# What Drives Participation in Non-Formal Education in MENA? Evidence from a survey experiment

Michael Robbins and Alon Yaktar University of Michigan



This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the University of Michigan and do not necessarily reflect the views of USAID or the United States Government.

#### **Overview**

Across the Middle East and North Africa, a number of Arab youth are participating in educational programs outside the formal system. As detailed in 2016 surveys conducted by the Arab Barometer, the reasons for participation vary, but are often linked with the goal of increasing job opportunities and the likelihood of employment. However, many citizens perceive such opportunities remain out of reach for them due to cost or other potential barriers.

Targeting educational programs outside the formal system to meet the needs of youth across MENA requires understanding how potential participants rate the attractiveness of such programs. In order to examine with better precision how program attributes shape respondents' motivation to participate in these programs, we designed an original survey experiment that was conducted in Lebanon, Jordan, and the West Bank asking respondents to choose between specific types of programs to determine what makes some more attractive than others. For example, some hypothetical programs focused on computers while others taught languages or the length of classroom time varied between one and five hours per week. Each respondent was presented with a choice between two such programs and asked to select which he or she would prefer.

The results from this analysis make clear that the most important motivation for participation is the degree of recognition received at the end of the program. Participants from all backgrounds are far more likely to choose a program with a degree or certificate at the end compared with one that does not offer such accreditation. Moreover, the type of recognition also matters; programs that offer a certificate from a national organization are more favored than those that offer one only from the institution itself. Meanwhile, those that offer a certificate from an international institution are the most preferred.

A second factor which effects participant participation is the type of program being offered. In Jordan and the West Bank, respondents are less likely to choose a program focused on literacy. In part, this may be related to the fact that few respondents among those selected have trouble reading or writing.<sup>1</sup> Additionally, Jordanians are less likely to favor courses that emphasizing emotional literacy compared with other topics. However, programs focused on topics such as computers, languages, critical thinking, job skills and self-improvement are about equally preferred among survey respondents.

By comparison, no other factor has a significant influence on preferences. Overall, respondents are effectively indifferent to the distance from their home, the number of hours spent each week in class, the duration of the full program, or the number of students enrolled. Notably, there is also limited evidence that high cost represents a negative

<sup>&</sup>lt;sup>1</sup> Only 18 percent of respondents had a primary education or less among the sample.

incentive to participation; in fact, it may make participation more likely on average. In the West Bank, programs that are free are somewhat more preferred than ones that cost the equivalent of US\$10 per month. The same is true of those costing US\$20, US\$30, or US\$40 each month. However, those that are the most expensive in the experiment – those costing US\$50 per month – are equally preferred by respondents to those that are free. Meanwhile, in Lebanon, programs that are free are, overall, somewhat less likely to be preferred than those charging tuition. Finally, in Jordan cost has virtually no effect on program preference.

Overall, these findings highlight strategies that can be used to promote engagement with educational opportunities outside the formal system. These programs are most likely to be successful when participants receive a degree or certificate of completion that is recognized at the national or international level. If the government or national associations provide accreditation for such efforts, it is more likely to encourage participation. Similarly, working with international partners such as universities or international associations are likely to encourage participation.

Second, these results make clear that the type of program which is most likely to be desired if it is linked with improving the likelihood of employment. Programs that appear more directly focused on job-related skills tend to be most popular. However, skills in critical thinking or emotional literacy can be taught in many formats, meaning students can increase their capacity to solve problems while also learning job-related skills. Again, marketing programs based on their likelihood of increasing chances of employment, regardless of the subject, is likely to encourage participation.

Third, the pricing of such programs merits careful consideration. Although free programs are beneficial for their open access to all, programs that are more expensive appear to be equally if not potentially more valued. Likely, more expensive programs are perceived as better or of higher quality than those that are free. Instead of promoting free programs, it may be beneficial to promote costly programs that offer scholarships to those in need as a means to encourage their participation in such programs. Institutions that organize educational opportunities outside the formal system may be more successful in promoting inclusion through scholarships than by marketing programs as cost free.

## **Survey Experiment**

In 2016, face-to-face nationally representative surveys were carried out as part of the Arab Barometer in countries across the Middle East and North Africa. These surveys included an extensive battery on education in the region, with a special focus on youth educational programs outside the formal system.

As a follow up to these surveys, the Arab Barometer team asked follow up surveys in three cases to respondents who were actively participating in educational programs outside the formal system. In Jordan, 211 surveys were conducted by the Center for Strategic Studies at the University of Jordan, in the West Bank 200 were conducted by the Palestinian Center for Policy and Survey Research, and in Lebanon 100 surveys were conducted by Statistics Lebanon.

The sampling strategy did not rely on random selection. In other words, the results are not designed to generalized to the national population. Instead, based on results from the Arab Barometer surveys, a number of respondents were identified who had participated in educational programs outside the formal system targeting youth and young adults. Using the names of the programs they had identified in previous research, research teams reached out to participants in non-randomly selected educational programs in each country. Participants in these programs, or related programs were then interviewed about their experience with educational programs outside the formal system.

A number of survey questions from the Arab Barometer were repeated, but the key addition was an experimental survey technique called conjoint analysis.<sup>2</sup> In this method, programs are broken down to seven possible attributes or features, listed in Table 1 below. Each respondent was shown pairs of programs that randomly varied by their specific attributes along these seven criteria. He or she was then asked to choose in which of the two programs they would be more interested to participate.

For example, a respondent may be shown the following pair of programs:

A program that teaches languages classes to 20 students over a period of 6 months, costs \$20 per month, lasts 1 hour per week with a 45 minutes travel, and awards a certificate from an international organization; or

 A program that teaches languages to 20 students over a period of 12 months, costs \$10 per month, lasts 1 hour per week with 15 minutes travel, and does not award a certificate.

<sup>&</sup>lt;sup>2</sup> For a technical explanation of this technique, see: Hainmueller, Jens, Daniel J. Hopkins, and Teppei Yamamoto. 2014. "Causal Inference in Conjoint Analysis: Understanding Multidimensional Choices via Stated Preference Experiments." Political Analysis 22 (1): 1–30. doi:10.1093/pan/mpt024.

2. The respondent then indicates whether he or she would be more interested in participating in program 1 or in program 2.

Table 1: Program	Attributes	Used in t	the Coni	oint Anal	vsis Experiment
rabie in rogram	7 100 01000	00000	cine conj		yoio Experimente

Program Type	Monthly Cost	Time from House
1) Computers	1) Free	1) 5 minutes
2) Languages	2) \$10	2) 15 minutes
3) Critical thinking	3) \$20	3) 30 minutes
4) Learning a job-related skill	4) \$30	4) 45 minutes
5) Understanding how to manage emotions	5) \$40	5) 1 hour
6) Literacy	6) \$50	
7) Self-improvement		
Length Each Week	Program Duration	Number of Students
1) 1 hour	1) 3 months	1) 1
2) 2 hours	2) 6 months	2) 10
3) 3 hours	3) 9 months	3) 20
4) 4 hours	4) 12 months	4) 30
5) 5 hours		5) 40
Recognition		
1) Do not receive a certificate		
2) Receive a certificate from the institution		
3) Receive a certificate from a national organization		
4) Receive a certificate from an international organization		

Our surveys asked each respondent to choose between six randomized pairs of programs in turn. In our sample of 511 respondents, this provides us with a total of 2,979 randomly generated pairs.<sup>3</sup> Using this large sample, we can analyze in isolation which specific attributes are consistently part of preferable programs, which are consistently part of rejected programs, and which show no consistent pattern. This method thus allows us to calculate statistically whether and by how much each specific attribute raised or lowered the probability of program participation.

#### Results

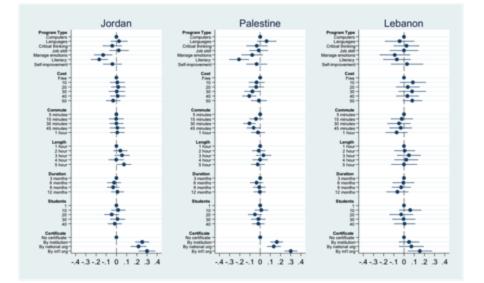
The results of this analysis, separated by country, are presented visually in Figure 1. In each graph, the vertical axis lists the various attributes tested in the experiment. For each attribute, the analysis produces a point estimate, illustrated by a circle, indicating the attribute's predicted effect on the likelihood of participation in a program. For example, a positive point estimate of 0.12 for a given attribute indicates that it raises the chances of participation by 12 percent. The lines on each side of the circles represent its confidence interval, the range in which we are statistically confident that the point estimate lies (at a 95 percent level). When the confidence interval includes the value of zero, marked by the vertical dashed line, we are uncertain that there is any effect and deem the attribute's effect statistically insignificant. Therefore, we are particularly interested in attributes whose confidence intervals do not overlap with zero, as in these instances we are able to conclude that there is a significant effect for this specific attribute.

Figure 1 presents the attributes' estimates separated by country. In all three countries, we do not see a significant effect of short-term attributes, including travel time, program duration, or number of students. The one minor exception is in the West Bank, where a commute of 30 minutes lowers the chances of participation by 10.5 percent compared to a five-minute commute.

Interestingly, respondents are also relatively indifferent to the cost of the program, which is contrary to national findings from the Arab Barometer. In both Jordan and Lebanon, we do not see a significant relationship between cost and willingness to participate. Almost all cost levels do not make a difference in the West Bank too, but a cost of \$40—the second-highest cost—does lower the chances of participation by 10.7 percent compared to a free program. However, the highest cost of \$50 does not show a similarly negative effect. A possible explanation may be a positive bias toward the most expensive program as an indicator of its prestige. Meanwhile, in Jordan, cost makes effectively no difference in likelihood of participation. And, in Lebanon, programs that are free are predicted to be less

<sup>&</sup>lt;sup>3</sup> In some cases respondents did not select between the two responses, said that he or she had no preference, or otherwise did not complete the experiment for a pair of choices. These 87 instances, totaling 2.8 percent of all pairings, were dropped from subsequent analysis.

preferred than those that charge a fee, albeit not at levels that are significant at standard levels.

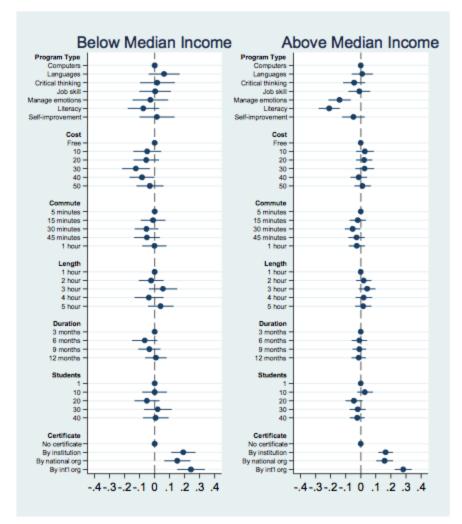


*Figure 1: Effects of Program Attributes on Selection Chances* 

Respondents do react to two long-term considerations: the program's type and recognition. The preferences on program type vary by country. In both Jordan and the West Bank, literacy programs are less valued, decreasing the chances of choosing these programs by 16.8 percent in Jordan and by 20.7 percent in the West Bank compared to computer programs, which is the baseline category. Respondents in Jordan also consistently reject emotion-management programs, which have a 13 percent lower chance of being selected compared to computer programs. Respondents in Lebanon, however, did not show a strong preference for any specific program types.

The second influential attribute in all three countries is the program's recognition. A certificate from an international organization consistently raises the chances of picking a given program: such a certificate increases the probability of participation by 30 percent in Jordan, by 30.2 percent in the West Bank, and by 15.6 percent in Lebanon compared to a program with no certificate. The appreciation of other certificates varies between the three countries, however. In Jordan, certificates from the institution or from a national organization have similarly positive effects, raising the odds of picking a program by 25.3 percent and by 21.8 percent, respectively, compared to no certificate from the institution raised the program's chances by 16.2 percent and a certificate from a national organization increased the odds by 13.4 percent compared to no certificate. In Lebanon, by contrast, these two certificate types do not increase the chances of picking a program compared to no certificate at all.

In sum, despite some country differences, the conjoint analysis exposes two common patterns. On the one hand, respondents are not driven by short-term costs in time and money. Tweaking a program's length, duration, distance, and even cost do not significantly change its appeal to respondents. On the other, respondents are positively driven by long-term program implications, namely its content and its external recognition. Programs that focus on advanced and applied skills—computers, languages, critical thinking, and self-improvement—fare better than programs that concentrate on emotional development and basic literacy skills. Similarly, programs that award a certificate, particularly one by an international organization, have a significantly larger appeal than programs that do not award certificates or, in most cases, locally recognized ones.



*Figure 2: Effects of Program Attributes on Selection Chances, Split by Income* 

In addition to country-level patterns, we also examine whether personal characteristics shape respondents' preferences across all three countries. In particular, we look into differences by income, age, and gender.

Figure 2 presents the estimated effects of program attributes split by income, with the left-hand panel including only respondents above the approximate median income (312 respondents) and the right-hand panel only respondents below it (134 respondents). Several notable findings stand out. First, an official certificate matters across income groups, although wealthier respondents have a stronger preference for a certificate by an international organization.

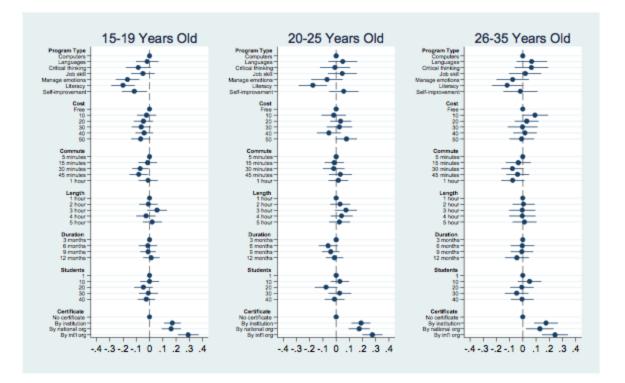
Second, wealthier respondents are more selective in the type of programs they prefer. Whereas poorer respondents show no statistically significant differences in their program preferences, wealthier ones consistently reject programs focused on emotion management (by 14.1 percent compared to computer programs) and literacy (by 20 percent compared to computer programs). These differences may reflect a stronger interest in advanced applied skills among wealthier respondents in lieu of more basic needs. Poorer respondents, by contrast, seem open to participating in programs of any type.

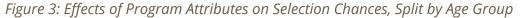
Third, cost matters more for poorer respondents, albeit with a relatively small effect. Whereas richer respondents are indifferent to program costs, poorer ones tend to reject programs that cost \$30 or \$40 dollars per week, lowering their participation chances, respectively, by 12.4 percent and 8.4 percent compared to free programs. However, poorer respondents are about as likely to participate in a program that costs \$50 per week compared to one that is free. Clearly, like for the national sample, poorer respondents worry that cost is an important consideration to participation in a program. Yet, it also appears that cost may signal to this group the quality of the program, as the relationship is a U-shaped curve; free programs and the most expensive programs are equally preferred while those costing levels in between are less preferred.

These results suggest that poorer respondents may be likely to accept programs that are free but also value programs that are expensive and may be willing to sacrifice to participate in an expensive, and presumably prestigious, program. For national and international organizations looking to promote such educational opportunities outside the formal system, it may be advantageous to note the high cost of such programs while offering scholarships to those in need to indicate both quality and alleviate cost concerns for potential participants.

Next, Figure 3 presents the estimated effect of program attributes split by age groups, with the left-hand panel including only 15-19 year-old people (109 respondents), the middle panel only 20-25 year-old people (151 respondents) and the right-hand panel only 26-35 year-old people (109 respondents). The key difference found between age groups is in their preferred program type. Respondents below the age of 20 consistently reject programs

dedicated to emotion management, literacy, and self-improvement, selecting instead more focused programs on computers, languages, critical thinking, and job-related skills. Thus, it appears that youth are more willing to engage in programs that appears to directly improve their job prospects. Meanwhile, although 20-25 year-old respondents also under prioritize literacy programs, older respondents largely show weaker differences on program types.

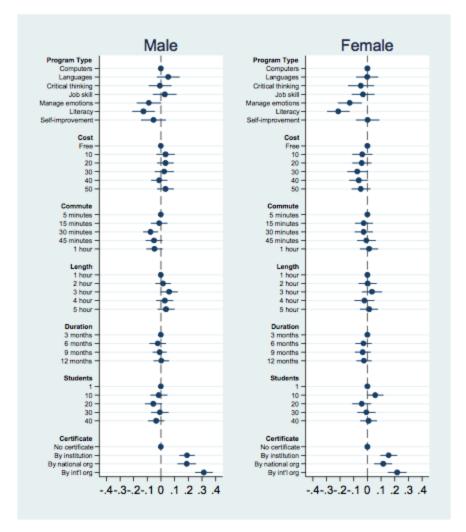


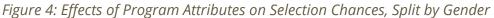


There are few significant differences between age groups in other aspects. However, it is worth noting that youth between 15-19 appear more sensitive regarding cost compared with older respondents. Among this demographic, free programs were preferred. This outcome may be linked to the fact that this age group is more likely to require support from a family member to cover the cost of programs. Additionally, the results suggest that length of commute may be of greater concern to youth (15-19) and the oldest cohort sampled (26-35) in this experiment.

Finally, Figure 4 presents the estimated effect of program attributes split by gender, with the left-hand panel including only male respondents (234 respondents) and the right-hand panel only female respondents (212 respondents). The results show few real differences between men and women. Both populations are less likely to participate in programs focused on emotion management or literacy, although female respondents have a somewhat stronger aversion than their male counterparts. In addition, both groups show strong preference for a formal certification, particularly by an international organization.

However, the results suggest that female respondents may be a bit more sensitive to cost considerations than their male counterparts. Men are either indifferent to cost or may have a slight preference for those that charge tuition over those that are free. Meanwhile, women are somewhat less likely to prefer programs that charge tuition over those that are free, suggesting that female participants may be worried about their ability to cover the costs of participation.





However, with this exception, there do not appear to be consistent differences by gender on program preferences. Overall, the results suggest that similarly designed programs outside the formal system are not more or less likely to attract male or female students based on the data collected in this experiment.

## **Recommendations**

Overall, there are three clear takeaways from this survey experiment among those actively participating in educational programs outside the formal system in Jordan, Lebanon and the West Bank:

- Recognition is the most important consideration for participants
- Programs that promote job-related skills are somewhat preferred
- Cost is not a major calculation in program type, although it is a greater concern for those from poorer backgrounds

Overall, individual differences have relatively little effect on their effect on program preferences. Income matters the most, as richer populations have stronger preferences for applied programs and for certificates by some international organizations compared. Poorer group, by contrast, are less selective and more sensitive to cost. Young age also matters, as younger respondents show stronger preferences for practical skills and recognized certificates. Gender, however, does not create notable differences in program preferences.

These results suggest that national and international organizations designing programs for settings outside the formal system should strongly consider the following:

- Partnering with national or international organizations that are recognized leaders in program category;
- Offer degrees or certificates that include the links with national and international organizations;
- Develop programmatic materials to highlight the program's value for job-related skills that match what potential employers are demanding from applicants;
- Advertise the cost of the program, but provide scholarships or grants to encourage participation by students from poorer backgrounds and youth;
- Consider proximity of the program to the target audience, especially for younger students.