

1 Project ICFES: Evidence from a referral field experiment\* 1

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4 **Abstract** 4

5 Lorem Ipsum ([Beaman, Keleher, & Magruder, 2018](#)) 5

6 **JEL Classification:** C93, D03, D83, J24 6

7 **Keywords:** productivity beliefs, referrals, field experiment, skill identification, social  
8 class 7 8

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\*We obtained Institutional Review Board approvals from NYU Abu Dhabi (HRPP 2024-50) and the University of Luxembourg (ERP 24-028). The study design was preregistered in the OSF Registries prior to data collection (see <https://doi.org/10.17605/OSF.IO/V9T3W>).

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9      **1 Introduction**

9

10     **2 Background and Setting**

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11     **3 Design**

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12     **4 Results**

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13    **4.1 Descriptives**

13

Table 1: Selection into the experiment

	<b>Admin Data</b>	<b>Sample</b>	<b>p</b>
Reading score	62.651	65.183	0.000
Math score	63.973	67.477	0.000
GPA	3.958	4.012	0.000
Low-SES	0.343	0.410	0.000
Med-SES	0.505	0.499	0.763
High-SES	0.153	0.091	0.000
Female	0.567	0.530	0.060
Age	21.154	20.651	0.000
Observations	4,417	734	5,151

*Note:* This table compares characteristics between the full administrative sample and the experimental sample. *p*-values for binary outcomes (Low-SES, Med-SES, High-SES, Female) are from two-sample tests of proportions; for continuous variables, from two-sample *t*-tests with unequal variances. All reported *p*-values are two-tailed.

Table 2: Balance between treatments

	<b>Baseline</b>	<b>Bonus</b>	<i>p</i>
Reading score	64.712	65.693	0.134
Math score	67.366	67.597	0.780
GPA	4.003	4.021	0.445
# connections	173.40	176.88	0.574
Tie strength	3.939	3.719	0.443
Low-SES	0.419	0.401	0.615
Med-SES	0.492	0.506	0.714
High-SES	0.089	0.094	0.824
Female	0.529	0.531	0.947
Age	20.576	20.733	0.380
Observations	382	352	734

*Note:* This table presents balance tests between **Baseline** and **Bonus** conditions. *p*-values for binary outcomes are from two-sample tests of proportions; for continuous variables, from two-sample *t*-tests with unequal variances. All reported *p*-values are two-tailed. Tie strength refers to the number of classes taken together. # connections refers to the number of individuals in referrer choice sets, otherwise called the “network degree”. Low-SES, Med-SES, and High-SES are binary variables indicating the share of participants in estrato 1 and 2, 3 and 4, or 5 and 6, respectively.

Table 3: Distribution of referrals by area

Area	Only one referral	Both areas	Total
Verbal	65	608	673
Math	61	608	669
Total	126	1,216	1,342

*Note:* The table shows how many referrers made referrals in only one area versus both areas. "Only one referral" indicates individuals who made referrals exclusively in that area. "Both areas" shows individuals who made referrals in both verbal and math areas. The majority of referrers (608) made referrals in both areas.

Table 4: Summary statistics for network members by nomination status

	Verbal		Math	
	Not Referred	Referred	Not Referred	Referred
Reading z-score	0.070 (0.003)	0.509 (0.039)	0.079 (0.003)	0.465 (0.040)
Math z-score	0.079 (0.003)	0.452 (0.042)	0.087 (0.003)	0.590 (0.043)
GPA z-score	-0.066 (0.003)	0.705 (0.041)	-0.069 (0.003)	0.711 (0.041)
Tie strength z-score	-0.153 (0.003)	2.690 (0.091)	-0.184 (0.003)	2.488 (0.090)
Low-SES	0.334 (0.001)	0.374 (0.019)	0.338 (0.001)	0.384 (0.019)
Med-SES	0.515 (0.001)	0.513 (0.019)	0.513 (0.001)	0.507 (0.019)
High-SES	0.151 (0.001)	0.113 (0.012)	0.149 (0.001)	0.109 (0.012)
Female	0.524 (0.001)	0.562 (0.019)	0.520 (0.001)	0.428 (0.019)
Age	20.945 (0.006)	20.501 (0.104)	20.961 (0.006)	20.490 (0.099)
Observations	128,174	673	127,481	669

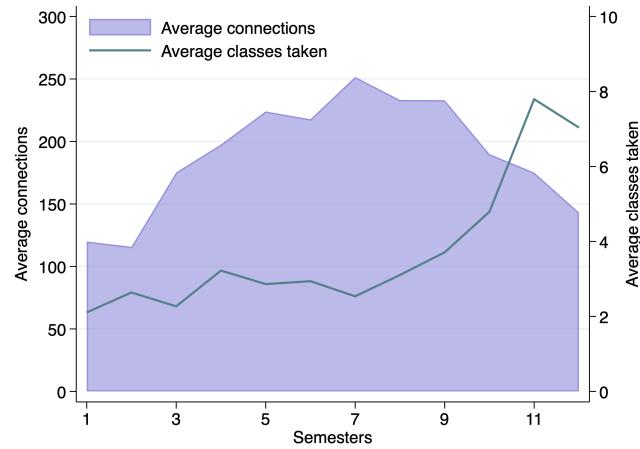
*Note:* Standard errors in parentheses. GPA, test scores, and tie strength are standardized at the network level. For each referrer's network, we first calculated the mean and standard deviation of each measure. We then computed the average of these means and standard deviations across all referrers. Each individual's score was standardized using these network-level statistics. The standardization formula is  $z = (x - \bar{x}_{network})/\sigma_{network}$ , where  $\bar{x}_{network}$  and  $\sigma_{network}$  are the average of network means and standard deviations, respectively. Low-SES, Med-SES, and High-SES are binary variables indicating the share of participants in strata 1 and 2, 3 and 4, or 5 and 6, respectively. Tie strength measures the number of connections between individuals.

Table 5: Comparison of math and verbal scores by SES group and data source

	Math			Verbal		
	Network	Admin	Sample	Network	Admin	Sample
Low-SES	66.976 (0.052)	61.653 (0.346)	67.813 (0.694)	64.738 (0.043)	60.974 (0.274)	66.058 (0.574)
Mid-SES	65.627 (0.039)	64.531 (0.224)	66.859 (0.580)	63.685 (0.032)	63.154 (0.183)	64.779 (0.436)
High-SES	67.781 (0.077)	67.330 (0.416)	70.610 (1.295)	64.966 (0.063)	64.892 (0.341)	66.397 (1.214)
Observations	128,150	4,415	669	128,847	4,403	673

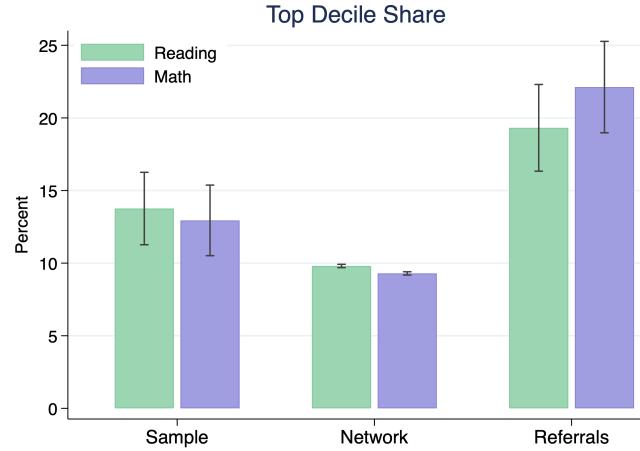
*Note:* Standard errors in parentheses. The table presents mean scores with standard errors for math and verbal tests across the entire network, the admin data, and the sample. Admin data consistently shows lower scores than both network and the sample across all SES groups consistent with selection, with the largest gaps occurring for the Low-SES. Differences between network and sample scores are generally smaller than those between either and the admin data.

Figure 1: Participant network size and tie strength by time spent at UNAB



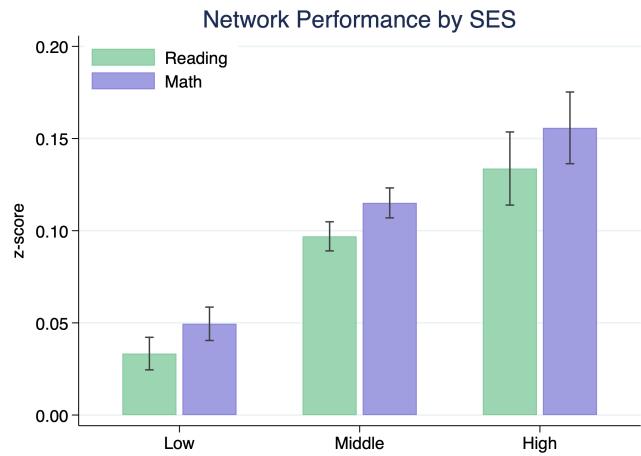
*Note:* This figure displays the average number of connections for referrers in blue and the average number of classes they have taken together with their connections in green across semesters spent at UNAB. The data shows an increase in the number of classes taken together as students progress in their programs, with the connections peaking around 7 semesters and dropping as certain students finish their bachelor's.

Figure 2: Top decile performer share across the sample, network and referrals



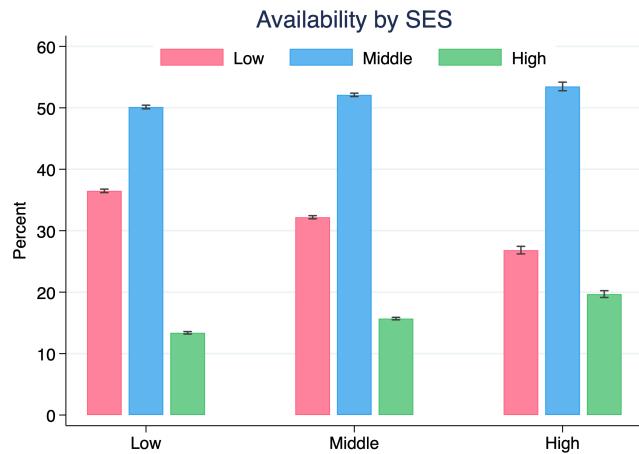
*Note:* This figure displays the percentage share of individuals across three dimensions. First bar shows referrers in the top decile for math and reading based on admin data. Second bar is the share of top decile in their networks. Third column shows the share of top decile among the referrals made. We test differences between proportions across these three groups using two-sample tests of proportions. For both math and reading scores, the differences between Sample and Network ( $p < 0.001$ ), Sample and Referrals ( $p < 0.005$ ), and Network and Referrals ( $p < 0.001$ ) are all statistically significant.

Figure 3: Participant network performance by subject and SES



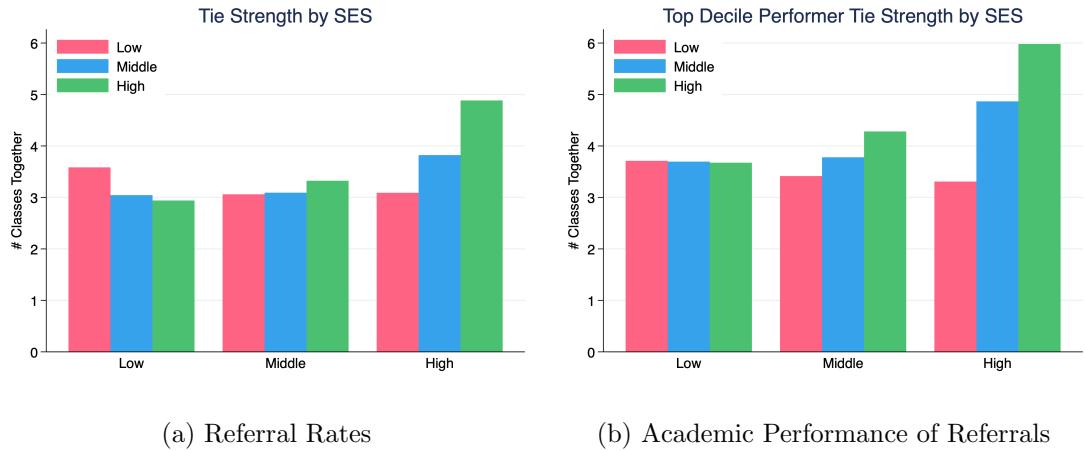
*Note:* This figure displays the network average math and reading z-scores across referrer SES. We test differences between math and reading scores within using paired  $t$ -tests. For both math and reading scores, differences between Low and Middle SES ( $p < 0.001$ ), Low and High SES ( $p < 0.001$ ), and Middle and High SES ( $p = 0.001$ ) are all statistically significant.

Figure 4: Participant network composition by SES



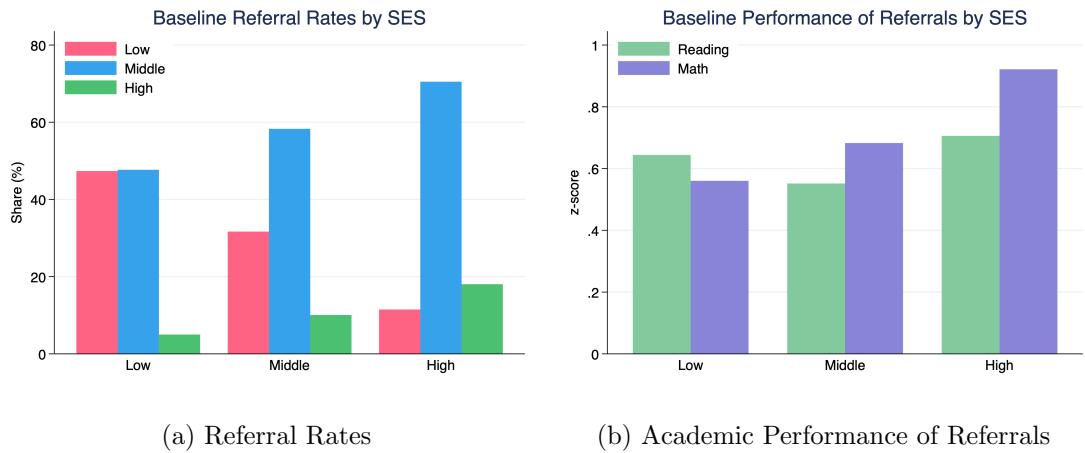
*Note:* This figure displays the composition of networks by SES. We test differences in proportions of peer connections across SES groups using two-sample tests of proportions. All differences are statistically significant ( $p < 0.001$ ): Low SES students are more likely to connect with Low SES peers than Middle or High SES students; Middle SES students form more connections with Middle SES peers than Low SES students; and High SES students have the highest proportion of High SES connections. These patterns reveal strong homophily in network formation across all SES groups.

Figure 5: Baseline Referral Patterns by SES



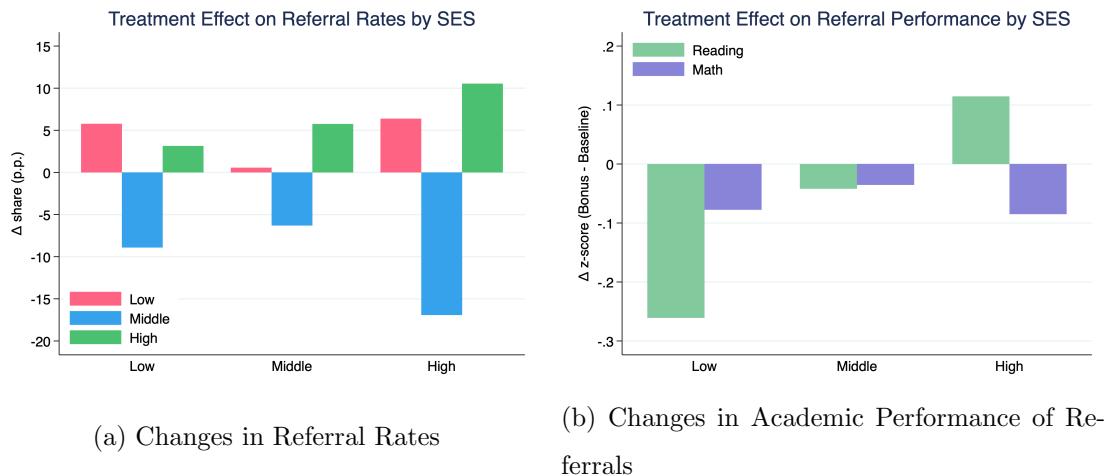
*Note:* The left panel shows the availability of SES groups across socioeconomic strata. The right panel shows the availability of top decile performers within each SES group.

Figure 6: Baseline Referral Patterns by SES



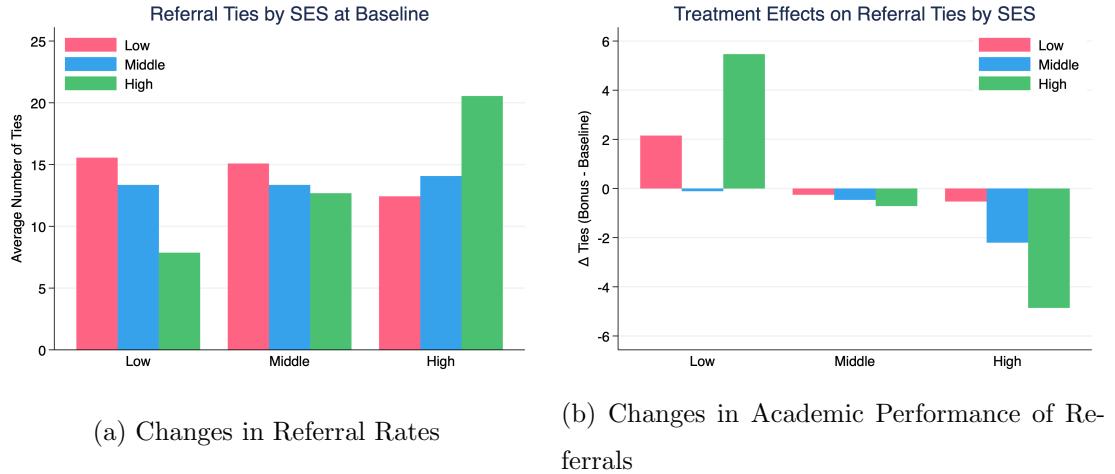
*Note:* The left panel shows the distribution of referrals across socioeconomic strata in the baseline condition. The right panel shows the average standardized math and reading scores of referred students byreferrer's SES.

Figure 7: Treatment Effects on Referral Patterns



*Note:* The left panel shows the changes in referral rates across socioeconomic strata (bonus minus baseline). The right panel shows the differences in average standardized math and reading scores of referred students by referrer's SES.

Figure 8: Treatment Effects on Tie Strength



(a) Changes in Referral Rates

(b) Changes in Academic Performance of Referrals

*Note:* The left panel shows the changes in referral rates across socioeconomic strata (bonus minus baseline). The right panel shows the differences in average standardized math and reading scores of referred students by referrer's SES.

Table 6: SES shares by SES and referral status

	Baseline		Bonus	
	Not Referred	Referred	Not Referred	Referred
Low-SES	0.361	0.473	0.368	0.531
Middle-SES	0.527	0.583	0.515	0.520
High-SES	0.201	0.180	0.193	0.286
Observations	131,777	699	123,878	643

Table 7: SES shares in Verbal

	Top Decile	Availability	Referred	
			Baseline	Bonus
Low-SES	0.301	0.398	0.483	0.508
Middle-SES	0.460	0.438	0.595	0.527
High-SES	0.239	0.282	0.161	0.259
Observations	385	25,196	147	128

Table 8: SES shares in Math

	Top Decile	Availability	Referred	
			Baseline	Bonus
Low-SES	0.318	0.398	0.464	0.554
Middle-SES	0.445	0.428	0.570	0.512
High-SES	0.237	0.278	0.200	0.310
Observations	355	23,883	153	130

Table 9: Verbal performance (z-score) of Referred Students

	Baseline	Bonus	Total
Low-SES	0.644	0.383	0.513
Middle-SES	0.551	0.509	0.530
High-SES	0.705	0.820	0.763
Observations	351	322	673

Table 10: Math performance (z-score) of Referred Students

	Baseline	Bonus	Total
Low-SES	0.560	0.483	0.521
Middle-SES	0.683	0.647	0.665
High-SES	0.921	0.836	0.879
Observations	348	321	669

<sup>14</sup> **5 Conclusion**

<sup>14</sup>

## References

16 Beaman, L., Keleher, N., & Magruder, J. (2018). Do Job Networks Disadvantage 16  
17 Women? Evidence from a Recruitment Experiment in Malawi. *Journal of Labor* 17  
18 *Economics*, 36(1), 121–157. doi: 10.1086/693869 18

<sup>19</sup> **A Additional Figures and Tables**

<sup>19</sup>

<sup>20</sup> **A.1 Additional Figures**

<sup>20</sup>

21    **B   Experiment**

21

22    We include the English version of the instructions used in Qualtrics. Participants saw 22  
23    the Spanish version. Horizontal lines in the text indicate page breaks and clarifying 23  
24    comments are inside brackets. 24

25    **Consent**

25

26    You have been invited to participate in this decision-making study. This study is directed 26  
27    by [omitted for anonymous review] and organized with the support of the Social Bee Lab 27  
28    (Social Behavior and Experimental Economics Laboratory) at UNAB. 28

29    In this study, we will pay **one (1)** out of every **ten (10)** participants, who will be 29  
30    randomly selected. Each selected person will receive a fixed payment of **70,000** (seventy 30  
31    thousand pesos) for completing the study. Additionally, they can earn up to **270,000** 31  
32    (two hundred and seventy thousand pesos), depending on their decisions. So, in total, 32  
33    if you are selected to receive payment, you can earn up to **340,000** (three hundred and 33  
34    forty thousand pesos) for completing this study. 34

35    If you are selected, you can claim your payment at any Banco de Bogotá office by 35  
36    presenting your ID. Your participation in this study is voluntary and you can leave the 36  
37    study at any time. If you withdraw before completing the study, you will not receive 37  
38    any payment. 38

39    The estimated duration of this study is 20 minutes. 39

40    The purpose of this study is to understand how people make decisions. For this, we will 40  
41    use administrative information from the university such as the SABER 11 test scores of 41  
42    various students (including you). Your responses will not be shared with anyone and your 42  
43    participation will not affect your academic records. To maintain strict confidentiality, the 43  
44    research results will not be associated at any time with information that could personally 44

45 identify you. 45

46 There are no risks associated with your participation in this study beyond everyday risks. 46  
47 However, if you wish to report any problems, you can contact Professor [omitted for 47  
48 anonymous review]. For questions related to your rights as a research study participant, 48  
49 you can contact the IRB office of [omitted for anonymous review]. 49

50 By selecting the option “I want to participate in the study” below, you give your con- 50  
51 sent to participate in this study and allow us to compare your responses with some 51  
52 administrative records from the university. 52

- 53 • I want to participate in the study [advances to next page] 53  
54 • I do not want to participate in the study 54

55 —————— 55

## 56 Student Information 56

57 Please write your student code. In case you are enrolled in more than one program 57  
58 simultaneously, write the code of the first program you entered: 58

59 [Student ID code] 59

60 What semester are you currently in? 60

61 [Slider ranging from 1 to 11] 61

62 —————— 62

63 [Random assignment to treatment or control] 63

64 **Instructions**

64

65 The instructions for this study are presented in the following video. Please watch it 65  
66 carefully. We will explain your participation and how earnings are determined if you are 66  
67 selected to receive payment. 67

68 [Treatment-specific instructions in video format] 68

69 If you want to read the text of the instructions narrated in the video, press the “Read 69  
70 instruction text” button. Also know that in each question, there will be a button with 70  
71 information that will remind you if that question has earnings and how it is calculated, 71  
72 in case you have any doubts. 72

73 • I want to read the instructions text [text version below] 73

74 —————— 74

75 In this study, you will respond to three types of questions. First, are the belief questions. 75  
76 For belief questions, we will use as reference the results of the SABER 11 test that you 76  
77 and other students took to enter the university, focused on three areas of the exam: 77  
78 mathematics, reading, and English. 78

79 For each area, we will take the scores of all university students and order them from 79  
80 lowest to highest. We will then group them into 100 percentiles. The percentile is a 80  
81 position measure that indicates the percentage of students with an exam score that is 81  
82 above or below a value. 82

83 For example, if your score in mathematics is in the 20th percentile, it means that 20 83  
84 percent of university students have a score lower than yours and the remaining 80 percent 84  
85 have a higher score. A sample belief question is: “compared to university students, in 85  
86 what percentile is your score for mathematics?” 86

87 If your answer is correct, you can earn 20 thousand pesos. We say your answer is correct 87

88 if the difference between the percentile you suggest and the actual percentile of your  
89 score is not greater than 7 units. For example, if you have a score that is in the 33rd  
90 percentile and you say it is in the 38th, the answer is correct because the difference is  
91 less than 7. But if you answer that it is in the 41st, the difference is greater than 7 and  
92 the answer is incorrect. 92

93 The second type of questions are recommendation questions and are also based on the  
94 mathematics, reading, and English areas of the SABER 11 test. We will ask you to think  
95 about the students with whom you have taken or are taking classes, to recommend from  
96 among them the person you consider best at solving problems similar to those on the  
97 SABER 11 test. 97

98 When you start typing the name of your recommended person, the computer will show  
99 suggestions with the full name, program, and university entry year of different students.  
100 Choose the person you want to recommend. If the name doesn't appear, check that you  
101 are writing it correctly. Do not use accents and use 'n' instead of 'ñ'. If it still doesn't  
102 appear, it may be because that person is not enrolled this semester or because they did  
103 not take the SABER 11 test. In that case, recommend someone else. 103

104 You can earn up to 250,000 pesos for your recommendation. We will multiply your  
105 recommended person's score by 100 pesos if they are in the first 50 percentiles. We will  
106 multiply it by 500 pesos if your recommended person's score is between the 51st and  
107 65th percentile. If it is between the 66th and 80th percentile, we will multiply your  
108 recommended person's score by 1000 pesos. If the score is between the 81st and 90th  
109 percentile, you earn 1500 pesos multiplied by your recommended person's score. And if  
110 the score is between the 91st and 100th percentile, we will multiply your recommended  
111 person's score by 2500 pesos to determine the earnings. 111

112 The third type of questions are information questions and focus on aspects of your  
113 personal life or your relationship with the people you have recommended. 112  
113

<sup>114</sup> **Earnings**

<sup>114</sup>

<sup>115</sup> Now we will explain who gets paid for participating and how the earnings for this study <sup>115</sup>  
<sup>116</sup> are assigned. The computer will randomly select one out of every 10 participants to pay <sup>116</sup>  
<sup>117</sup> for their responses. For selected individuals, the computer will randomly choose one of <sup>117</sup>  
<sup>118</sup> the three areas, and from that chosen area, it will pay for one of the belief questions. <sup>118</sup>

<sup>119</sup> Similarly, the computer will randomly select one of the three areas to pay for one of the <sup>119</sup>  
<sup>120</sup> recommendation questions. <sup>120</sup>

<sup>121</sup> **Additionally, if you are selected to receive payment, your recommended per- <sup>121</sup>  
son in the chosen area will receive a fixed payment of 100 thousand pesos. <sup>122</sup>  
[Only seen if assigned to the treatment] <sup>123</sup>**

<sup>124</sup> Each person selected to receive payment for this study can earn: up to 20 thousand pesos <sup>124</sup>  
<sup>125</sup> for one of the belief questions, up to 250 thousand pesos for one of the recommendation <sup>125</sup>  
<sup>126</sup> questions, and a fixed payment of 70 thousand pesos for completing the study. <sup>126</sup>

<sup>127</sup> Selected individuals can earn up to 340 thousand pesos. <sup>127</sup>

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<sup>128</sup> <sup>128</sup> [Participants go through all three Subject Areas in randomized order] <sup>129</sup>

<sup>130</sup> **Subject Areas**

<sup>130</sup>

<sup>131</sup> **Critical Reading** <sup>131</sup>

<sup>132</sup> For this section, we will use as reference the Critical Reading test from SABER 11, which <sup>132</sup>  
<sup>133</sup> evaluates the necessary competencies to understand, interpret, and evaluate texts that <sup>133</sup>  
<sup>134</sup> can be found in everyday life and in non-specialized academic fields. <sup>134</sup>

<sup>135</sup> [Clicking shows the example question from SABER 11 below] <sup>135</sup>

136 Although the democratic political tradition dates back to ancient Greece, political 136  
137 thinkers did not address the democratic cause until the 19th century. Until then, democ- 137  
138 racy had been rejected as the government of the ignorant and unenlightened masses. 138  
139 Today it seems that we have all become democrats without having solid arguments in 139  
140 favor. Liberals, conservatives, socialists, communists, anarchists, and even fascists have 140  
141 rushed to proclaim the virtues of democracy and to show their democratic credentials 141  
142 (Andrew Heywood). According to the text, which political positions identify themselves 142  
143 as democratic? 143

- 144     • Only political positions that are not extremist 144  
145     • The most recent political positions historically 145  
146     • The majority of existing political positions 146  
147     • The totality of possible political currents 147

148 —————— 148

## 149   **Mathematics** 149

150 This section references the Mathematics test from SABER 11, which evaluates people's 150  
151 competencies to face situations that can be resolved using certain mathematical tools. 151

152 [Clicking shows the example question from SABER 11 below] 152

153 A person living in Colombia has investments in dollars in the United States and knows 153  
154 that the exchange rate of the dollar against the Colombian peso will remain constant 154  
155 this month, with 1 dollar equivalent to 2,000 Colombian pesos. Their investment, in 155  
156 dollars, will yield profits of 3% in the same period. A friend assures them that their 156  
157 profits in pesos will also be 3%. Their friend's statement is: 157

- 158     • Correct. The proportion in which the investment increases in dollars is the same 158  
159         as in pesos. 159

- Incorrect. The exact value of the investment should be known.
  - Correct. 3% is a fixed proportion in either currency.
  - Incorrect. 3% is a larger increase in Colombian pesos.

163

163

English

165 This section uses the English test from SABER 11 as a reference, which evaluates that 165  
166 the person demonstrates their communicative abilities in reading and language use in 166  
167 this language. 167

<sup>168</sup> [Clicking shows the example question from SABER 11 below]

169 Complete the conversations by marking the correct option.

- Conversation 1: I can't eat a cold sandwich. It is horrible!
    - I hope so.
    - I agree.
    - I am not.
  - Conversation 2: It rained a lot last night!
    - Did you accept?
    - Did you understand?
    - Did you sleep?

178

178

[Following parts are identical for all Subject Areas and are not repeated here for brevity] 179

180 Your Score

181 Compared to university students, in which percentile do you think your [Subject Area] 181  
182 test score falls (1 is the lowest percentile and 100 the highest)? 182

<sup>183</sup> [Clicking shows the explanations below] 183

<sup>184</sup> How is a percentile calculated? 184

185 A percentile is a position measurement. To calculate it, we take the test scores for all 185  
186 students currently enrolled in the university and order them from lowest to highest. The 186  
187 percentile value you choose refers to the percentage of students whose score is below 187  
188 yours. For example, if you choose the 20th percentile, you're indicating that 20% of 188  
189 students have a score lower than yours and the remaining 80% have a score higher than 189  
190 yours.

<sup>191</sup> What can I earn for this question? 191

192 For your answer, you can earn **20,000 (twenty thousand) PESOS**, but only if the 192  
193 difference between your response and the correct percentile is less than 7. For example, if 193  
194 the percentile where your score falls is 33 and you respond with 38 (or 28), the difference 194  
195 is 5 and the answer is considered correct. But if you respond with 41 or more (or 25 or 195  
196 less), for example, the difference would be greater than 7 and the answer is incorrect. 196

<sup>197</sup> Please move the sphere to indicate which percentile you think your score falls in:

198 [Slider with values from 0 to 100] 198

200 **Recommendation**

200

201 Among the people with whom you have taken any class at the university, who is your 201  
202 recommendation for the [Subject Area] test? Please write that person's name in the 202  
203 box below: 203

204 **Important:** You will not be considered for payment unless the recommended 204  
205 person is someone with whom you have taken at least one class during your 205  
206 studies. 206

207 Your response is only a recommendation for the purposes of this study and we will **not** 207  
208 contact your recommended person at any time. 208

209 [Clicking shows the explanations below] 209

210 Who can I recommend? 210

211 Your recommendation **must** be someone with whom you have taken (or are taking) a 211  
212 class. If not, your answer will not be considered for payment. The person you recommend 212  
213 will not be contacted or receive any benefit from your recommendation. 213

214 As you write, you will see up to 7 suggested student names containing the letters you 214  
215 have entered. The more you write, the more accurate the suggestions will be. Please 215  
216 write **without** accents and use the letter 'n' instead of 'ñ'. If the name of the person 216  
217 you're writing doesn't appear, it could be because you made an error while writing the 217  
218 name. 218

219 If the name is correct and still doesn't appear, it could be because the student is not en- 219  
220 rolled this semester or didn't take the SABER 11 test. In that case, you must recommend 220  
221 someone else. 221

222 My earnings for this question? 222

223 For your recommendation, you could receive earnings of up to 250,000 (two hundred and 223  
224 fifty thousand) PESOS. The earnings are calculated based on your recommendation's 224  
225 score and the percentile of that score compared to other UNAB students, as follows: 225

- 226 • We will multiply your recommendation's score by \$100 (one hundred) pesos if it's 226  
227 between the 1st and 50th percentiles 227
- 228 • We will multiply your recommendation's score by \$500 (five hundred) pesos if it's 228  
229 between the 51st and 65th percentiles 229
- 230 • We will multiply your recommendation's score by \$1000 (one thousand) pesos if 230  
231 it's between the 66th and 80th percentiles 231
- 232 • We will multiply your recommendation's score by \$1500 (one thousand five hun- 232  
233 dred) pesos if it's between the 81st and 90th percentiles 233
- 234 • We will multiply your recommendation's score by \$2500 (two thousand five hun- 234  
235 dred) pesos if it's between the 91st and 100th percentiles 235

236 This is illustrated in the image below: 236

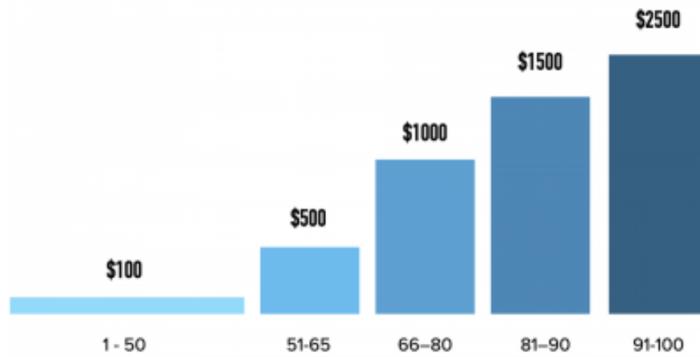


Figure B.1: Earnings for recommendation questions

237 For example, if your recommendation got 54 points and the score is in the 48th percentile, 237

238 you could earn  $54 \times 100 = 5400$  PESOS. But, if the same score of 54 points were in the 238  
239 98th percentile, you could earn  $54 \times 2500 = 135,000$  PESOS. 239

240 [Text field with student name suggestions popping up as participant types] 240

241 \_\_\_\_\_ 241

## 242 Relationship with your recommendation 242

243 How close is your relationship with your recommendedation: “[Name of the student 243  
244 selected from earlier]”? (0 indicates you are barely acquaintances and 10 means you are 244  
245 very close) 245

246 [Slider with values from 0 to 10] 246

247 \_\_\_\_\_ 247

## 248 Your recommendation's score 248

249 Compared to university students, in which percentile do you think [Name of the student 249  
250 selected from earlier]’s score falls in the [Subject Area] test (1 is the lowest percentile 250  
251 and 100 the highest)? 251

252 [Clicking shows the explanations below] 252

253 How is a percentile calculated? 253

254 A percentile is a position measurement. To calculate it, we take the test scores for all 254  
255 students currently enrolled in the university and order them from lowest to highest. The 255  
256 percentile value you choose refers to the percentage of students whose score is below 256  
257 yours. For example, if you choose the 20th percentile, you’re indicating that 20% of 257  
258 students have a score lower than yours and the remaining 80% have a score higher than 258  
259 yours. 259

260 What can I earn for this question?

260

261 For your answer, you can earn **20,000 (twenty thousand) PESOS**, but only if the 261  
262 difference between your response and the correct percentile is less than 7. For example, 262  
263 if the percentile where your recommended person's score falls is 33 and you respond with 263  
264 38 (or 28), the difference is 5 and the answer is considered correct. But if you respond 264  
265 with 41 or more (or 25 or less), for example, the difference would be greater than 7 and 265  
266 the answer is incorrect. 266

267 Please move the sphere to indicate which percentile you think your recommended per- 267  
268 son's score falls in: 268

269 [Slider with values from 0 to 100] 269

270 ————— 270

## 271 Demographic Information 271

272 What is the highest level of education achieved by your father? 272

273 [Primary, High School, University, Graduate Studies, Not Applicable] 273

274 What is the highest level of education achieved by your mother? 274

275 [Primary, High School, University, Graduate Studies, Not Applicable] 275

276 Please indicate the socio-economic group to which your family belongs: 276

277 [Group A (Strata 1 or 2), Group B (Strata 3 or 4), Group C (Strata 5 or 6)] 277

278 ————— 278

**279 UNAB Students Distribution**

279

280 Thinking about UNAB students, in your opinion, what percentage belongs to each socio- 280  
281 economic group? The total must sum to 100%: 281

282 [Group A (Strata 1 or 2) percentage input area] 282

283 [Group B (Strata 3 or 4) percentage input area] 283

284 [Group C (Strata 5 or 6) percentage input area] 284

285 [Shows sum of above percentages] 285

---

286 \_\_\_\_\_ 286

**287 End of the Experiment** 287

288 Thank you for participating in this study. 288

289 If you are chosen to receive payment for your participation, you will receive a confirma- 289  
290 tion to your UNAB email and a link to fill out a form with your information. The process 290  
291 of processing payments is done through Nequi and takes approximately 15 business days, 291  
292 counted from the day of your participation. 292

293 [Clicking shows the explanations below] 293

294 Who gets paid and how is it decided? 294

295 The computer will randomly select one out of every ten participants in this study to be 295  
296 paid for their decisions. 296

297 For selected individuals, the computer will randomly select one area: mathematics, 297  
298 reading, or English, and from that area will select one of the belief questions. If the 298  
299 answer to that question is correct, the participant will receive 20,000 pesos. 299

300 The computer will randomly select an area (mathematics, critical reading, or English) to 300  
301 pay for one of the recommendation questions. The area chosen for the recommendation 301  
302 question is independent of the area chosen for the belief question. The computer will 302  
303 take one of the two recommendations you have made for the chosen area. Depending on 303  
304 your recommendation's score, you could win up to 250,000 pesos. 304

305 Additionally, people selected to receive payment for their participation will have a fixed 305  
306 earnings of 70,000 pesos for completing the study. 306

307 \_\_\_\_\_ 307

## 308 **Participation** 308

309 In the future, we will conduct studies similar to this one where people can earn money 309  
310 for their participation. The participation in these studies is by invitation only. Please 310  
311 indicate if you are interested in being invited to other studies similar to this one: 311

312 [Yes, No] 312