

Hesitancy in Uptake and Recommendation of COVID-19 Vaccines by US Healthcare Workers



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Background

The COVID-19 pandemic has brought vaccination to the forefront of discourse on public health. The rapid speed of COVID-19 vaccine development, utilization of novel technology, and an atmosphere of politicized misinformation have created a perfect storm for vaccine hesitancy. As early adopters of vaccination, HCWs set an example for the general population; as trusted sources of medical information, they educate and inform. However, comparatively little work has investigated HCWs' attitudes toward vaccination and how those attitudes drive their recommendation behavior.

The goals of this study:

- Better understand HCWs beliefs on vaccinations
- What messaging themes improved confidence in COVID vaccination
- What messaging themes improved confidence in recommending the vaccine

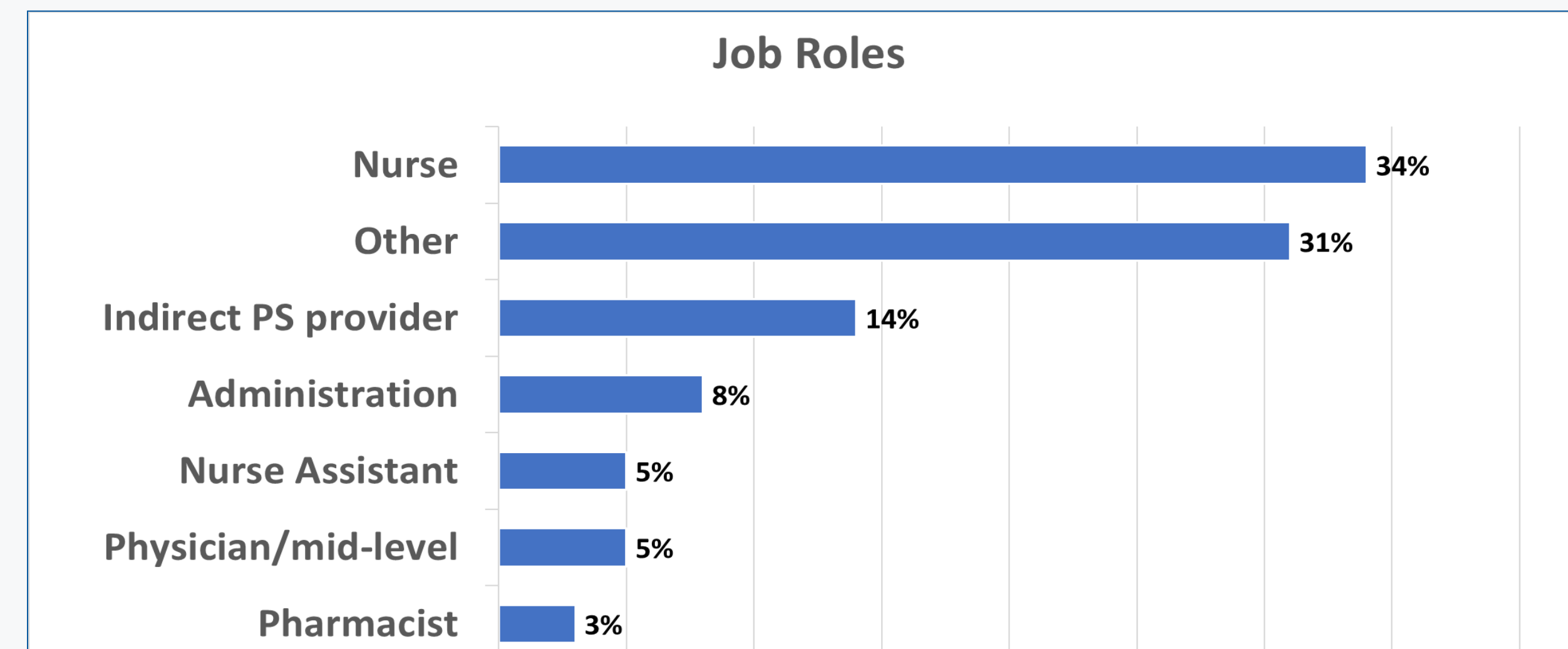
Methods

- Developed a survey within Qualtrics®XM in collaboration with Center for Advanced Hindsight, behavioral economists
- Emailed using individual hospital listservs within DASON
- Survey randomized participants to see one of 3 different messages or control (no message)

Message Theme	Brief Description
Process Safety	Rapid development and testing of COVID-19 vaccines were made possible through a combined effort worldwide - vaccines are both safe and effective.
Appeal to Normalcy	What do you miss about pre-pandemic life? How much would you pay for it back? For life to return to normal, a vaccine is the key
Signal Detection Theory (SDT)/ Risk assessment	Decisions involving uncertain outcomes create two ways to be wrong: Which risk would you rather take? 1-Don't get a vaccine (don't think you'll get sick) when you needed one 2-Get a vaccine (think you will get sick) when you didn't need one

Results

- 674 NC hospital employees responded in February 2021, reported 80% vaccine acceptance rate
- 84% Female, 85% White
- 43% Republican, 25% Independent, 17% Democrat, 13% no preference



Results

- Those who had not accepted, the top reasons cited were “wait to ensure its safe”, “created too quickly”, “wait to see effectiveness”, and “political interference”
- Those who accepted, there was no difference in rating by message for personal uptake, except slight preference for SDT (Fig 1)
- When asked which message would help your patients feel more comfortable getting the vaccine, Process ranked higher (Fig 2)
- When asked would you share this passage with your patients (e.g. by handing out a flyer, hanging a poster, or talking to a patient directly, Process again was significantly rated higher (Fig 3)
- Rating the passage as trustworthy or believable was positively correlated with sharing (Pearson coefficient $r=0.6$) (Fig 4)

Figure 1:

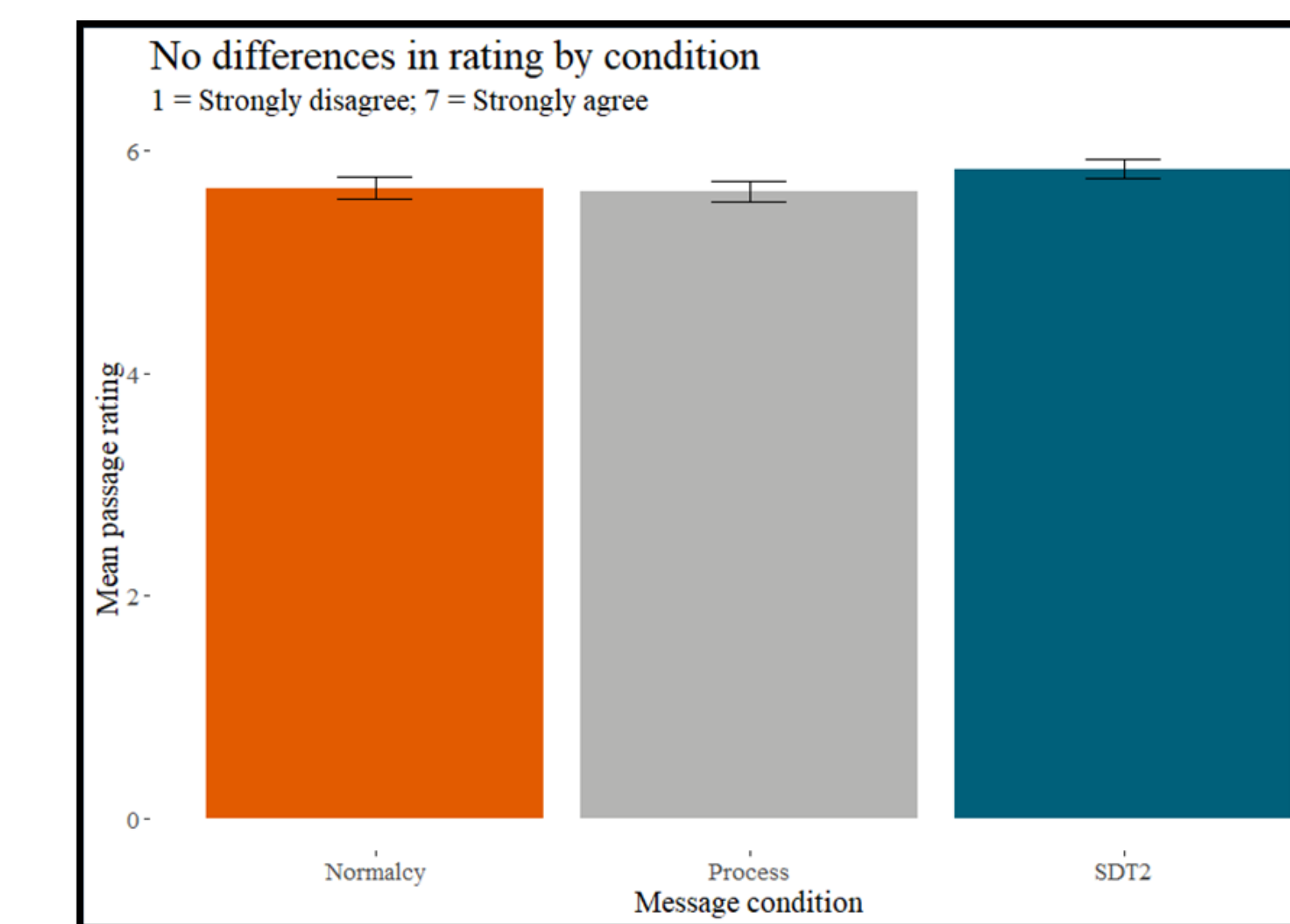


Figure 2:

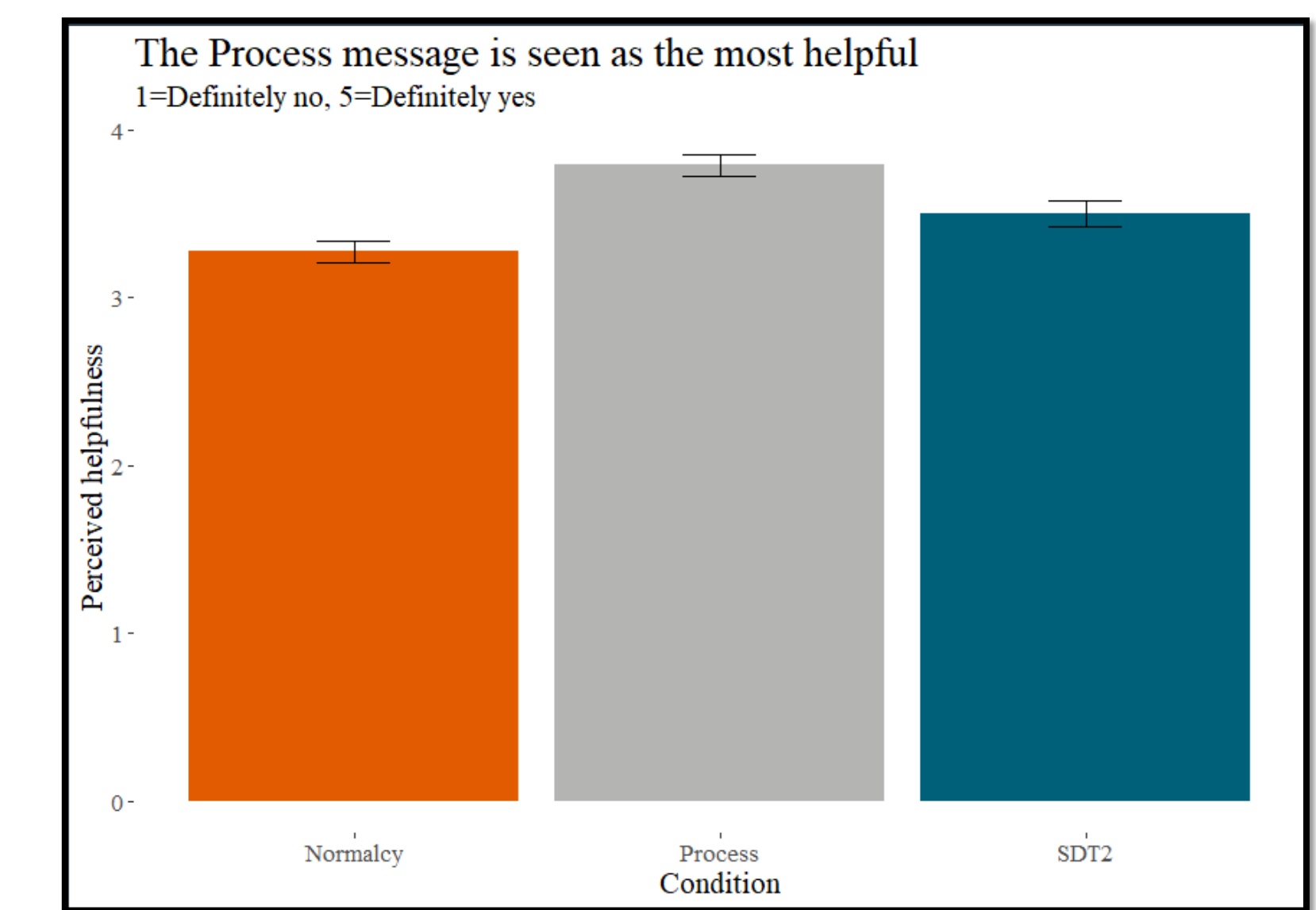


Figure 3:

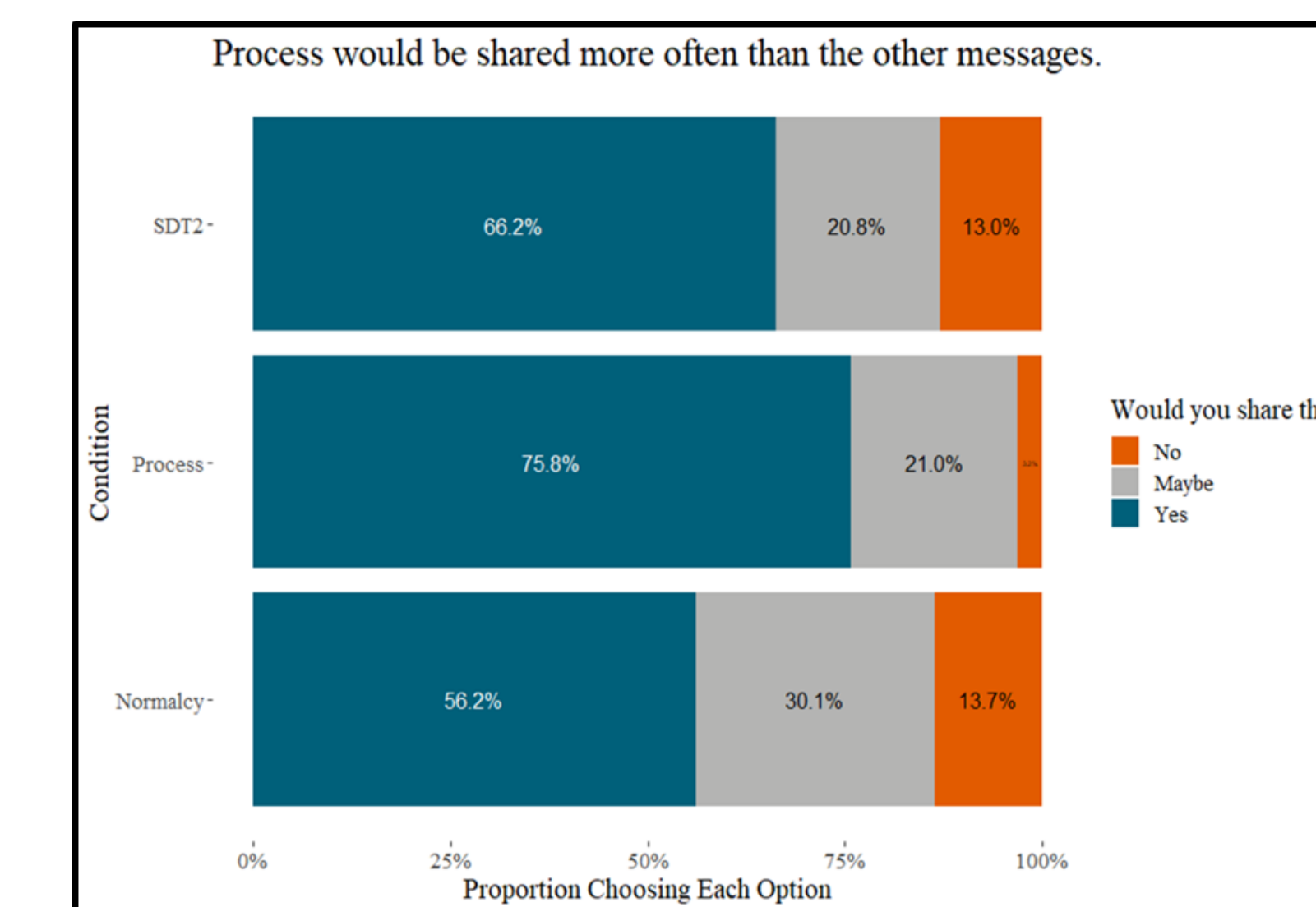
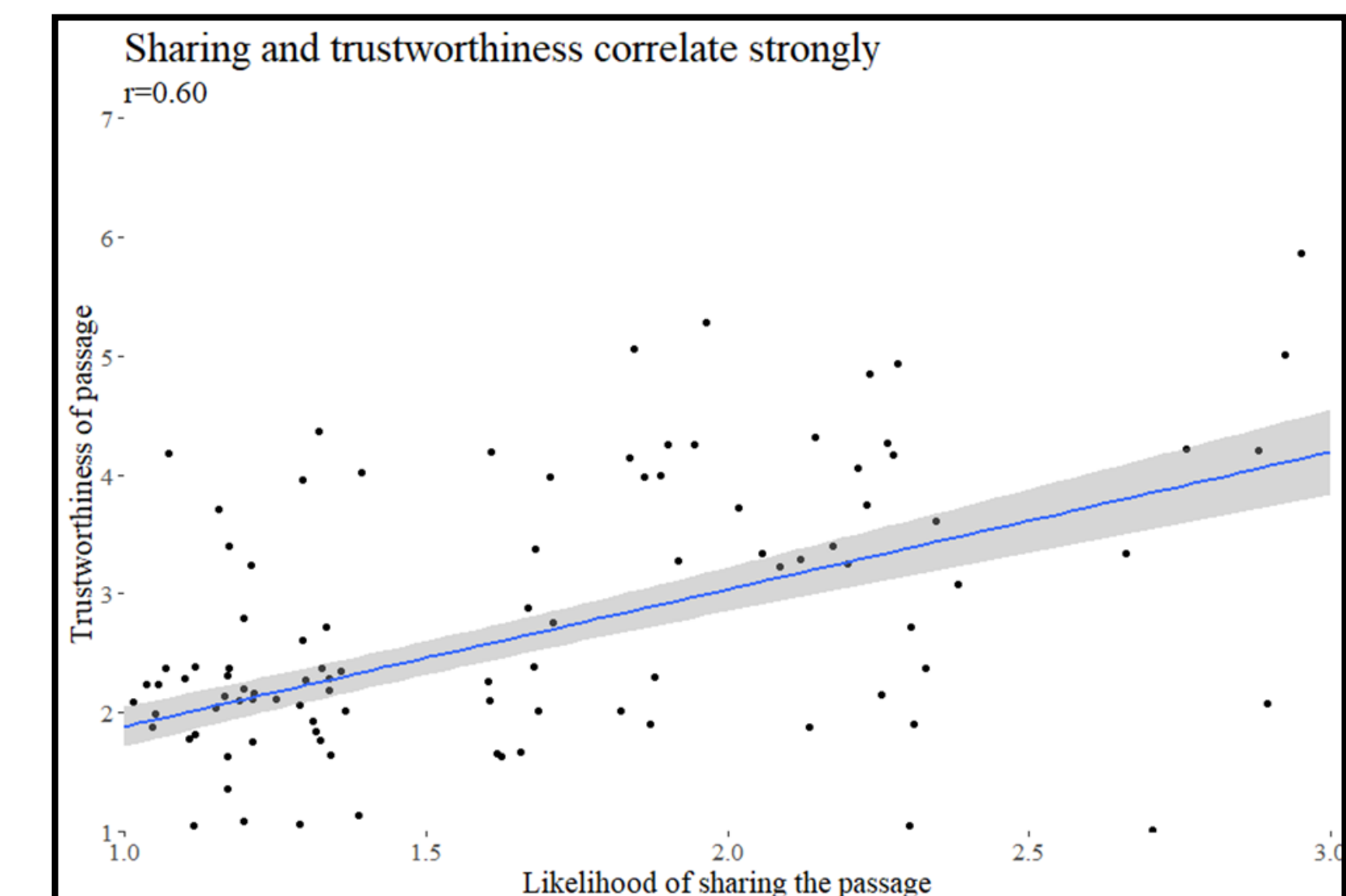


Figure 4:



Conclusions

- Messages HCWs are most likely to share with patients do NOT appear to align with their own perceptions of what's most helpful to themselves
- Suggests HCWs criteria to make the decision to share recommendations differs from those criteria they use in answering this decision for themselves.
- There is a desire to share trustworthy information first

