Title:
The cat is out of the bag: Using Mouselab to expose HIV discrimination

SUMMARY

Objective
HIV stigma has been touted as a barrier to HIV prevention and care, but there is no consensus on how best to measure stigma. Stigma attitudes expressed in surveys may also not represent real behavior. Moreover, even if potentially stigmatizing behavior is observed, HIV may not be the main reason for this behavior. This study breaks new ground by using experimental economics games combined with surveys and a process tracing tool (Mouselab) to detect HIV discrimination.

Method
358 health clinic clients around Witbank, South Africa, played the Trust Game three months after HIV testing. Each player was paired and assigned a role of Player A (first mover) or Player B (second mover) in an anonymous one-shot Trust Game. Each player scrolled with a Mouselab equipped computer to open one button at a time to reveal six possible characteristics, including HIV status, of the paired player. After practice-scrolling, each player scrolled to view the paired player's characteristics and then made Trust Game decisions. Afterwards, players answered a survey that included an HIV stigma instrument validated for South Africa. We used interval regression to model A's behavior in terms of the amount player A transferred to player B. Covariates included players' characteristics, player pairs' HIV configurations (HIV+/HIV+, HIV+/HIV-, HIV-/HIV+, and HIV-/HIV-), a stigma survey instrument score, expected return offers from B to A, and time-to-HIV (TTH). TTH measured the length of time it took player A to uncover B's HIV status.

Results
The mean transfer amount from A to B was around R30 out of R50, and it did not differ by players' HIV status. Raw TTH ranged from just under a second to over half a minute. HIV- A players with a short TTH transferred R8 less to HIV+ B players ($p<.01$), relative to how much an otherwise identical HIV- A player sent to an HIV- B player. Although the stigma survey instrument score was significantly related to TTH, with high stigma score associated with fast TTH, the survey instrument score alone was not significant in predicting transfers from A to B.

Conclusions
HIV- A players who quickly opened the HIV box to view B's HIV status discriminated against HIV+ B players in the Trust Game. HIV stigma survey instrument scores alone did not detect HIV discrimination. Trust Game alone also did not detect HIV discrimination. Mouselab allows researchers to 'cheat' by using otherwise unobserved behavioral patterns to better detect stigma.

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