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Editorial

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## Engagement in Behavior to Prevent COVID-19 Infection for the Sake of Oneself or Others?



Empathy is commonly conceived as the ability to comprehend, share, and show concerns about the emotions of others through "wearing their shoes." Empathy is a precursor of prosocial behavior, such as following rules and doing good things that benefit others. Based on a short-term longitudinal study, Qu et al. [1] showed that empathy positively predicted preventive health behavior under COVID-19, such as maintaining social distancing and wearing a mask when going out, which highlights the importance of prosocial motivation in promoting health behavior to prevent COVID infection. While perspective taking and concern for personal health were not related to preventive behavior for COVID infection, empathic concern positively predicted preventive health behavior and COVID-19 worries.

Shek [2] outlined 12 reflections about COVID-19. On top of these reflections, we have several comments based on this study. First, the present findings are consistent with the limited existing findings that prosocial motivation positively influences behavior to prevent COVID infection. Based on 3,718 Western participants in four studies, Pfattheicher et al. [3] reported that while the provision of information alone did not promote preventive health behavior under COVID-19, empathy was related to behavior on physical distancing and wearing face masks. Similarly, Petrocchi et al. [4] showed that affective empathy was positively related to the endorsement of lockdown measures. As most of the studies in this area are conducted in Western societies, there is a need to examine the generalizability of the findings across populations, places, cultures, and time [5].

Second, in different positive youth development (PYD) models, theorists emphasize the importance of empathy in optimal adolescent development [6]. In the developmental assets framework proposed by the Search Institute, empathy is regarded as an interpersonal competence. A similar emphasis on empathy as an interpersonal competence can be seen in the "5C" model of Richard M. Lerner. For models on social-emotional learning, empathy is regarded as an important domain of social-emotional learning on social awareness. In a review of PYD programs in the United States, social competence (with empathy

as an integral element) was identified as a PYD attribute that promotes adolescent holistic development. Empirically, there are studies showing the importance of PYD attributes on adolescent health outcomes [7], although studies on the influence of PYD attributes (including empathy) on preventive health behavior, particularly behavior to prevent COVID infection, are not systematically conducted.

Third, it is noteworthy that there is a decline in empathy in young people. Based on 72 samples of college students (N =13,737), Konrath et al. [8] showed a drop in empathic concern and perspective taking over time. Studies have also shown a decline in empathy in students of the health disciplines in their first year of study [9]. Based on four cohorts of medical students, Newton et al. [10] showed that vicarious empathy generally declined among medical students, reflecting a "hardening" of their hearts. Theoretically, there is a need to understand factors contributing to the drop of empathy. Practically, different stakeholders, such as educators and pediatricians, should devise ways to promote empathy among young people. As decline in empathy has negative health consequences and it influences preventive health behavior, tailor-made empathy training in the context of the pandemic would be helpful. In particular, how to train people to cope with COVID-19 worries while engaging in behavior to prevent COVID-19 out of empathy for others is an important question to be considered.

Fourth, besides empathy, it is also important to understand why people engage in preventive health behavior. Buchanan [11] argued that researchers should understand the reasons why people adopt different preventive health behavior (i.e., "moral reasoning") and the role of autonomy and responsibility involved in such decisions. In their discussion of different factors shaping preventive health behavior, van Beval et al. [12] similarly highlighted the importance of moral decision-making, which has relevance to our understanding of behavior to prevent COVID infection.

Lawrence Kohlberg's theory of moral development might help us understand the complex nature of moral decisionmaking [13] underlying behavior to prevent COVID infection. In

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this theory, there are three levels (preconventional, conventional, and postconventional) and six stages of moral development, which would shape one's preventive health behavior. There are two stages at the preconventional level. At Stage 1 (avoidance of punishment and obeying authority), one keeps social distancing to avoid being fined. At Stage 2 (reward and exchange orientation), one gets vaccinated because he/she can get 1 day of vaccination leave and/or monetary incentive. There are also two stages at the conventional level. At Stage 3 (conforming to avoid disapproval and getting praised by others), one wears a face mask inside a room because he/she does not want to be disliked and he/she wishes to be praised by others (i.e., "good boy/good girl" morality). At Stage 4 (observing law and order), one follows pandemic laws because one respects the authority and regards that it is a duty to follow the law. At the final level (postconventional morality), there are two stages. In Stage 5 ("law behind the law" orientation), one wears a mask because it is good for the community. The reasoning is that one should respect the "law behind the law," such as promotion of the wellbeing of the society as a social contract. At Stage 6 (universal ethical principles), one maintains personal hygiene during the pandemic because one loves others and does not want others to be infected. Hence, one would sacrifice (such as taking the trouble of wearing masks and constantly washing one's hands) for the sake of others. At the same time, Kohlberg's theory may also be used to understand why people do not engage in preventive health behavior under COVID-19. For example, one does not wear a face mask because there is no incentive (Stage 2 morality) or one does not want to be criticized by friends as stupid (Stage 3 morality). Obviously, understanding moral reasoning behind preventive health behavior, particularly that under COVID-19, is an uncharted area with practical health promotion implications.

Finally, Qu et al. [1] highlighted the importance of understanding the role of altruistic motives in preventive health behavior under COVID-19. In a recent study, Christner et al. [14] found that social-oriented factors (empathy and moral judgment) actually predicted preventive health behavior under COVID-19 beyond self-oriented factors, such as the fear of being infected and punished. Such findings underscore the importance of including prosocial and moral judgment factors on top of egoistic motives in understanding behavior aiming to prevent COVID infection. Theoretically, the inclusion of prosocial motives and moral reasoning in theories of health promotion models would help to identify the missing links in the study of COVID-19 [15]. Practically, besides the provision of basic information and addressing self-focused motives, such as the fear of infection, adding some "emotional" (affective empathy) and "moral judgment" (moral reasoning) ingredients, would provide additional leads for promoting preventive health behavior under the pandemic.

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