We design and test financial incentives and a teaching intervention to improve COVID-19 knowledge soon after the onset of the pandemic.

**KEY LESSONS**

- Financial incentives and teaching interventions are effective strategies to improve learning about COVID-19.

- Contrary to expert predictions, our financial incentives and teaching interventions are complementary — there is a positive synergy when they are implemented together rather than separately.

- Policymakers should consider a cross-design of supply and demand interventions to improve understanding and knowledge of COVID-19 and possibly in other contexts.
Research design

What strategies are effective in motivating COVID-19 knowledge acquisition? We administered three interventions over the phone: 1) offering 5 MT for each correct answer to COVID-19 knowledge questions, 2) teaching via feedback on incorrect responses to COVID-19 knowledge questions, and 3) a joint intervention of both 1) and 2). We measure our interventions’ effects using a randomized controlled trial across 76 communities in Central Mozambique between July and November 2020. Our outcome measure is a COVID-19 knowledge test with questions about general COVID-19 information, protection methods, and government policies. For further details on this work including project timeline, visit our website at www.fordschool.umich.edu/mozambique-research or read the full study.

Teaching and financial incentives: substitutes or complements?

We find that, when implemented separately, both the financial incentives and teaching interventions had a positive effect on COVID-19 knowledge. Prior to testing the interventions, we asked experts to predict how effective each of the three interventions would be at increasing knowledge. Experts underestimated the joint effects of our interventions, predicting the joint effect of treatment 3) to be less than the additive effect of treatments 1) and 2). Yet we find that, contrary to expert predictions, the joint interventions had an even larger effect on knowledge than the standalone effects added together (see Figure 1). This suggests a positive synergy between these interventions.

FIGURE 1: COMPLEMENTARITY OF THE KNOWLEDGE INTERVENTION
Conclusions and recommendations

Figure 2 shows that each intervention is relatively cost-effective but that the standalone teaching treatment has the greatest return on improved knowledge per dollar spent, though this may vary in other contexts. Overall, our study demonstrates that cross-designed education initiatives that combine both teaching and financial incentives can have the greatest effect on increasing knowledge of COVID-19 precautionary measures and government policy. Policymakers should consider implementing similarly designed policies to combat misinformation.

**FIGURE 2: COST-EFFECTIVENESS OF THE KNOWLEDGE INTERVENTIONS**

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Cost per percentage point increase in COVID-19 related knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning incentive</td>
<td>3.71</td>
</tr>
<tr>
<td>Teaching</td>
<td>0.98</td>
</tr>
<tr>
<td>Incentive and teaching</td>
<td>1.24</td>
</tr>
</tbody>
</table>

All costs in Figure 2 are represented in U.S dollars (1USD = 62MT). For estimation methodology and detailed results on the knowledge interventions, please see our working paper here.

For survey instruments, summary statistics, additional analyses, and future updates please see our website: www.fordschool.umich.edu/mozambique-research

Questions? Comments?
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