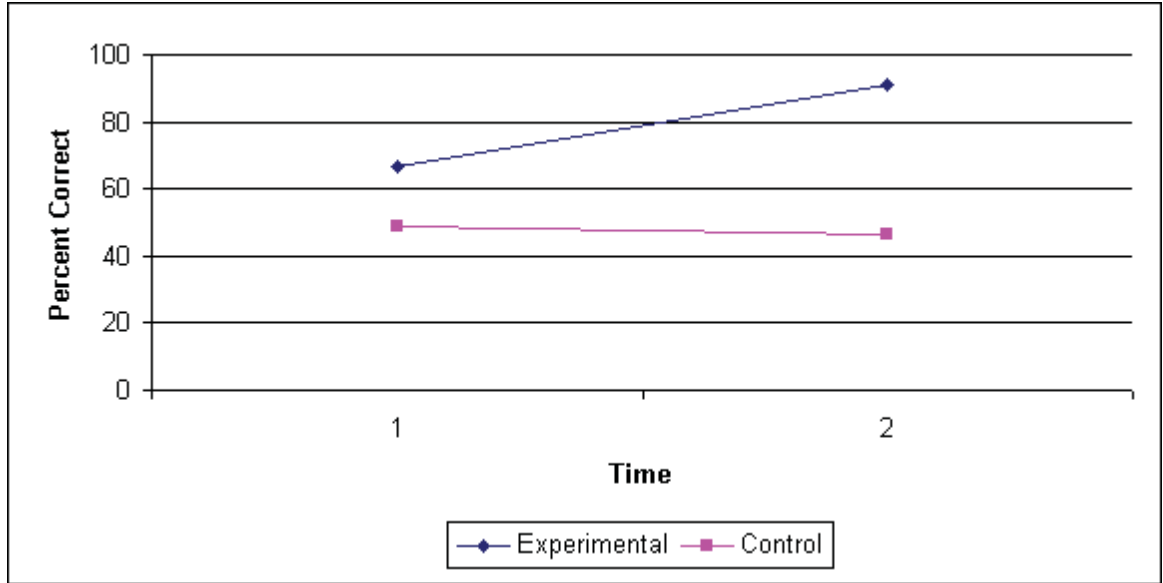
6. The Addictions Foundation of Manitoba has a website for gambling information called "www.feelingluckytoday.com" (disagree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	6.7	10	4.8	67	88.6	23
Control	6.3	0	8.9	19.3	84.8	80.7



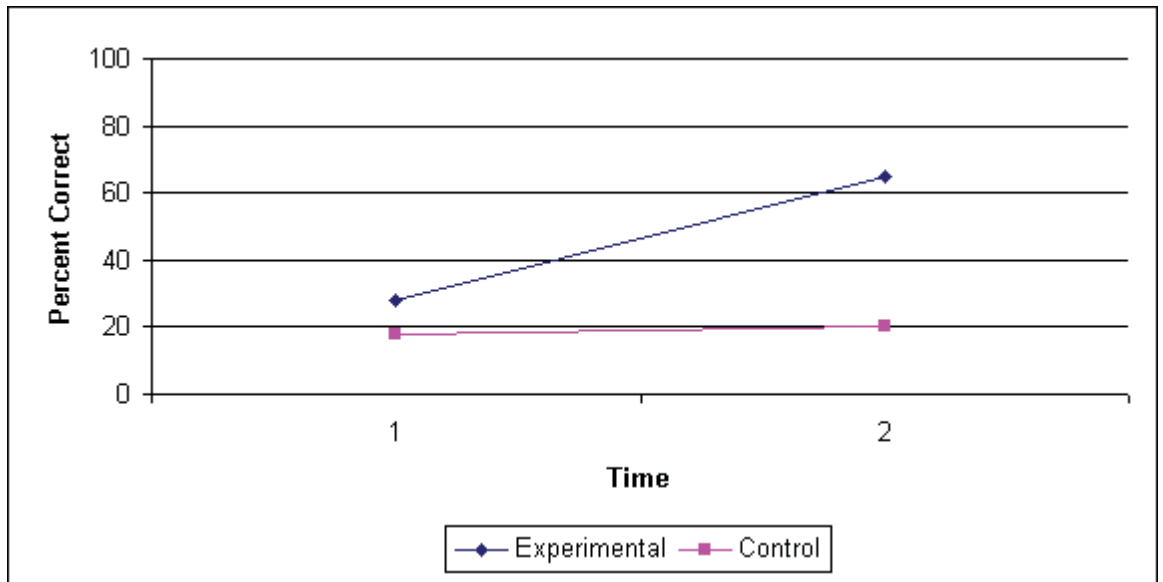
**7. If I try harder at gambling, I will get better and win money
(disagree)**

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	66.7	91.1	26.7	1	6.7	7.9
Control	48.7	46.6	37.2	35.2	14.1	18.2



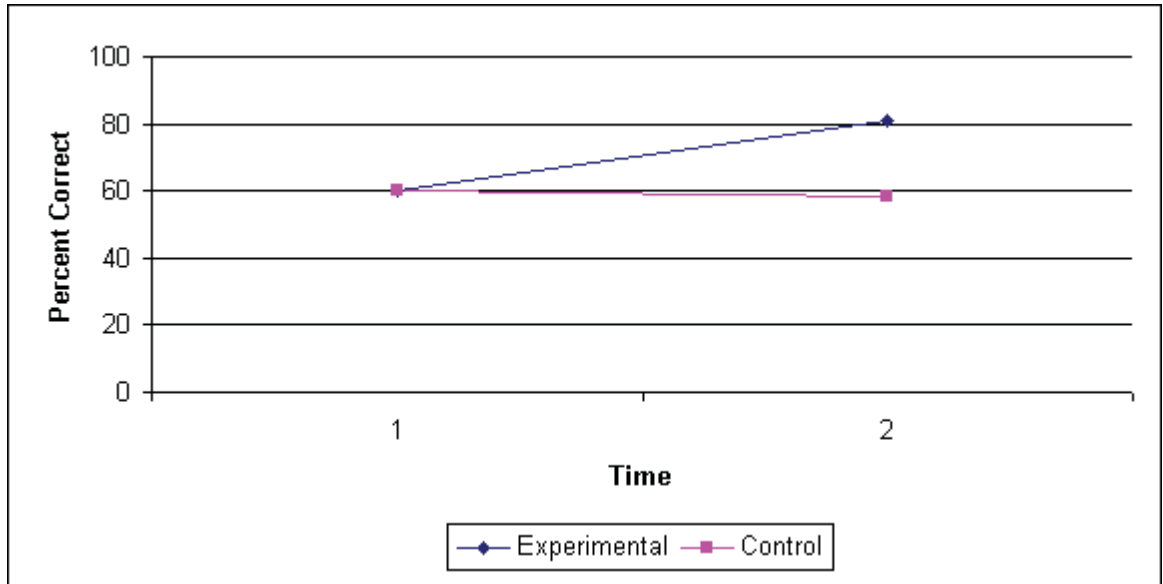
**8. When I'm betting, I must know the tricks and strategies if I want to win
(disagree)**

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	27.9	65	41.3	16	30.8	19
Control	17.9	20.5	53.8	53.4	28.2	26.1



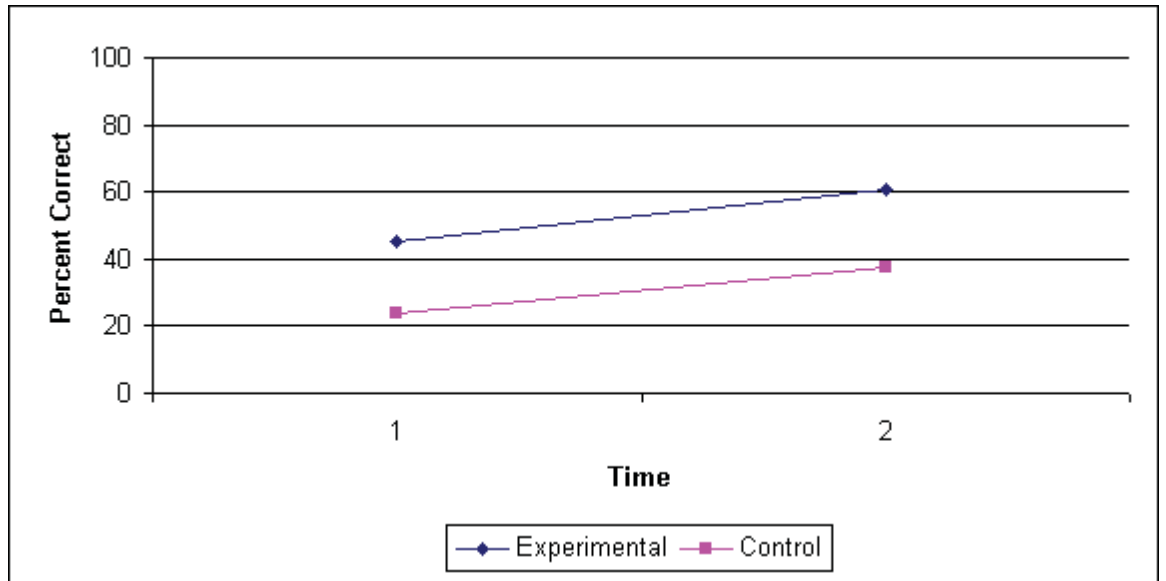
**9. When gambling, the chance that one thing will happen instead of another is called the odds.
(agree)**

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	60	81	1	1	39	18
Control	60.3	58.6	2.6	1.1	37.2	40.2



**10. Problem gamblers usually tell someone about their gambling.
(disagree)**

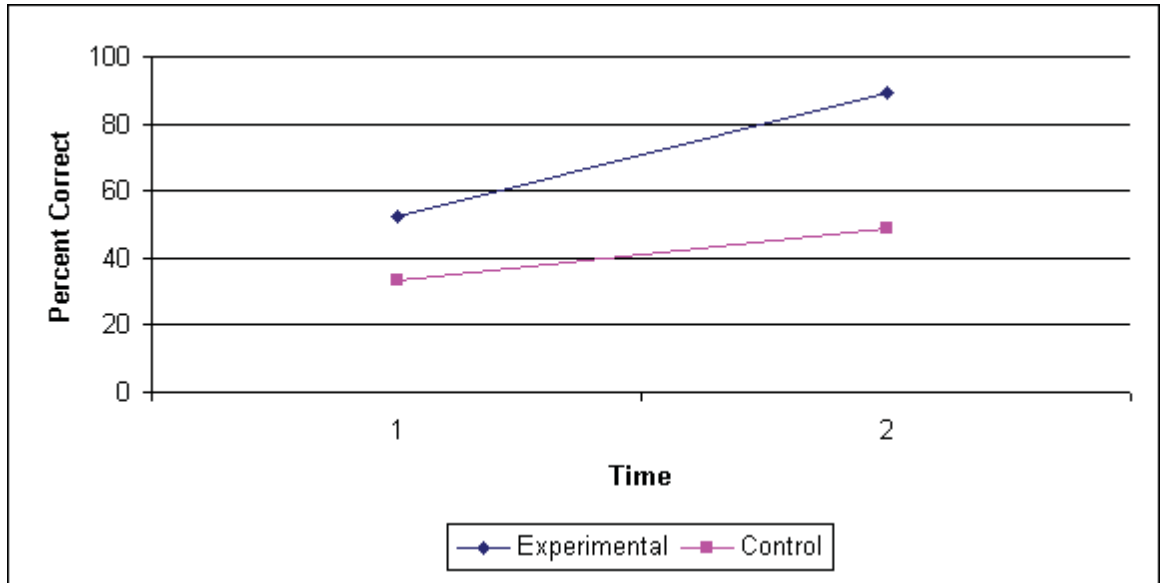
CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	45.2	61	19.2	16	35.6	23
Control	24.1	37.5	32.9	23.9	43	38.6



11. Randomness means that you cannot predict what will happen in a chance game because there is no pattern.

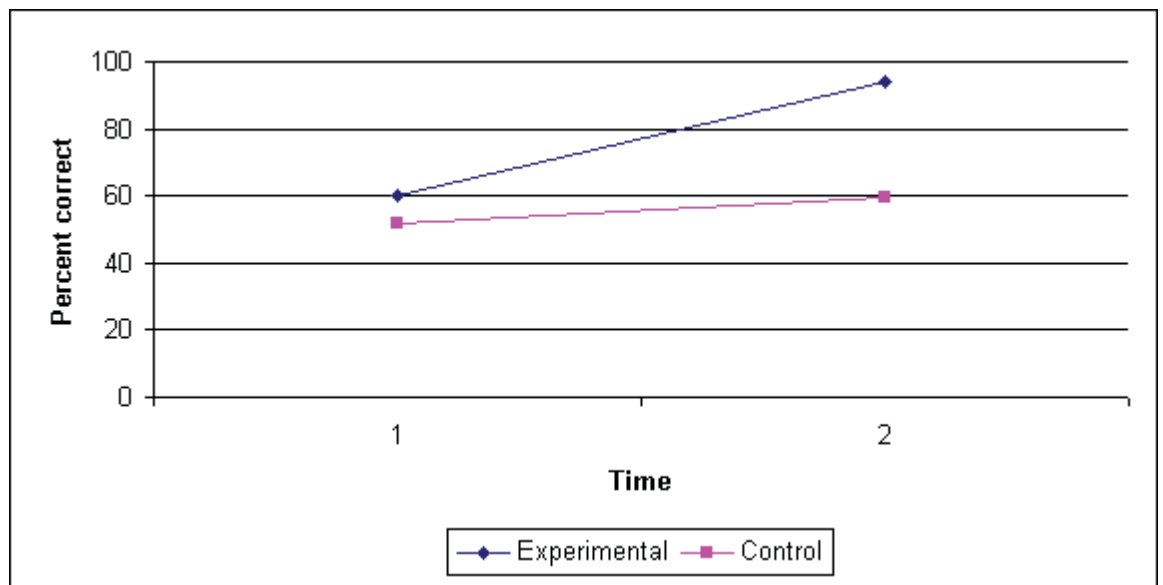
(agree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	52.4	89.1	0	4	47.6	6.9
Control	33.3	48.9	2.6	0	64.1	51.1



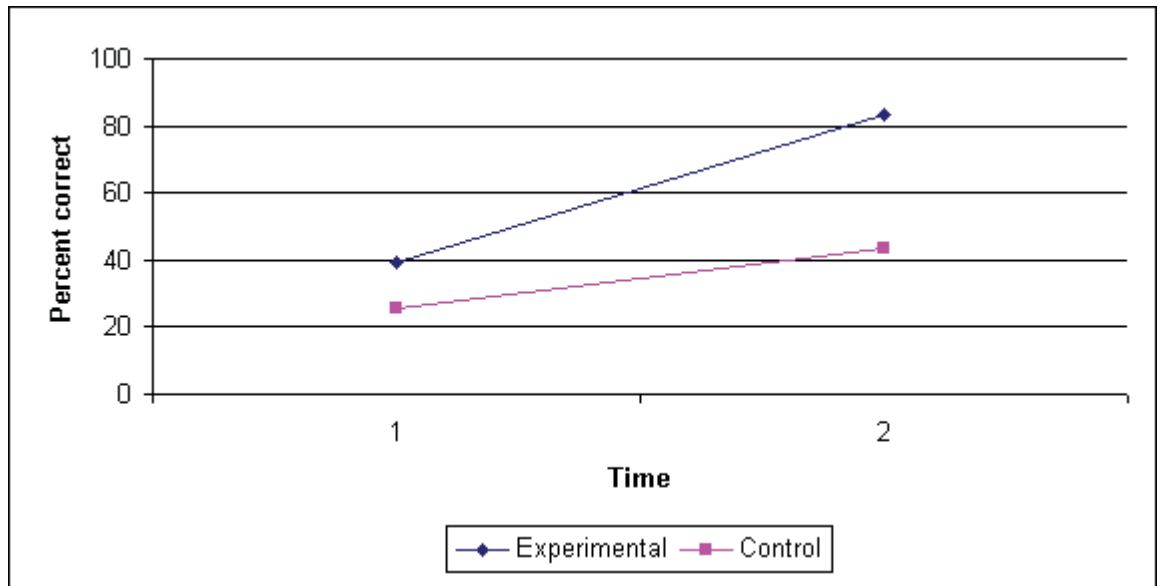
12. If I bet money on a pool game, it isn't really gambling (disagree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	60	93.9	28.6	3	11.4	3
Control	51.9	59.8	29.1	26.4	19	13.8



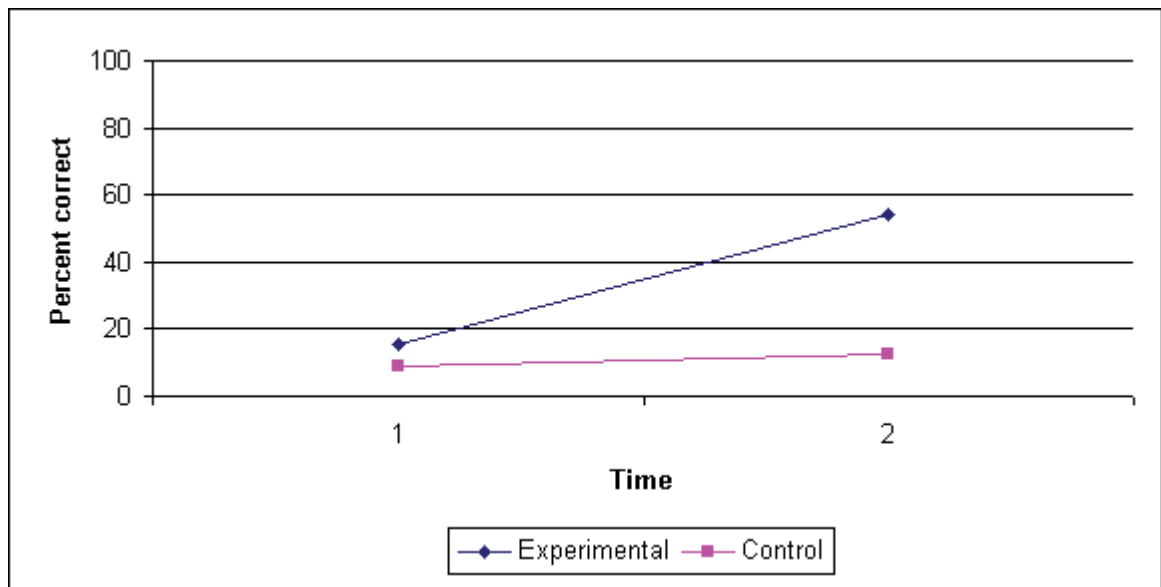
13. If I lose while gambling, it has nothing to do with how I played. (agree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	39	83.2	40	12.9	21	4
Control	25.6	43.7	43.6	40.2	30.8	16.1



14. "House advantage" is a term that means, over time, people eventually win back their gambling losses. (disagree)

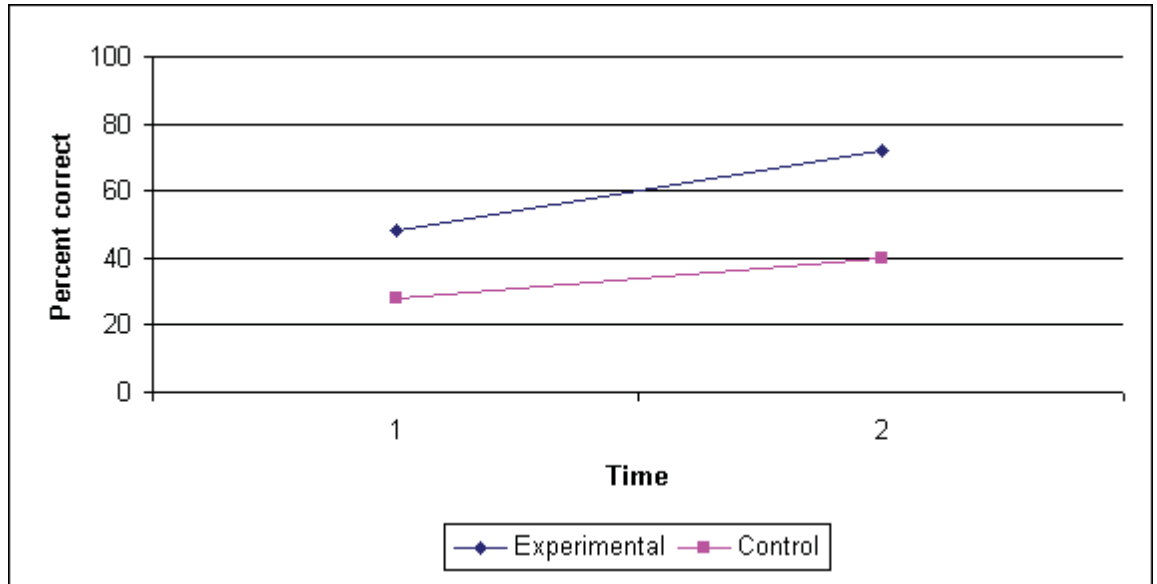
CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	15.2	54	13.3	17	71.4	29
Control	8.9	12.6	16.5	18.4	74.7	69



15. Smart people are less likely to become problem gamblers.

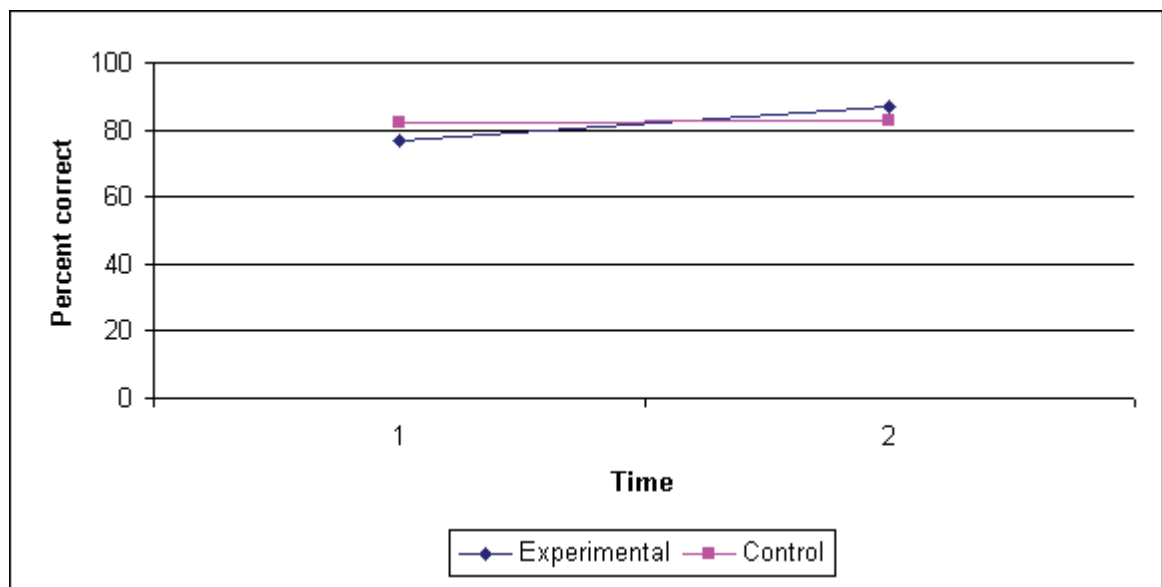
(disagree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	48.1	72.3	44.2	15.8	7.7	11.9
Control	27.8	40	46.8	38.8	25.3	21.2



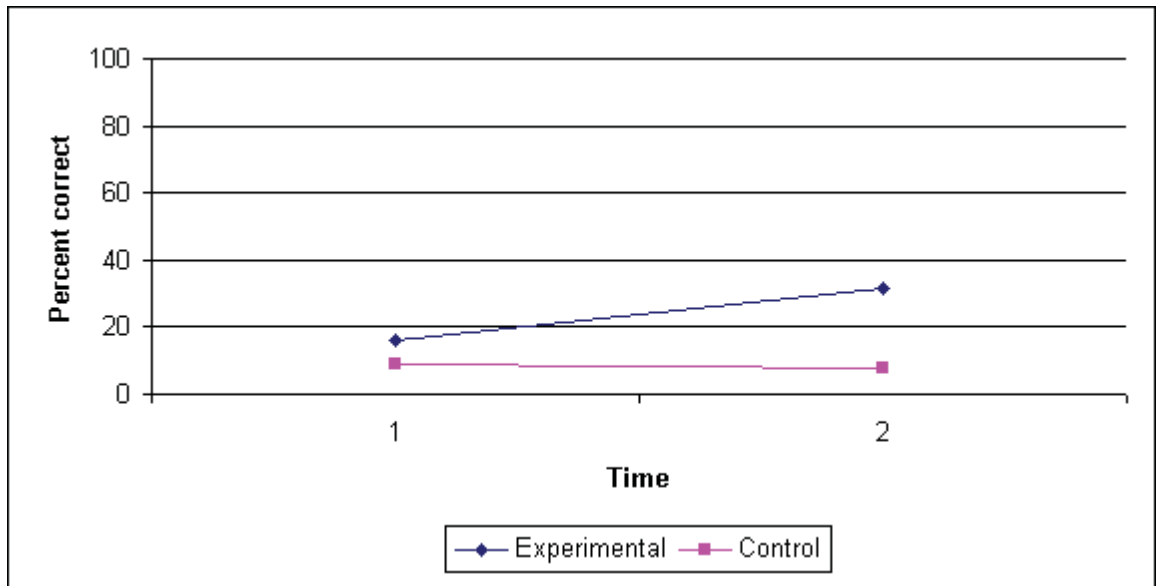
16. Playing bingo for money is a type of gambling (agree).

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	76.7	87.1	8.7	6.9	14.6	5.9
Control	82.3	83	8.9	8	8.9	9.1



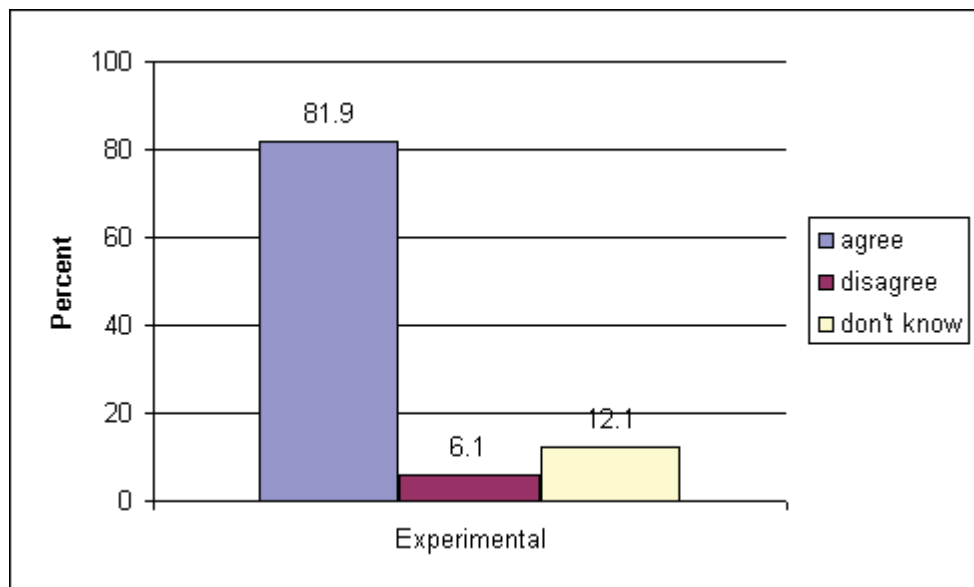
17. Feeling bad about your gambling is common. (disagree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	16.2	31.7	53.3	44.6	30.5	23.8
Control	8.9	8	49.4	47.7	41.8	44.3



18. I enjoyed learning about gambling through the session (exp. post test only)

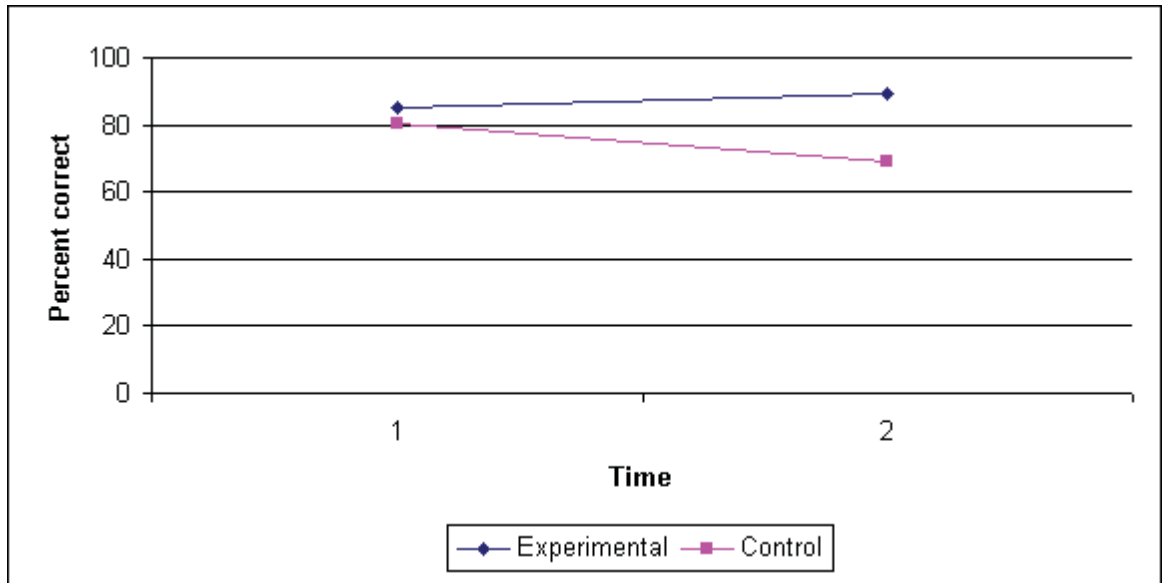
CONDITION	agree	disagree	don't know
Experimental	81.9	6.1	12.1



Appendix D: Part Three
Question by Question Analysis
Grade 8s

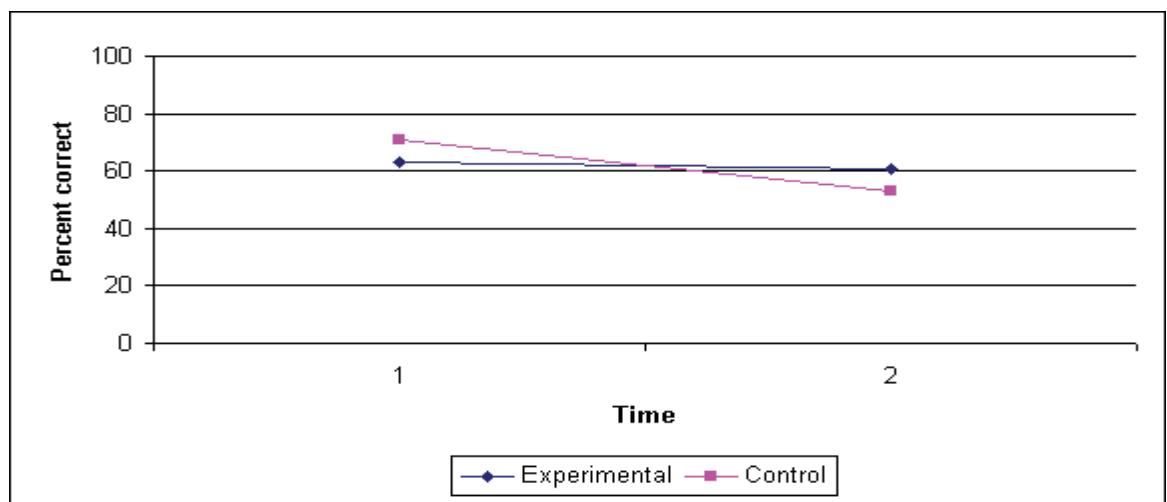
1. Gambling is risking money or valuables on a game, contest or event where the end result totally or partially depends on chance. (agree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	85	89.1	4.2	1.4	10.8	9.5
Control	80.3	69.3	0.7	3	19.1	27.7



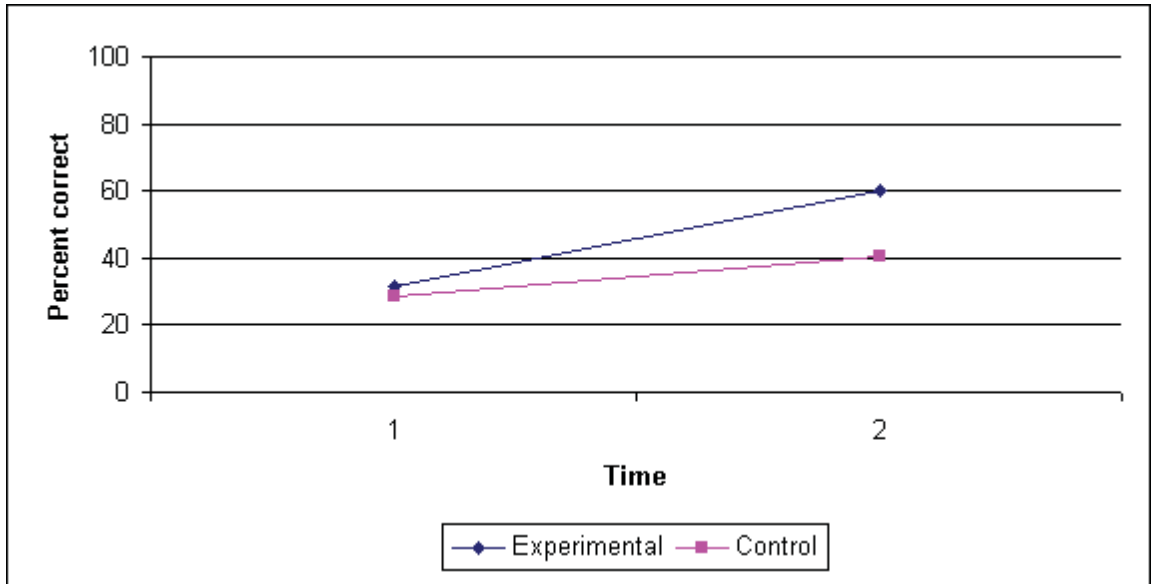
2. Some people buy lottery tickets every week but are not addicted to gambling (agree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	63.3	60.7	22.5	20.7	14.2	18.6
Control	71.1	52.9	15.1	29.4	13.8	17.6



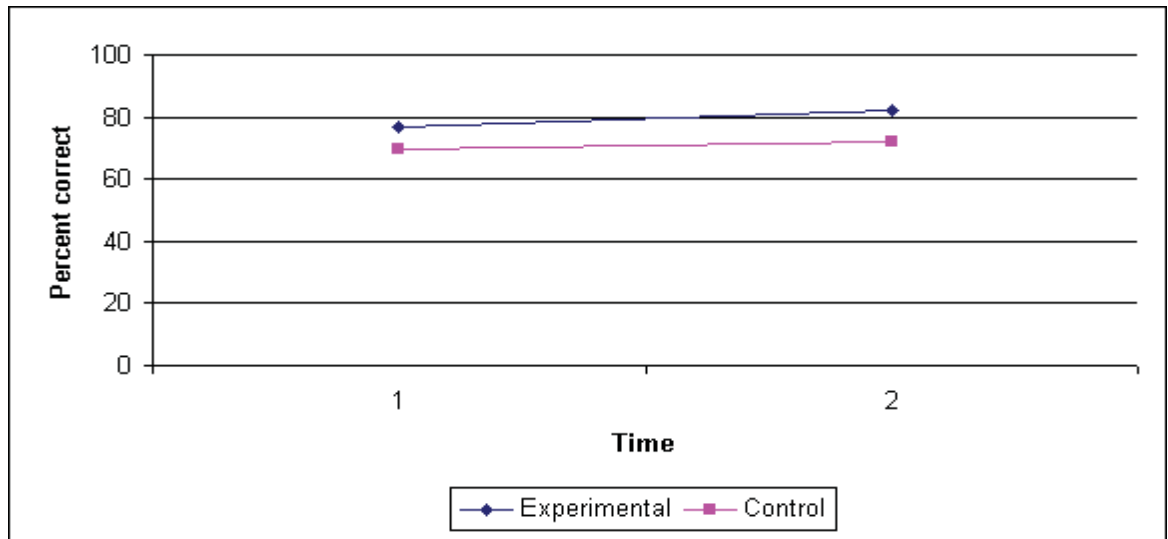
**3. Random events can be correctly predicted if I use a computer
(disagree)**

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	31.4	59.9	16.1	10.2	52.5	29.9
Control	28.3	40.6	19.1	18.8	52.6	40.6



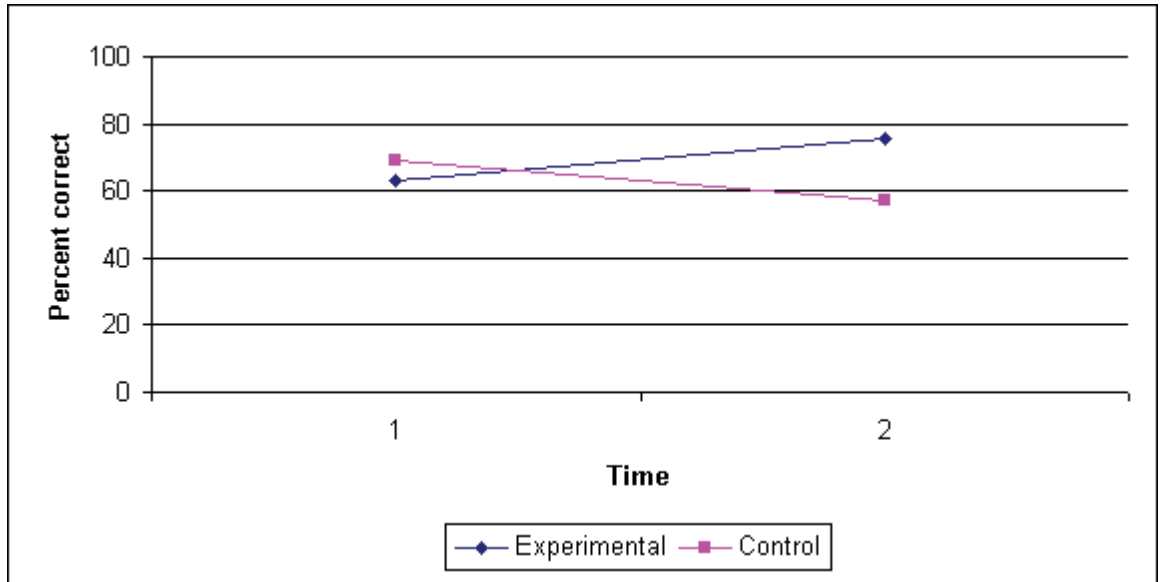
**4. Bingo players have no control over wins and losses
(agree)**

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	76.5	82.1	10.1	5.5	13.4	12.4
Control	69.5	72.3	17.2	22.8	13.2	5



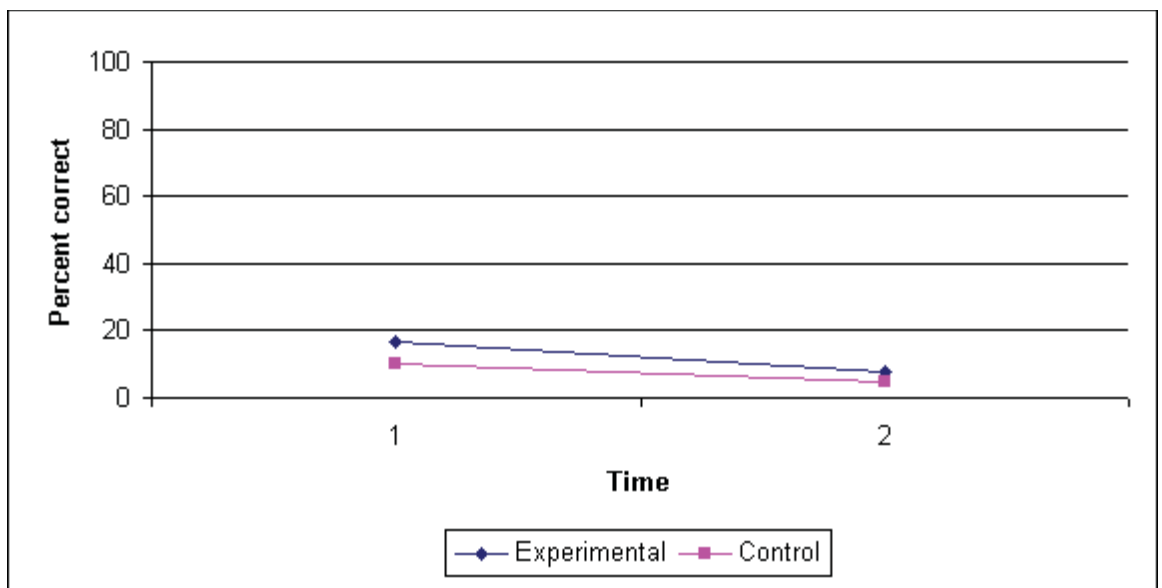
5. If I am good at playing video games, I will be good at playing electronic forms of gambling like video lottery terminals or slots. (disagree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	63.3	75.5	15.8	7.5	20.8	17
Control	68.9	57	20.5	25	10.6	18



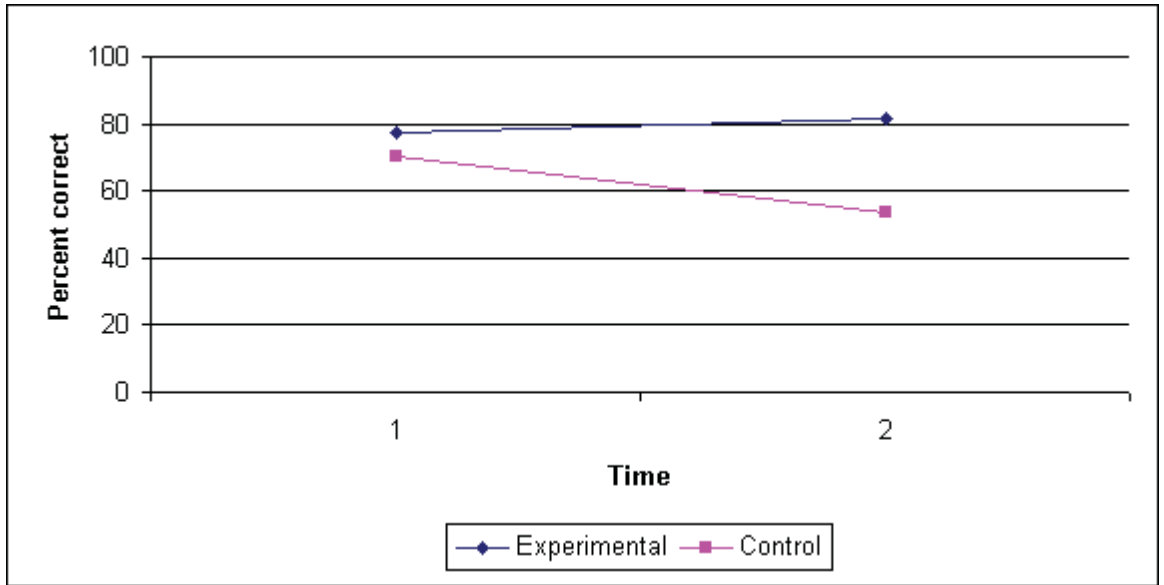
6. The Addictions Foundation of Manitoba has a website for gambling information called "www.feelingluckytoday.com" (disagree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	16.7	7.5	7.5	57.5	75.8	34.9
Control	9.9	5	9.9	23.8	80.3	71.3



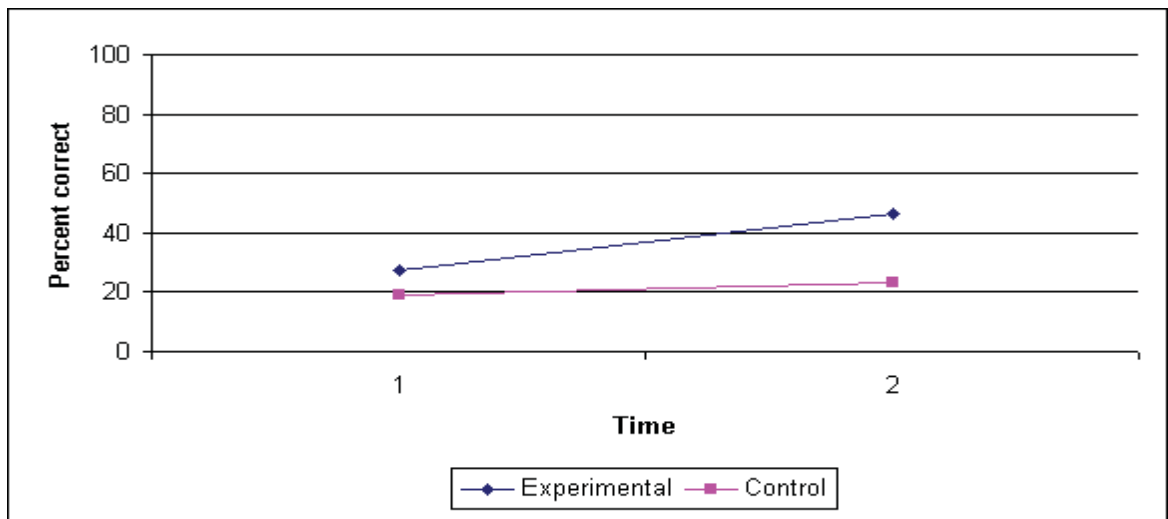
**7. If I try harder at gambling, I will get better and win money
(disagree)**

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	77.3	81.6	10.1	7.5	12.6	10.9
Control	70.4	53.5	22.4	30.7	7.2	15.8



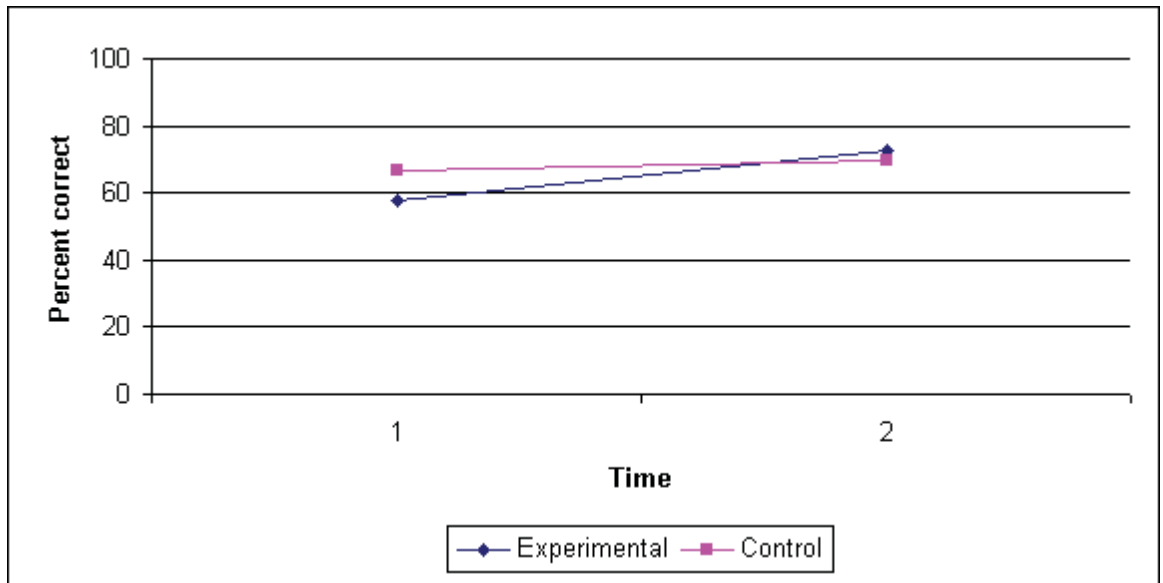
**8. When I'm betting, I must know the tricks and strategies if I want to win
(disagree)**

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	27.5	46.6	47.5	28.1	25	25.3
Control	19.1	23.2	55.3	47.5	25.7	29.3



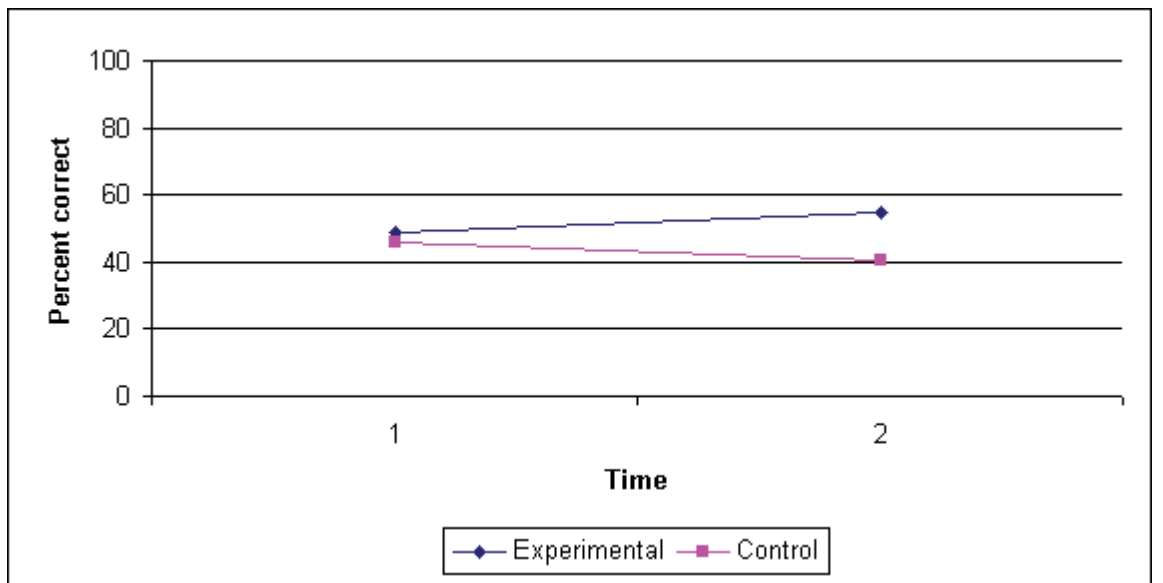
**9. When gambling, the chance that one thing will happen instead of another is called the odds.
(agree)**

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	57.5	72.4	2.5	3.4	40	24.1
Control	66.4	69.4	2	3.1	31.6	27.6



**10. Problem gamblers usually tell someone about their gambling.
(disagree)**

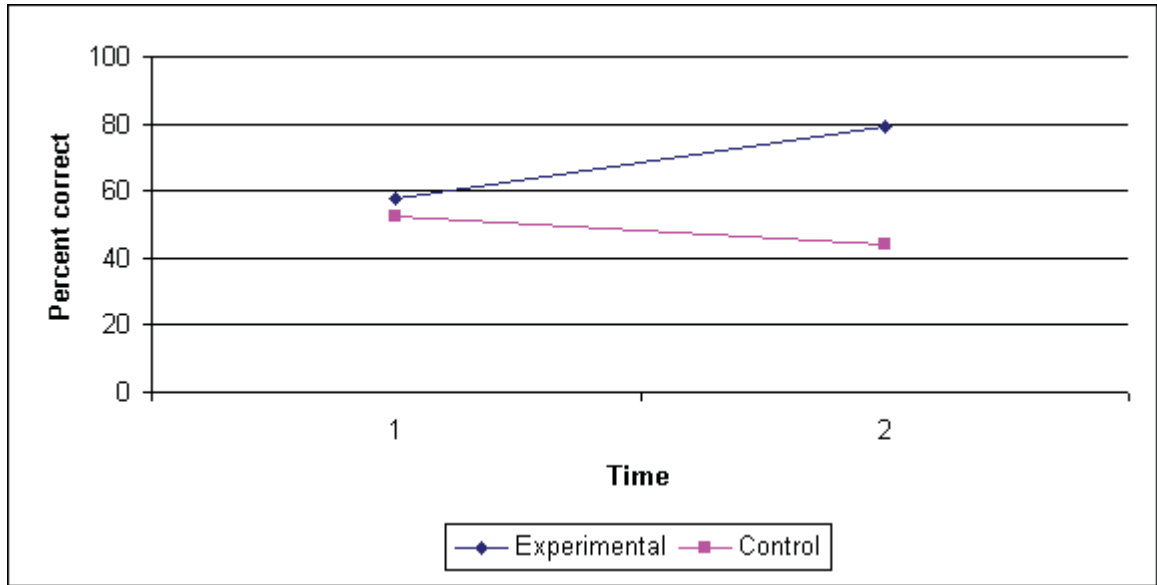
CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	48.7	54.9	24.4	18.8	26.9	26.4
Control	46.1	40.6	18.4	20.8	35.5	38.6



11. Randomness means that you cannot predict what will happen in a chance game because there is no pattern.

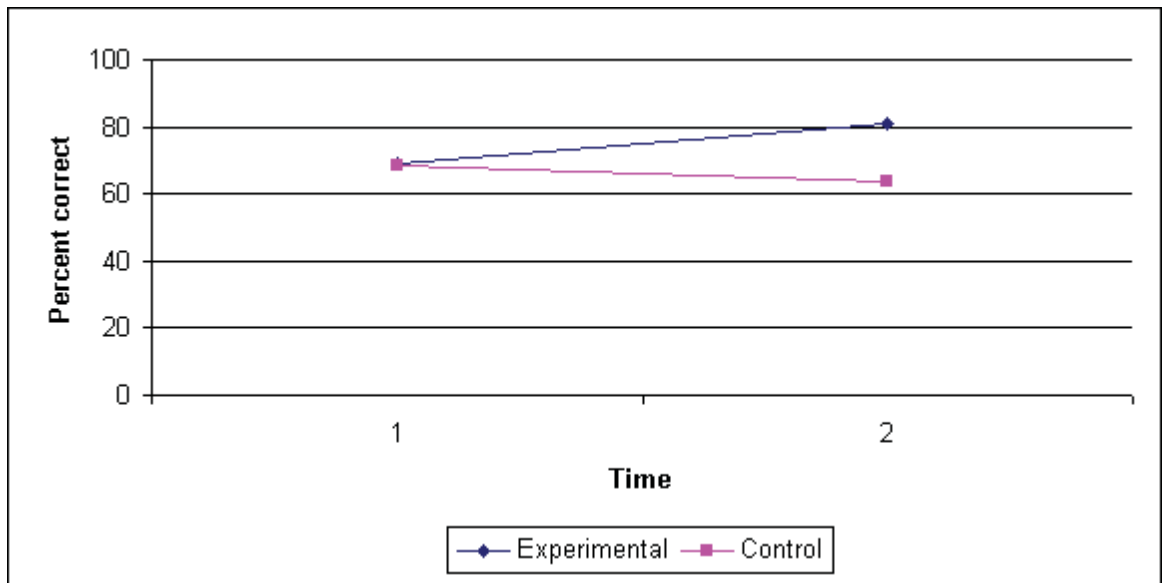
(agree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	57.5	78.9	6.7	1.4	35.8	19.7
Control	52.6	44	2	9	45.4	47



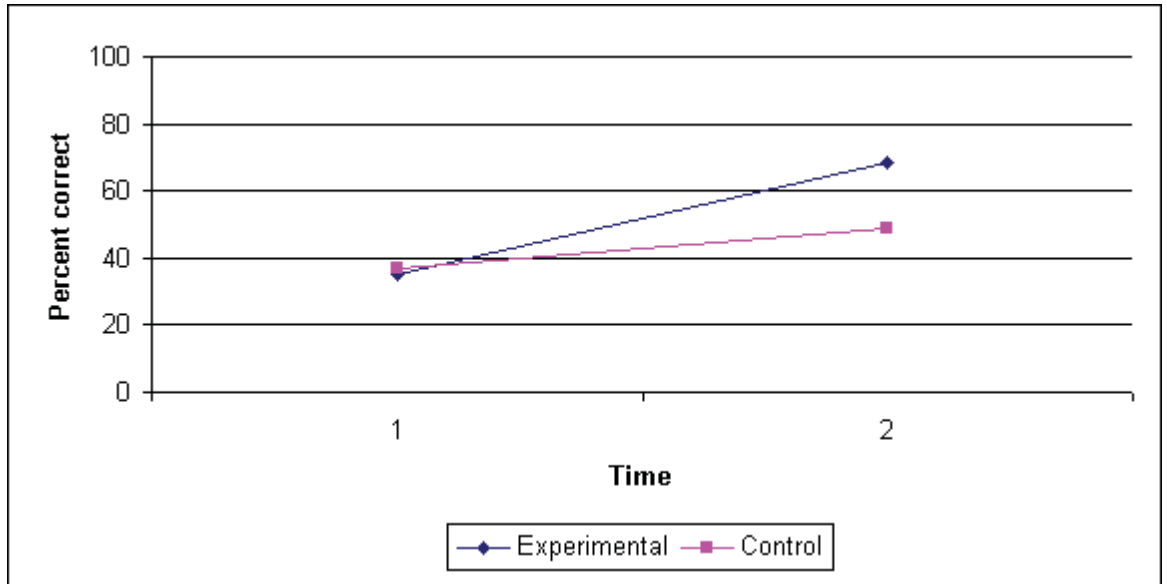
12. If I bet money on a pool game, it isn't really gambling (disagree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	69.2	80.7	15	12.4	15.8	6.9
Control	68.2	63.4	19.9	22.8	11.9	13.9



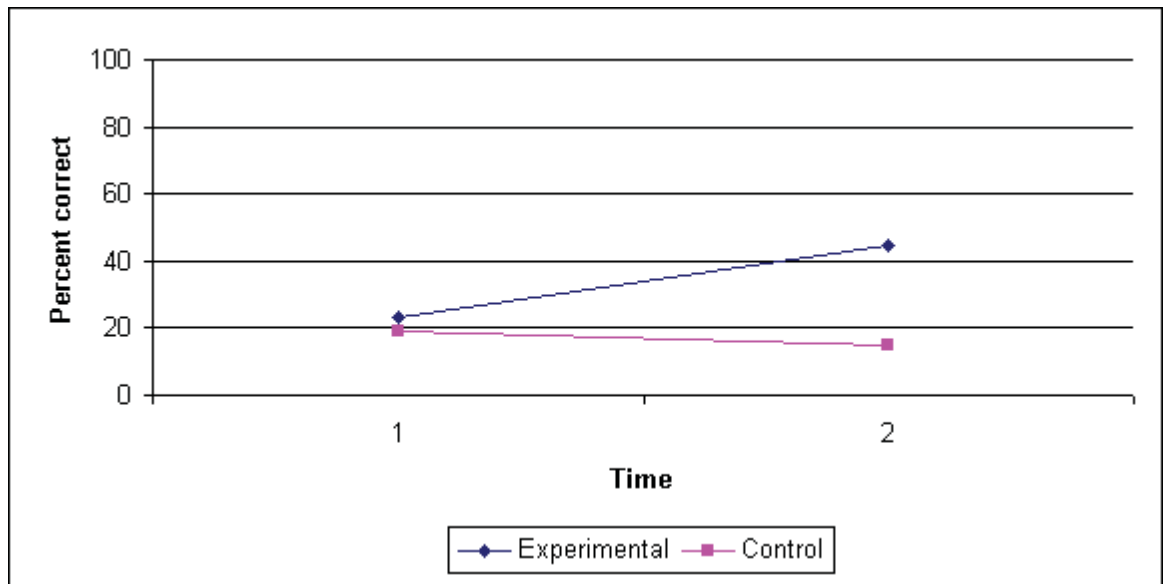
13. If I lose while gambling, it has nothing to do with how I played. (agree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	35	68.7	32.5	16.3	32.5	15
Control	37.1	49	33.8	34.3	29.1	16.7



14. "House advantage" is a term that means, over time, people eventually win back their gambling losses. (disagree)

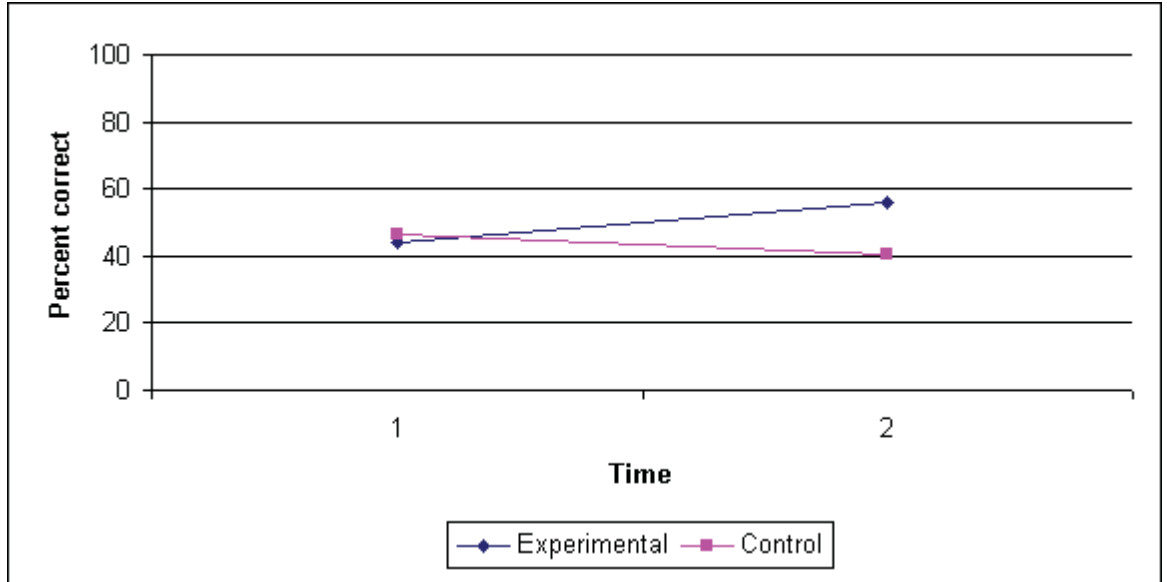
CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	23.3	44.9	14.2	15	62.5	40.1
Control	19.1	14.9	15.8	15.8	65.1	69.3



15. Smart people are less likely to become problem gamblers.

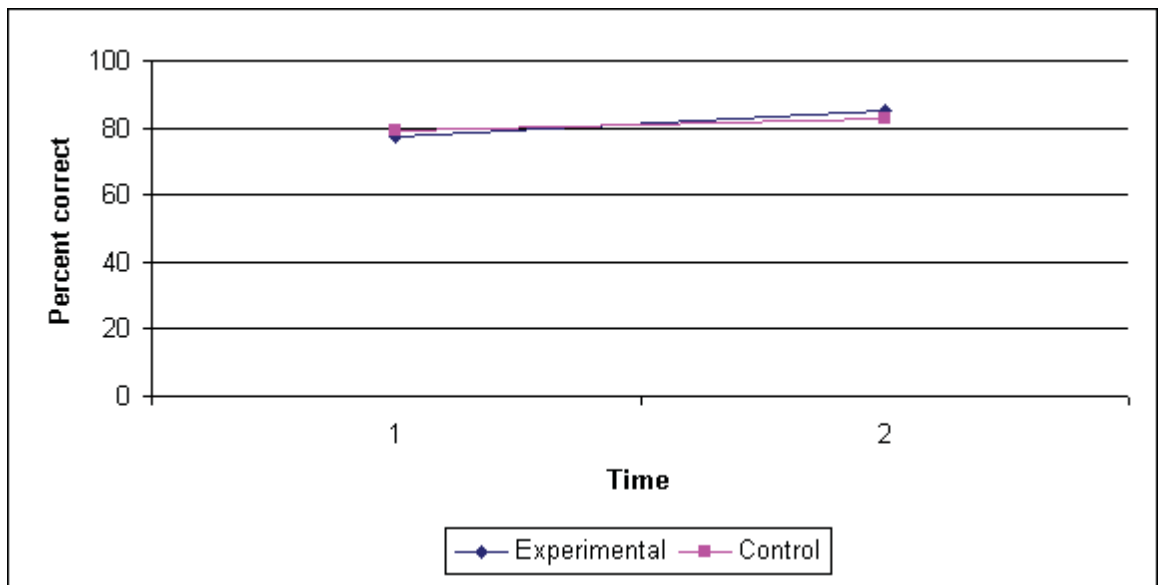
(disagree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	44.2	55.8	25	23.1	30.8	21.1
Control	46.4	40.2	37.7	34.3	15.9	25.5



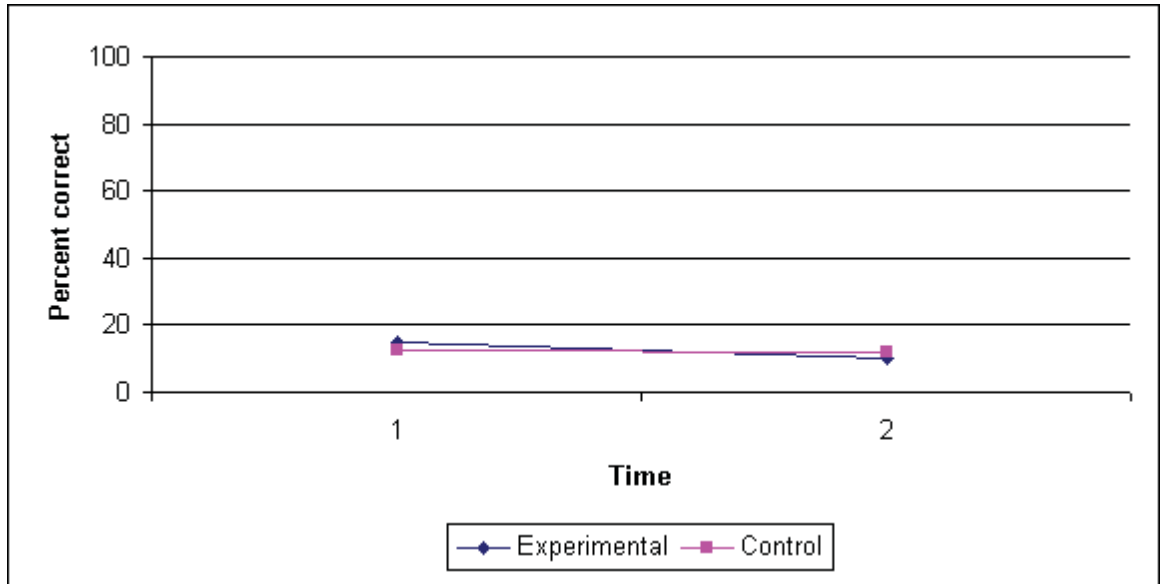
16. Playing bingo for money is a type of gambling (agree).

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	77.5	84.9	10	6.8	12.5	8.2
Control	78.9	82.7	9.9	7.1	11.2	10.2



17. Feeling bad about your gambling is common. (disagree)

CONDITION	C pre	C post	I pre	I post	D/K pre	D/K post
Experimental	15.1	10.2	47.9	51	37	38.8
Control	12.5	11.9	51.3	47.5	36.2	40.6



18. I enjoyed learning about gambling through the session (exp. post test only)

CONDITION	agree	disagree	don't know
Experimental	60.7	9.7	29.7

