EMPLOYMENT AND STATISTICAL

DISCRIMINATION: A HANDS-ON EXPERIMENT

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ABSTRACT

The purpose of this experiment is to illustrate the economic inefficiencies that result from discriminatory hiring practices as well as outline the economic rationale that exists for statistical discrimination to occur. Each participant acts as an employer charged with maximizing output by attempting to hire 8 workers out of 20 with high productive characteristics. There are three labor markets designed for this experiment and three rounds of the experiment for each labor market. The labor markets are differentiated by the distribution of the workers among a certain output range. The three rounds are associated with different interviewing costs. Results of the experiment conducted with 57 teams of college students are analyzed and discussed. (A22, J71)

I. INTRODUCTION

The purpose of this experiment is to illustrate to students the inefficiencies that result from discriminatory hiring practices while at the same time explain the economic rationale that exists for statistical discrimination. In an ideal labor market, characteristics such as race, gender, and ethnic origin of the buyers (employers) and sellers (employees) of labor services do not affect the interviewing and hiring

outcomes. However, due to the fact that employers are constantly making decisions in an environment of imperfect information, they quite rationally might use this information about an employee in the employment decision-making process if they believe the information is related to actual worker productivity.[2] By not allowing for personal discrimination (the utility that hiring may bring to an employer or disutility that may be avoided if a certain type of employee is not hired), and instead focusing on statistical discrimination, we can highlight the following: the role it plays in interviewing and hiring decisions by employers; its effect on labor market outcome differences between different groups in society; the costs it imposes on the economy and individual workers; and potential solutions for this problem.

Previous experiments have centered on how wages and employment levels are determined theoretically in a market economy, allowing for different scenarios that include search costs, unemployment insurance, and recessions (Haupert, 1995). Other experiments have introduced factors such as unequal financial and human endowments to explain wealth distribution in a market economy (Williams, 1993). This experiment differs from previous ones in its emphasis on the theory of statistical discrimination to help explain labor market outcomes.

The next section defines statistical discrimination. The experiment is described in section III and results generated by college students are presented and discussed in Section IV. Section V presents some possible methods of enhancing the experiment, followed by the conclusion in Section VI.

II. STATISTICAL DISCRIMINATION

Statistical discrimination occurs when an employer uses average characteristics of groups to predict individual worker productivity.[3] In the labor market it occurs when employers are screening job candidates and use group characteristics such as race or sex that they have come to believe are correlated with worker productivity. Since the employer has imperfect information about a potential employee's actual productivity, and since the costs of screening job candidates are high, an employer may use group characteristics to determine productivity. For example, an employer might take into account knowledge of women's higher probability of quitting as compared to men in deciding whether to hire and train an individual female job candidate (Ragan Jr. and Smith, 1982). Further, given these conditions, an individual employer's motivation to discriminate statistically is related to his or her attitude towards risk: the more risk-averse employer is more likely to engage in this type of behavior compared to his or her less risk-averse counterpart. Rather than risking interviewing, hiring and training a woman who, based on group averages, has a higher probability of quitting, a risk-averse employer will hire the "safer" male candidate.

From a cost-benefit perspective, discrimination can masquerade as a rational economic decision. If the expected gain in productivity of the worker is greater than the expected transaction costs of hiring, then the employer will have an incentive to bear these costs. The transaction costs of hiring an employee include the costs of

processing and screening applications and then interviewing selected candidates before making a decision as to which one to hire. If, however, the expected gain is low or the expected costs are too high, then the employer will not want to incur these costs. Instead, employers will use group type as a proxy for employee productivity.

For the purpose of this experiment we define application as the process whereby an employer gathers all possible "free" or low marginal cost information about the potential employee. In other words, if the decision to hire has been made, then the cost of screening applications is borne for all potential employees, regardless of whether they are eventually interviewed or hired. The interview portion of the candidate search is the process whereby the employer gathers additional information about the candidate. Information gathered in the interview is costlier than information gathered in the application screening, because additional resources are required to bring the candidate in for the interview. The decision to hire is based on all of the information that the employer has gathered, which will include all application information and any interview information that the employer "purchased" by incurring the extra costs of the interview.

For this experiment, the application process is thus defined as the process whereby the potential employee reveals a certain amount of information about his/her ability to the employer. All employees reveal the same information to the employer in the experiment. That information includes their group type – green or yellow. Employers know the average characteristics of each group type, and thus they have

information about the average performance of individuals in each group, but not specific information about the performance of individual workers. This is the extent of the information provided to employers by the application process.

If employers wish to gather further information about a prospective employee, they can incur the greater cost of interviewing an employee. The greater cost is reflected in the experiment as an explicit cost. The cost of interviewing is the aforementioned resource cost involved in bringing a candidate in for a face to face interview. In the interview stage, the employer can find out more information about the employee than they can through the application process. In this experiment, the employer can find out the actual productivity of the worker, instead of having to rely on the average information they gathered in the application process.

The hiring stage of the process involves hiring the worker, and then incurring training costs and perhaps a probationary period of monitoring the worker closely to see that he/she is performing up to expectations. In the experiment, the decision to hire is simpler. There are no training costs involved, and each worker interviewed will perform exactly as expected. That is, once a candidate is interviewed, the employer knows with certainty at what level of productivity he/she will perform. If a candidate is hired without interviewing, then the employer will discover the level of productivity at which this candidate performs, and this level of productivity is fixed, that is, there is no amount of training expense that can be undertaken to improve this worker's productivity.

For the experiment then, the hiring decision is simplified. Employers must decide whether or not to incur the extra costs of interviewing in order to obtain additional information about a job candidate. The information that can be "purchased" through an interview is the candidate's productivity. There is no uncertainty about this productivity information once it is obtained, and there is nothing that can be done to change it, thus the decision to hire in this experiment is costless in the sense that the marginal cost of hiring an employee is no different whether or not the candidate has been interviewed.

Unfortunately for all involved, the mistaken assumptions that all members of a class share the same characteristics can result in inefficient and unfair outcomes. Equally productive workers are not hired because they are assumed to be less productive, or worse, more productive workers are not hired for the same reason.

III. EXPERIMENT PARAMETERS[4]

There are three labor markets designed for this experiment and three rounds of the experiment for each labor market. In all three labor markets, the first round has a cost of interviewing equal to 2 units of production, the second round has a cost of 0.5 units of production, and the third round has a cost of 2 units of production and a requirement that employers hire an equal number of employees from each of the two employee groups.

Each of the three labor markets is composed of twenty workers, ten from each of two identifiable groups, with an output range from 0 to 10. The labor markets are

differentiated by the distribution of the workers among those output ranges (see Table 1). Each participant acts as an employer charged with maximizing the productivity of his or her workforce by attempting to hire 8 workers with high productive characteristics. The participants are given a deck of twenty cards, half green and half yellow, representing twenty workers who apply for the 8 positions. They are informed of the average productivity characteristics of each type of worker. Each worker's level of productivity is represented by the number of units of output he or she can produce, which is written on the back of each card. The productivity level can be determined with certainty by the employer after an interview, which has a cost as defined above, which varies with each round of the experiment.

In Labor Market I, the average productivity of green workers is less than yellow workers, but the distribution of each class is similar, as can be seen by the equal standard deviations and variances of the two worker groups. In Labor Market II, the average productivity of each class is the same, but the distributions are quite different. The green workers have a much higher standard deviation and variance than the yellow workers. Labor Market III resembles Market I in that the yellow average is higher than the green average and the standard deviations are nearly equal, but much higher than in Labor Market I. This is due to the broader distribution of workers around the mean, reflecting a riskier hiring atmosphere.

In the first round, the cost of interviewing and hiring workers was set so that the cost of interviewing every candidate in order to find the eight most productive

workers was greater than the difference between the total output of the eight best workers and the expected total output of hiring eight random workers without incurring any interview costs. Though in the experiment participants know the average output and variance of each class of worker, they do not know the actual distribution of workers. What they do know is that the best workers are not all from one class. In other words, they know that the most productive workers come from the two separate classes (see Table 1). In addition, they are aware of the cost of finding those workers. As a result, the profit-maximizing behavior is to discriminate by hiring only yellow workers. Interviewing job candidates is not profit maximizing, because even if only five were interviewed and hired, and they turned out to be the five best workers (which the employer would not know since output distributions are not known), the total net output would be less than the expected random output without interviewing.

In the second round, the transaction costs of hiring workers were low enough so that the cost of interviewing every candidate in order to find the eight best (i.e. most productive) workers was less than the difference between the total output of the eight best workers and the expected total output of hiring eight random workers without incurring any interview cost. However, the difference between the eight best workers and the expected value of hiring eight random yellow workers is less than the cost of interviewing. In this case, some of the employers may still be willing to interview rather than hire all yellow workers, because the outcome with complete

interviewing is a sure thing, whereas the expected outcome is uncertain. (The actual outcome of hiring eight random yellow workers ranges from 33 to 50 in Labor Market I.) In this case, the expected profit-maximizing behavior is also to hire eight random yellow workers. However, the difference in expected outcome from doing this and from interviewing all workers and hiring the best eight is only one unit. For some employers this difference is small enough to warrant sacrificing the expected one unit difference and get the sure thing by interviewing. The *risk-free* profit-maximizing behavior is to interview everyone and hire the best workers, regardless of employee type.

While it is obvious what behavior should take place by profit maximizing participants, this motivates the real issue behind this experiment, which is whether discriminatory behavior is rational. Though this behavior might maximize profits, it is not certain whether profit-maximization is a lexicographic preference in our labor markets. This issue generates an interesting discussion centering on the concepts of equity and profits. For example, are markets "fair" if they result in discrimination based on incomplete information?

Reducing transaction costs is an obvious solution to the problem. Doing this would allow for the best workers to be hired regardless of type. While this is easy to do in an experiment, it is quite another thing to accomplish in actual labor markets. The discussion on this topic can range from proposed methods of overcoming these transaction costs, to the difference between actual and perceived average information

about workers. For example, in this experiment, the average output of the two classes is known, but what happens if the average output of two classes is estimated, but incorrectly? This presents another topic for discussion, with a range of very different proposed solutions. In this case, the class discussion includes the costs of reducing or eliminating false information, which may or may not be the same as the cost of conveying actual information.

In addition to these discussions, this experiment also allows us to lead our classes into another normative discussion: at what price do we place profits over "equity" in our economy? This is driven home in the third round of the experiment, in which employers are forced to hire a balanced workforce, despite the costs of doing so. Either the employer must interview candidates in order to find the best workers (when the costs of doing so are not profitable) *or* hire a random sample of four workers of each type, though the expected output is less than that of hiring all eight workers from the yellow class.

This round leads into a discussion on the merits of such policies. The discussion begins with the difference between quotas used here, and affirmative action, and continues with the potential costs of quotas (in terms of reduced output due to the potential hiring of less qualified workers) and of affirmative action (due to the potential reduced net output due to the higher costs of finding workers). These costs are then compared to the benefits of a more diverse workforce.

While the experiment itself is simple and the mathematics behind profit-

maximization obvious, its purpose is not to test math skills and statistical understanding, but rather to point out through actual participation the role of profits in discrimination. For this reason the experiment is "unrealistic" in that it provides employers with information which they do not have access to in actual labor markets, such as the distribution of productivity ranges by worker type. We do not regard this as a serious shortcoming however, because our goal is not to test the mathematical savvy of our students or to illustrate all of the intricacies of labor markets, but rather to focus on one particular aspect of labor markets – and that is the use of a proxy for information regarding worker productivity, why it is used, and what effects it has on the market and individuals in the market. The experiment is a much better way to usher in the discussion of the topic because students have experienced first hand the decisions that have to be made. As one of our participants remarked, he never felt like he was discriminating, but he had a hard time arguing that he wasn't given his behavior. The argument over profits versus "fair labor practices" is indeed a thorny one, and generates an interesting and valuable discussion. We have found that this type of discussion in our introductory economics classes helps to break down a stereotype some students have about economics – that it is the study of how businesses make money. Instead, they come to realize that economics is much richer – it is the study of decision making under constraints, not simply how to get rich.

Participants have an incentive to pursue a profit-maximizing strategy over the entire run of the experiment because bonus points are given to the employers in each

labor market who earn the highest total level of output. In a class of thirty students, with ten participating in each labor market, we typically award bonus points to the two highest earners in each labor market. The value of bonus points in our grading scheme is approximately one percent of the total grade for the semester. Students are told how they can earn bonus points, but during the experiment they are provided no information on their performance relative to any other student. We want students to pursue a strategy that will maximize their total expected output through the experiment. We withhold comparative information to maximize the probability that profit-maximizing behavior is occurring. A student who knows he or she is in last place going in to the final round may behave differently than if the student believed there was still a chance to earn bonus points.

IV. EXPERIMENT RESULTS

The initial run of this experiment was conducted with 57 teams[5] of college students at a mid-sized midwestern university enrolled in either a Principles of Microeconomics course or a Women in the U.S. Economy course[6] in the spring semester 1997. Experiment results appear in Tables 2-6.

As shown in Table 2, the number of applicants interviewed in all three markets[7] in rounds 1 (interviewing cost= 2) and 2 (interviewing cost= 0.5) was significantly less when the interview cost was 2 units (5.12 applicants interviewed) as compared to 0.5 units (10.65 applicants interviewed). As expected, the net production was also significantly higher when the interview costs were 0.5 units

(46.39 units) as compared to interview costs of 2 units (36.05 units). Class discussion brought out two reasons: first, because costs are lower, the subtraction from gross production is less; and second, because of the lower costs, the employer could afford to determine workers' actual productivity and hire the most productive individuals, regardless of whether they were Yellow or Green.

Table 3 compares net production and number interviewed between the first and third rounds in which interviewing costs were 2 in each. It is interesting to note that there was no significant difference in net production or number interviewed when the employers had the additional requirement of hiring 50% from each group. This led to class discussions of the costs and benefits of policies designed to promote diversity in the workforce.

Table 4 provides interviewing information by type of worker for all markets. There was no significant difference in the number of Greens vs. Yellows interviewed in the first two rounds. Interestingly, in the last round when employers were required to hire 4 Greens and 4 Yellows, significantly more *Greens* were interviewed ($P = .049$). The explanation given by the students was that given the greater uncertainty about *Green*s' actual productivity in Market II and the lower average productivity of *Green*s in both markets, they felt it beneficial to screen this group of workers more thoroughly.

When interviewing costs were dropped, significantly more *Green*s were interviewed, as shown in Table 5. However, the effect on employment of *Green*s was

insignificant, leading to the disparate employment ratios shown in Table 6. The employment ratios of .68 and .62 Greens/Yellows are significantly different from the labor force ratio of 1, giving students an indication of how statistical discrimination can result in disparate labor market outcomes between various groups in society. Why more interviews didn't lead to more hiring of Greens resulted in a good economic discussion. Some students argued that since in Markets 1 and 3 Yellows were on average more productive and since not everyone could be hired, we should see relatively more Yellows hired. This is true for Market I: if the top 8 were hired, 3 Greens and 5 Yellows would be hired for a ratio of .60 at best, actually below that of those in the aggregate results. However, in Market II, the top 8 would be the reverse: 5 Greens and 3 Yellows, for an employment ratio of 1.67. And in Market III, the top 8 would result in a ratio of between .60 and 1.00. This led to a discussion of whether basing employment on card color is fair, even if the resulting employment differences between Yellows and Greens can be accounted for by average productivity differences.

Finally, a review of their employment worksheets (Appendix Table) enabled participants to discover the effect of statistical discrimination on individual employees. Group discussion emphasized the fact that some "unemployed" individuals had higher productivity than others who were actually hired.

V. POSSIBLE EXPERIMENT EXTENSTIONS

One extension would be to allow the employers to pay workers what they

think the workers are worth, leading to statistical discrimination as an explanation of the wage gap by race and sex. Another possibility is to extend the experiment to explain occupational segregation by sex. One example of statistical discrimination leading to this phenomenon is employers who feel that women are best confined to certain positions in the labor market due to stereotyped views of women and high screening costs. One way to incorporate this issue into the experiment would be to require each employer to hire workers into one of two jobs: a clerical job or an upper management job. The characteristics of each job would have to be developed, average productivity statistics for each group for each job would be announced, and actual productivity characteristics of each individual worker in each job would have to be assigned to each worker. The results would show not only the employment statistics, but also the occupation statistics of each worker group.

VI. CONCLUSION

This experiment is simple to run and straightforward in its intent. In a class of thirty students divided into three labor markets, we can run the entire experiment in a one-hour class if the instructions that appear in the Appendix are distributed in the prior class. This includes about ten minutes at the beginning of class to pass out materials, review instructions and answer questions.

We show the results for the experiment run in a Principles of Microeconomics course in the section on the labor market, and a Women in the U.S. economy course when theories of labor market discrimination are discussed. In these classes, we run

the experiment after we discuss the neoclassical theory of the demand for labor, but before we introduce the theory of statistical discrimination in order not to bias the results. This experiment would be ideal in a Labor Economics course where there is generally more time that can be devoted to the discussion of the experiment results relative to the Principles course. It would also be appropriate in an Intermediate Microeconomics course during the discussion on labor markets. The most valuable part of any classroom experiment is the follow-up discussion. In order to enhance the quality of the discussion, we recommend passing out a sheet with questions for the students to think about – or provide short written answers – in preparation for the follow-up discussion during the next class. In various classes, our questions included:

1. What were your interviewing and employment strategies?
2. Did these strategies change with each round?
3. Is being a statistical discriminator profit maximizing?
4. Provide an example of how statistical discrimination based on <u>real</u> group differences does or could arise in the labor market, and the consequences of it.
5. Provide an example of how statistical discrimination based on <u>perceived</u> group differences does or could arise in the labor market, and the consequences of it.
6. How might statistical discrimination worsen group differences, whether they were real or perceived at the outset?

7. What are some solutions to reduce the incidence of statistical discrimination and it effects?
8. In what ways do real markets differ from this experiment? What are some possible extensions?
9. As an employer, how would you argue that using statistical discrimination is rational?
10. As an employee who is a victim of statistical discrimination (i.e. you did not get a job because of stereotyping) how would you respond to your answer in question number nine?
11. Is this type of labor market outcome fair?
12. What is the ideal balance between profit and equity?
13. What would happen to a firm operating in competitive output and labor markets that decided to hire workers based entirely on their output with no reliance on statistical discrimination? Can you use your answer to explain why statistical discrimination occurs?
14. Can you think of any way to eliminate statistical discrimination? What would be the cost to society/ an individual firm/ the industry?

We have found the most successful discussions for this experiment began with small groups and then evolved to encompass the entire class. Another approach to the discussion portion of the experiment is to put it off until the following class. In this case we pass out the discussion questions and ask the students to answer them on their

own before the next class, at which time we put them into small groups and then open the discussion to the entire class. Either way, the follow-up discussion is an important part of the experiment.

FOOTNOTES

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[2]A more general discussion can be found in Akerloff (1970).

[3]The statistical discrimination literature includes research by Phelps (1972), Aigner and Cain (1977), Borjas and Goldberg (1978), Lundberg and Startz (1983), Schwab (1986), and Oettinger (1996).

[4] Experiment Rules appear in the Appendix.

[5]A team was comprised of 1 to 4 students.

[6]The Women in the U.S. Economy course is a general education course and has no economics prerequisites.

[7]Results for the three labor markets were not significantly different from each other or from the aggregated results, so only the aggregated results are reported.

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APPENDIX: EXPERIMENT RULES

This is an experiment in the economics of market decision making. In this experiment you are going to play the part of an employer who must hire eight workers from a potential workforce of 20 employees. Your objective is to hire the most productive workers possible. Each worker's level of productivity is represented by the number of units of output he or she can produce. You will have an opportunity to earn bonus points based on the total productivity of your employees, or the total number of units of output produced by all your employees. The employers in each market with the highest total output over the duration of the experiment will each be awarded five bonus points.

You will be assigned a labor market from which you will have the opportunity to hire workers. You will not compete against players from labor markets other than your own, and the performance of players in other markets will not affect the market you are in. Each of the three markets is independent from one another. The following instructions apply to all three labor markets. You may not talk to nor share information with any other participants for the duration of this experiment.

As an employer, you must hire eight workers from a pool of 20 applicants. The applicants have a variety of skills, making some of them more productive than others. In this experiment, everything will be measured in units of productivity. The various skills of the employees are translated into units of production that they will add to your firm. The range of production units produced by each worker varies

from 0 to 10. The actual distribution of workers within that range will not be revealed to you. You are, however, given some information about the potential workforce. See Table 1.

The workforce is equally divided into two types of workers: yellow and green. These characteristics can be observed at zero cost by each employer. What cannot be observed at zero cost is the actual level of production of each worker. The only information you have regarding worker production is the statistical summary information found in Table 1. You are told the average, standard deviation and range of output levels for workers of each type. In addition, you are told the total output of the eight most productive workers of each type, as well as the maximum possible level of output from the eight most productive workers regardless of type.

While a worker's output level is not revealed to you, you can discover this information by interviewing prospective employees. Interviewing job candidates bears a cost. The cost of interviewing each candidate in the first round is two units of production. In the second round the interview cost is 0.5 units of production, and in the third round it is raised again to two units of production and you are required to hire four each of the yellow and green workers. The only way to know the production level of a worker is to interview the worker. Once the interview has taken place, the worker's output is revealed.

Each employer will be given a deck of cards, ten of which are yellow and ten of which are green. The cards are shuffled together, representing the 20 workers

who apply for the eight positions each employer must fill. The production of each worker is written on the back of the card. The order of the cards determines the order in which the workers apply for jobs. If you choose to interview an applicant, write "yes" in column C of your worksheet (Appendix Table). You may then look at the back of the card and record the output level of the worker in column E. Enter the cost of the interview in column F. You do not have to make an immediate decision on whether or not to hire a worker. Instead, you may interview as many of the twenty job applicants as you wish, recording the output and interview cost for each. You are not required to hire anyone interviewed, but must hire a total of eight workers. Regardless of whether or not an interviewed employee is hired, the interview cost must be paid.

If you decide not to interview a worker, write "no" in column C, zero in column F, and then immediately decide whether or not to hire the worker. If you decide to hire the worker, look at the back of the card to see the output level, record it in column E, and write "yes" in column D. If you decide not to hire the worker, then write "no" in column D and enter a zero in column F. If you decide not to hire a worker you do not interview, you may not look at the back of the card. You then proceed to the next card. Once the entire deck of cards is exhausted, you must go back and hire the interviewed workers of your choice to fill out the necessary eight spots on the employment roster. This is done by writing "yes" in column D for the desired interviewed job applicants.

Once eight employees have been hired, the total production of the eight workers is calculated and entered as gross production. The total cost of all interviews, whether or not the candidates were hired, is subtracted from gross production to get net production. For each subsequent round the cards are reshuffled and the process is repeated with the aforementioned changes in interview costs. Net production is totaled over all three rounds to determine total production.

Appendix Table

Worksheet NAME_____

Market Type Round #

applicant	color of card	interview (yes or no)	hire (yes or no)	output level of worker	interview cost
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
total production of hired workers					**********

total cost of interviews	
net production = total production - total cost of interviews	

TABLE 1. Worker Characteristics

	Quantity of workers					
	Labor Market I		Labor Market II		Labor Market III	
productivity	Green Worker	Yellow Worker	Green Worker	Yellow Worker	Green Worker	Yellow Worker
0	0	0	1	0	3	1
1	1	0	1	0	0	1
2	1	1	1	0	1	1
3	1	1	1	1	1	1
4	4	1	1	1	0	1
5	1	4	0	6	1	0
6	1	1	1	1	1	1
7	1	1	1	1	1	1
8	0	1	1	0	1	1
9	0	0	1	0	1	1
10	0	0	1	0	0	1
average 8*	32	*40*	40	*40*	32	*40*
top 8*	37	45	49	43	40	49
average*	4	5	5	5	4	5
range*	min= 1 max= 7	min= 2 max= 8	min= 0 max= 10	min= 3 max= 7	min= 0 max= 9	min= 0 max= 10
std. dev.*	1.67	1.67	3.32	1	3.29	3.32
average*	4.5		5		4.5	
std. dev*	1.75		2.45		3.34	
range*	min= 1 max= 8		min= 0 max= 10		min= 0 max= 10	
avg ϑ*	36		40		36	
ϑ max*	49		58		64	
maxcost	9		18		24	

*= data available to employers. In addition, they know the range of output values and the number of workers of each type in the labor market. **Average 8** is expected total output of 8 randomly selected workers. **Top 8** is total output of top 8 workers. **Avg 9** is expected total output from 8 randomly selected workers. **9 max** indicates productivity of eight most productive workers. *Italics* indicates dominant hiring strategy with prohibitive information costs. **Maxcost** is maximum total cost of interviewing applicants at which employer will still interview all candidates in order to assure **9 max** output level.

TABLE 2. Total Number Interviewed and Net Production: Rounds 1&2
Mean Values, Standard Deviations and Test Statistics

	Interview Cost= 0.5	Interview Cost= 2	*t* Test (N= 57)	*P*-Value
Net Production	46.39 (8.12)	35.88 (8.60)	7.926	.000
# Interviewed	10.65 (5.81)	5.12 (5.30)	6.220	.000

(Std. Dev. Appears in Parenthesis)

TABLE 3. Total Number Interviewed and Net Production: Rounds 1&3
Mean Values, Standard Deviations and Test Statistics

	Interview Cost= 2.0	Interview Cost= 2.0 2 Yellow 2 Green	*t* Test (N= 29)	*P*-Value
Net Production	35.88 (8.60)	40.69 (6.13)	1.068	.295
# Interviewed	5.12 (5.30)	2.83 (3.83)	.900	.375

(Std. Dev. Appears in Parenthesis)

TABLE 4. Interviewing Mean Values, Standard Deviations and Test Statistics

Round	# Greens Interviewed	# Yellows Interviewed	*t* Test	*P*-Value
Interviewing Cost= .5 (N= 57)	5.19 (3.28)	5.46 (3.47)	.578	.565
Interviewing Cost= 2 (N= 57)	2.33 (2.75)	2.74 (3.27)	1.059	.294
Interviewing Cost= 2 2 Yellow, 2 Green Hired	1.72 (2.12)	1.21 (1.95)	2.059	.049

(N= 29)				

(Std. Dev. Appears in Parenthesis)

TABLE 5. Number of Greens Interviewed and Hired
Mean Values, Standard Deviations and Test Statistics

	Interview Cost= 0.5	Interview Cost= 2	*t* Test (N= 57)	*P*-Value
Greens Interviewed	5.19 (3.28)	2.33 (2.75)	5.830	.000
Greens Hired	2.86 (1.36)	2.60 (1.62)	1.520	.133

(Std. Dev. Appears in Parenthesis)

TABLE 6. Employment and Labor Force Ratios
Mean Values, Standard Deviations and Test Statistics

	Employment Ratio: Greens/Yellows	Labor Force Ratio: Greens/Yellows	*t* Test (N= 57)	*P*-Value
Interviewing Costs= .5	.68 (.53)	1.00	5.630	.000
Interviewing Costs= 2	.62 (.51)	1.00	4.481	.000

(Std. Dev. Appears in Parenthesis)