

Université de Montréal

Pandémie de la COVID-19 : confiance, moralisation et respect des mesures sanitaires

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Ce mémoire intitulé

Pandémie de la COVID-19 : confiance, moralisation et respect des mesures sanitaires

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Résumé

En réponse à la pandémie de la COVID-19, les gouvernements ont mis sur pied des mesures sanitaires contraignantes afin de limiter la propagation du virus (p. ex., port du masque). Lors de cette crise, les individus sont appelés à coopérer en respectant les mesures sanitaires. De nombreuses études ont démontré que la confiance envers autrui était liée positivement aux comportements coopératifs. Néanmoins, il est possible que, dans le contexte d'une crise sanitaire, les individus soient moins portés à adhérer aux mesures sanitaires lorsqu'ils sont avec des gens en qui ils ont confiance. Ce mémoire vise à examiner si la confiance envers les autres mène les individus à moins coopérer, c'est-à-dire, à moins respecter les mesures sanitaires. Plus particulièrement, nous avons pour objectif de tester si les individus sont moins enclins à respecter les mesures avec leurs proches (p. ex., amis et membres de leur famille), et si ce phénomène peut s'expliquer par la plus grande confiance que nous portons envers nos proches comparativement aux étrangers. Pour ce faire, nous avons entrepris deux études. Dans les deux études, les participants devaient lire une vignette décrivant une situation sociale (p. ex., un concert dans un parc). Les participants devaient s'imaginer assister à la situation sociale avec soit leurs proches (p. ex., amis) ou des étrangers. Les participants devaient ensuite rapporter à quel point ils (1) respecteraient les mesures sanitaires (p. ex., maintiendraient une distanciation physique) et (2) feraient confiance aux autres personnes dans la situation. Il a été démontré que les individus faisaient davantage confiance à leurs proches qu'aux étrangers. Cette plus grande confiance était liée à une moindre adhésion aux mesures sanitaires lors d'interactions sociales avec les proches. De plus, les résultats de la deuxième étude ont montré que les individus étaient moins enclins à adhérer aux mesures sanitaires avec leurs proches, même lorsqu'ils moralisaient le respect des mesures (c'est-à-dire, percevaient comme moralement « mal » le non-respect des mesures). Ce mémoire met donc en évidence un lien négatif entre la confiance et la coopération – dans certains contextes, la confiance interpersonnelle peut nuire aux intérêts collectifs.

Mots-clés : Respect des mesures sanitaires, pandémie de la COVID-19, confiance, coopération, moralisation.

Abstract

In response to the COVID-19 pandemic, governments implemented stringent preventive measures to limit the spread of the virus (e.g., mask wearing). During this crisis, individuals are called upon to cooperate by complying with preventive measures. Numerous studies have shown that trust in others is positively related to cooperative behaviors. Nevertheless, it is possible that, in the context of a sanitary crisis, individuals are less likely to adhere to preventive measures with people they trust. The purpose of this paper is therefore to examine whether interpersonal trust leads individuals to be less cooperative, i.e., less compliant with preventive measures. Specifically, we aim to test whether individuals are less likely to comply with measures with their close others (e.g., friends and family members), and whether this phenomenon can be explained by the greater trust we have in our close others compared to strangers. To do this, we undertook two studies. In both studies, participants were asked to read a vignette describing a social situation (e.g., a concert in a park). Participants had to imagine attending the social situation with either their close others (e.g., friends) or strangers. Participants were then asked to report the extent to which they would (1) adhere to preventive measures (e.g., maintain physical distancing) and (2) trust others in the situation. Results showed that individuals trusted their close others more than strangers. This greater trust was related to less adherence to preventive measures during social interactions with close others. Furthermore, the second study showed that individuals were less likely to comply with preventive measures with their close others, even when they moralized compliance (i.e., perceived non-compliance as morally "wrong"). This master's thesis thus highlights a negative link between trust and cooperation - in some contexts, interpersonal trust can undermine collective interests.

Keywords: Compliance with preventive measures, COVID-19 pandemic, trust, cooperation, moralization.

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Chapitre 1 - Introduction

La pandémie de la COVID-19 a provoqué des bouleversements majeurs tant au niveau des structures sociales des pays touchés (p. ex., systèmes de santé et d'éducation) que des comportements des individus. En raison des changements soudains et significatifs que cette crise a induite, celle-ci peut même être qualifiée de « changement social dramatique » (de la Sablonnière, 2017). Ce changement social dramatique a eu un impact considérable au Canada – la pandémie a causé plus de quatre millions de cas d'infection ainsi que plus de 40 000 décès depuis janvier 2020 (Our World in Data, 2022). En réponse à la crise, des mesures sanitaires ont été mises en place par les gouvernements provinciaux afin de limiter la prolifération des cas et l'engorgement des hôpitaux. Néanmoins, le respect des nouvelles mesures a constitué un défi pour les Canadiens. Des rassemblements (fêtes, mariages) au cours desquels des individus n'adhéraient pas aux mesures sanitaires ont été à l'origine de la propagation rapide du virus dans certaines régions du pays (p. ex., Lacoursière, 2020). Nous avons tous été témoins de comportements de non-adhésion au cours de la pandémie. Bien que ces comportements puissent sembler anodins, ceux-ci sont en mesure d'avoir un effet boule de neige et d'aggraver la crise sanitaire. À titre d'exemple, en septembre 2020, un rassemblement réunissant 10 personnes en Ontario a causé 40 cas d'infections en un peu plus d'une semaine. Non seulement il y a une augmentation des cas, mais la fête a aussi mené à l'hospitalisation des membres de la famille de certaines personnes présentes. Deux garderies ont également dû cesser leurs activités (Blewett, 2020).

Il apparaît donc que les individus peuvent être amenés à ne pas adhérer aux mesures sanitaires même si cela est susceptible d'avoir des répercussions considérables sur leurs proches et leur communauté. De plus, il semble qu'une moindre adhésion survient lors d'interactions sociales spécifiques, plus particulièrement, avec des personnes de confiance (c'est-à-dire, nos proches) auprès desquels nous agissons de façon désinvolte. Étant donné l'importance des mesures sanitaires pour contrer le virus (Ayouni et al., 2020 ; Chu et al., 2020), il est crucial de mieux comprendre les contextes dans lesquels les individus sont moins portés à respecter les mesures. En effet, une meilleure compréhension des facteurs expliquant une adhésion moindre dans ces situations permettrait de mieux orienter les interventions afin de favoriser le respect des mesures lors de futures pandémies.

La présente recherche a donc deux objectifs : (1) identifier les situations sociales dans lesquelles les Canadiens se conforment moins aux mesures sanitaires et (2) examiner les mécanismes qui favorisent ou non l'adhésion aux mesures dans ces situations. Dans ce

mémoire, nous examinons si une moindre adhésion survient lors d'interactions sociales avec les proches (amis et membres de la famille), et si ce phénomène peut s'expliquer par la plus grande confiance que nous portons envers nos proches comparativement aux étrangers. Nous testons également si le fait de percevoir le respect des mesures sanitaires comme un enjeu moral (c.à.d., considérer comme moralement « mal » le non-respect des mesures) mène les individus à adhérer aux mesures même lorsqu'ils interagissent avec leurs proches.

La pandémie de la COVID-19 : un dilemme social

Combattre la COVID-19 nécessite que les individus adaptent leurs comportements et contribuent à l'effort collectif afin de limiter la propagation du virus. Conséquemment, il est possible d'appréhender le défi du respect des mesures sanitaires sous l'angle du dilemme social (Johnson et al., 2020). Un dilemme social est une situation dans laquelle les individus sont confrontés à deux options quant à leurs comportements : ils peuvent choisir de coopérer ou non avec les autres. Dans le contexte de la crise de la COVID-19, nous pouvons considérer que le respect des mesures sanitaires (p. ex., porter le masque) constitue l'option coopérative du dilemme social alors que de ne pas respecter ces mesures représenterait plutôt l'option non coopérative (Johnson et al., 2020, Van Bavel et al., 2020). L'option coopérative est plus avantageuse pour la société à long terme. En effet, respecter les mesures sanitaires permet de limiter la propagation du virus et de protéger les populations les plus vulnérables. Néanmoins, se comporter de manière coopérative entraîne moins de bénéfices personnels à court terme que de se comporter de façon non coopérative. Par exemple, un individu pourrait trouver plus avantageux à court terme de ne pas porter le masque lors d'un rassemblement entre amis – ce comportement lui procurerait davantage de confort et favoriserait la communication avec les autres. Par contre, si tout le monde choisit l'option non coopérative, l'ensemble des individus se retrouveront dans une situation plus désavantageuse que s'ils avaient tous décidé de coopérer (Dawes, 1980 ; Van Lange et al., 2013) – cela peut même mener à la catastrophe collective (Kerr & Kaufman-Gilliland, 1994). Lors de la pandémie, si un nombre insuffisant de personnes respecte les mesures, la société dans son ensemble souffrira des conséquences de la crise (p. ex., surcharge du système de santé). Par exemple, l'individu qui ne porte pas de masque pourrait, sans le vouloir, contribuer à une transmission plus rapide du virus dans sa communauté ce qui, ultimement, serait désavantageux pour tous.

Coopération et confiance

Dans le contexte de la pandémie de la COVID-19, il est donc important que les individus coopèrent en respectant les mesures sanitaires. Plusieurs études ont démontré que la confiance envers autrui constituait un facteur important pour favoriser la coopération dans le

contexte de dilemmes sociaux (p. ex., Balliet & Van Lange, 2013 ; Van Lange et al. ; 1998). La confiance peut être définie comme un « état psychologique comprenant l'intention d'accepter la vulnérabilité basée sur des attentes positives quant aux intentions ou comportements d'autrui » (traduction libre ; Rousseau et al., 1998, p. 395). En d'autres mots, la confiance suppose que l'on perçoit que les autres ont des intentions bienveillantes et qu'ils vont coopérer en retour. La confiance pousse donc les individus à coopérer, car ils considèrent que leurs comportements coopératifs ne seront pas en vain – que ces comportements contribueront aux intérêts collectifs, car d'autres coopéreront également (Yamagishi & Sato, 1986). En raison de son lien avec la coopération, la confiance joue un rôle majeur dans le bon fonctionnement d'une société (p. ex., la confiance est liée à la performance de son gouvernement et de ses institutions ; La Porta, 1997).

Or, dans le contexte de la pandémie de la COVID-19, il est possible de se demander si la confiance envers les autres mène nécessairement à plus de comportements coopératifs (c'est-à-dire, à plus de respect des mesures). En effet, la confiance est également liée à une moins grande perception du risque et à l'adoption de comportements risqués, notamment, pour la santé (p. ex., Cruwys et al., 2021a ; Goldenberg et al., 2015). Ainsi, lors d'une crise sanitaire, les individus peuvent être portés à adopter des comportements qui les exposent à davantage de risque de contracter le virus – c'est-à-dire, à moins respecter les mesures sanitaires – avec des personnes de confiance. La confiance pourrait donc amener les individus à adopter des comportements qui nuisent aux intérêts collectifs. Dans la section suivante, le lien entre la confiance et la perception/prise de risque sera approfondi.

Confiance et perception du risque

Au niveau théorique, la confiance et la perception du risque sont deux concepts qui sont intimement liés. Selon Das et Teng (2004), la confiance et la perception du risque constituent en fait deux facettes d'un même phénomène ; ce sont deux notions qui agissent en opposition l'un envers l'autre. En effet, lorsque l'on a confiance en quelqu'un, nous estimons que les probabilités d'obtenir des résultats favorables sont élevées et que la probabilité d'obtenir des résultats défavorables (c'est-à-dire, la perception du risque) est faible. En d'autres mots, plus il y a de confiance, moins il y a de perception de risque.

La confiance envers autrui peut donc amener les individus à adopter des comportements à risque, notamment, des comportements potentiellement dangereux pour la santé. Par exemple, des études de nature qualitative entreprises auprès d'injecteurs de drogue à Londres (Rhodes & Judd, 2004) ainsi qu'en Serbie et au Monténégro (Rhodes et al., 2008) ont démontré que la confiance pouvait mener au partage de seringue. La confiance peut également mener les

individus à ne pas porter de préservatifs lors de rapports sexuels – en raison, entre autres, d’une perception du risque moindre de contracter une infection transmissible sexuellement et par le sang (p. ex., Flood, 2003 ; Goldenberg et al., 2015). Dans ces situations, les personnes en confiance adoptaient des comportements qui étaient susceptibles d’accroître la propagation de ces maladies et qui, ultimement, étaient potentiellement néfastes pour la société.

Dans le contexte de la crise de la COVID-19, un individu pourrait être porté à croire que les personnes en qui il a confiance respectent les mesures sanitaires au quotidien et présentent donc un moindre risque de le contaminer avec le virus. Cette perception d’un risque moindre pourrait mener l’individu à moins respecter les mesures sanitaires. Plusieurs études ont d’ailleurs démontré que la perception du risque d’infection était associée positivement à l’adhésion aux mesures sanitaires – moins il y a de perception du risque, moins il y a d’adhésion (p.ex., Dryhurst, 2020, Schneider et al., 2021).

Proximité sociale et comportements à risque

Une adhésion moindre aux mesures sanitaires pourrait ainsi survenir lors d’interactions sociales avec des personnes de confiance. Mais qui sont ces personnes de confiance ? Il a été démontré que nous avons une tendance naturelle à faire davantage confiance à nos proches (p. ex., nos amis et les membres de notre famille) ou bien aux personnes partageant notre groupe social (p. ex., les membres de notre église, de notre lieu de travail). En effet, nous faisons davantage confiance aux individus avec lesquels nous entretenons des liens intimes (proches, membres de l’endogroupe) qu’à ceux avec qui nous entretenons des liens distants (inconnus, membres de l’exogroupe). La proximité sociale, c’est-à-dire, le niveau de proximité relationnelle, est donc liée à la confiance (Buchan & Croson, 2004 ; Riyanto & Jonathan, 2018 ; Weiss et al., 2021).

Des études ont examiné le lien entre la proximité sociale, la confiance et la perception du risque/la prise de risque. Cruwys et al. (2021a) ont entrepris une série d’études démontrant que la proximité sociale (p. ex., l’appartenance à un groupe social telle la nationalité ou bien l’affiliation politique) était liée à une plus grande confiance qui, à son tour, était liée à une moins grande perception du risque et à plus de comportements risqués. Par exemple, dans une de leurs études, ces chercheurs ont testé la prise de risque financier en utilisant le *Balloon Analogue Risk Task*. Plus particulièrement, lors de cette tâche, les participants recevaient une compensation financière à mesure qu’ils faisaient gonfler des ballons virtuels. Néanmoins, plus ils faisaient gonfler un ballon, plus il y avait de risque que ce dernier explose. Lorsqu’un ballon explosait, les participants perdaient tout l’argent qu’ils avaient accumulé en exécutant la tâche. Il a été démontré que les participants avaient tendance à prendre plus de risque lorsqu’on leur

indiquait que le point d'explosion du ballon avait été déterminé par une personne partageant leur affiliation politique (républicain ou démocrate). Dans une autre de leurs études, cette fois, sur le terrain, les chercheurs ont examiné les comportements des individus dans un contexte qui posait un risque pour la santé des personnes présentes — c'est-à-dire, lors d'une performance artistique au cours duquel il y avait dépeçage de la carcasse d'un animal. Il a été démontré que l'identification aux autres participants assistant à la performance prédisait une plus grande confiance envers les autres participants – cette plus grande confiance amenait les individus à passer davantage de temps à l'évènement. La prise de risque parmi les personnes partageant le même groupe d'appartenance a également été testée dans le contexte de la pandémie de la COVID-19 dans une étude entreprise auprès d'un échantillon représentatif d'Australiens (Cruwys et al., 2021b). En effet, il a été démontré que les participants qui s'identifiaient à leur quartier étaient moins susceptibles de maintenir une distanciation physique avec leurs voisins, et ce, en raison d'une plus grande confiance en leurs voisins.

Les études présentées ci-dessus ont donc étudié la façon dont l'appartenance au groupe influence les comportements à risque, notamment, dans le contexte de la crise de la COVID-19. Dans le présent mémoire, nous adoptons un cadre d'analyse différent. Plutôt que d'examiner la façon dont l'appartenance au groupe influence le respect des mesures sanitaires, nous étudions les comportements d'adhésion lors d'interactions sociales avec des individus représentant différents niveaux de proximité sociale : membres de la famille, amis, amis d'un ami et étrangers. Contrairement à l'appartenance au groupe, examiner différents degrés de proximité sociale permet d'étudier avec davantage de précision les situations sociales dans lesquelles il y a moins d'adhésion aux mesures sanitaires. En d'autres termes, cela permet d'identifier une gradation des interactions sociales au cours desquelles le respect des mesures sanitaires serait plus ou moins important. Dans ce mémoire, nous désirons tester si les individus ont moins tendance à adhérer aux mesures sanitaires avec des individus socialement proches d'eux (p. ex., famille) qu'avec des individus socialement distants (p. ex., inconnus), et ce, en raison d'une plus grande confiance.

La confiance pourrait mener les individus à ne pas respecter les mesures lorsqu'ils interagissent avec leurs proches. Mais quel mécanisme pourrait favoriser le respect des mesures sanitaires dans le contexte d'interactions sociales avec les proches ? Dans la section suivante, je propose que la moralisation des mesures sanitaires pourrait atténuer l'effet de la proximité sociale sur le respect des mesures sanitaires. Les individus qui considèrent comme moralement « mal » le non-respect des mesures sanitaires seraient amenés à respecter les mesures même lorsqu'ils interagissent avec leurs amis et les membres de leur famille.

La moralisation des mesures sanitaires

L'enjeu que pose le respect des nouvelles mesures sanitaires a le potentiel d'être perçu comme un enjeu « moral » dans la mesure où les individus peuvent être amenés à considérer comme moralement « mal » le fait de ne pas adhérer aux mesures sanitaires. En d'autres mots, de nouveaux comportements, comme le port du masque, sont susceptibles d'être moralisés. La moralisation désigne le processus par lequel une entité, un comportement ou une attitude à l'origine neutre finit par acquérir un caractère moral (Rozin, 1999).

Tel que démontré par de nombreux chercheurs (p. ex., Ekberg et al., 2021 ; Francis & McNabb, 2022 ; Graso et al., 2021 ; Prosser et al., 2020), la pandémie de la COVID-19 constitue un contexte particulier au cours duquel les comportements des individus ont le potentiel d'être moralisés, et ce, pour différentes raisons. Tout d'abord, lors de cette crise, les individus sont appelés à agir de façon à favoriser le bien-être de la collectivité au détriment de leurs intérêts personnels (Francis & McNabb, 2022 ; Graso et al., 2021). Ensuite, tel que souligné par Graso et al. (2021), les comportements qui peuvent causer du mal à autrui (p. ex., infecter une personne à risque) sont plus susceptibles de faire l'objet d'un jugement moral (Schein & Gray, 2018). Enfin, les messages divulgués par les gouvernements afin de promouvoir l'adhésion aux mesures sanitaires ont le potentiel de galvaniser la moralisation de ces nouveaux comportements auprès de la population (Prosser et al., 2020 ; Rozin, 1999 ; Tauber, 2018). Au Québec, nous pouvons, par exemple, penser au « contrat moral » que le gouvernement Legault avait instauré en novembre 2020 afin de limiter la propagation du virus en prévision de la période des Fêtes (Gouvernement du Québec, 2020).

La moralisation des mesures sanitaires pourrait mener les individus à respecter les mesures même lorsqu'ils interagissent avec leurs proches (p. ex., amis et membres de leur famille). En effet, selon Skitka (2010), les convictions morales sont considérées comme universellement « vraies » pour les individus. Ainsi, les individus ayant moralisé le respect des mesures sanitaires seraient moins influencés par le contexte ; ils seraient d'avis que le respect des mesures devrait se faire dans toutes les situations – même lors d'interactions sociales avec les proches (p. ex., lors de fêtes entre amis). De plus, les individus ayant des convictions morales sont moins susceptibles d'être influencés par leurs pairs (Skitka, 2010). Par exemple, une étude d'Aramovich et al. (2012) a démontré que lorsque les individus avaient des convictions morales contre l'usage de la torture (dans le contexte d'interrogatoires avec des terroristes présumés), ils étaient moins susceptibles de changer leur opinion lorsqu'ils étaient confrontés à une majorité d'individus exprimant leur approbation de la torture dans ces situations. À la lumière de ces résultats, l'individu ayant moralisé le respect des mesures

sanitaires serait moins influencé par les normes du groupe si celles-ci sont en contradiction avec ses convictions morales. Par exemple, cet individu serait porté à garder son masque et à maintenir une distanciation physique avec les autres même s'il se retrouve dans un rassemblement entre amis au cours duquel les gens ne respectent pas les mesures sanitaires. Dans ce mémoire, nous examinons donc si la moralisation des mesures sanitaires modère la relation entre la proximité sociale et le respect des mesures.

Objectifs et hypothèses

1er objectif : Examiner si la proximité sociale mène les Canadiens à moins coopérer (c'est-à-dire, à moins respecter les mesures).

1ère hypothèse : Plus la proximité sociale est grande entre les Canadiens qui interagissent ensemble, moins ils sont susceptibles de respecter les mesures.

2ième objectif : Examiner si la proximité sociale est indirectement liée à l'adhésion aux mesures sanitaires via la confiance.

2ième hypothèse : Plus la proximité sociale entre les Canadiens qui interagissent ensemble est grande, plus ils font confiance et moins ils sont susceptibles de respecter les mesures sanitaires (voir figure 1).

3ième objectif : Examiner si la moralisation du respect des mesures sanitaires modère la relation entre la proximité sociale et le respect des mesures sanitaires.

3ième hypothèse : Les Canadiens qui moralisent le respect des mesures de sanitaires seront moins affectés par l'effet de la proximité sociale sur l'adhésion aux mesures sanitaires que les Canadiens qui ne moralisent pas le respect des mesures sanitaires. En d'autres mots, les Canadiens qui moralisent le respect des mesures seront davantage portés à respecter les mesures avec leurs proches que ceux qui ne le moralisent pas (voir figure 2).

Figure 1

Hypothèse 2 : la confiance comme médiateur dans la relation entre la proximité sociale et le respect des mesures sanitaires

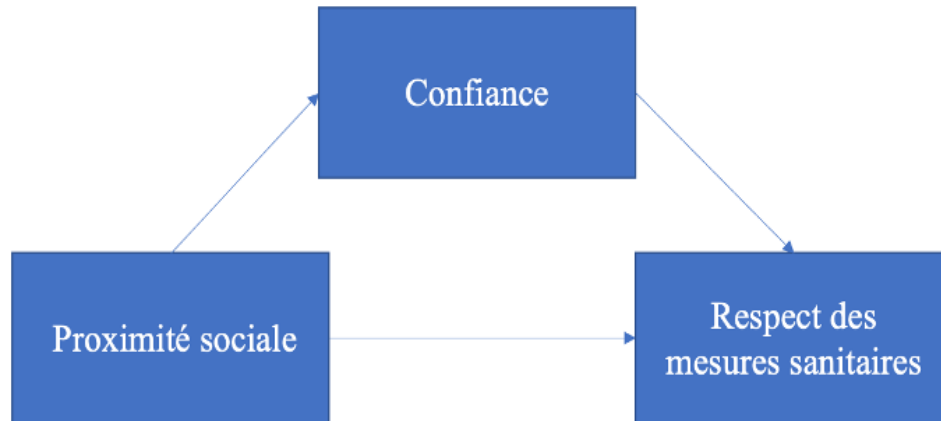
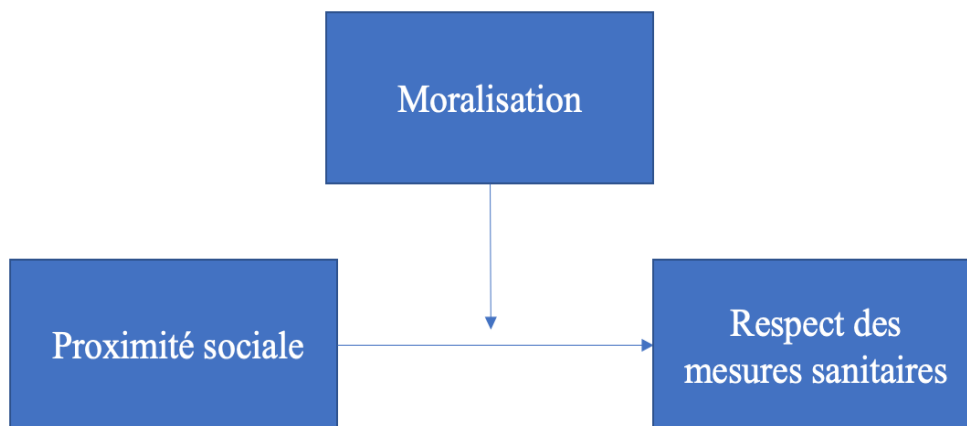


Figure 2

Hypothèse 3 : la moralisation comme modérateur dans la relation entre la proximité sociale et le respect des mesures sanitaires



Article du mémoire

L'article présenté dans ce mémoire est composé de deux études. La première étude vise à tester si la proximité sociale est liée à moins de comportements coopératifs (c'est-à-dire, une moins grande adhésion aux mesures sanitaires, H1). La première étude a également pour objectif d'examiner si la proximité sociale a un effet indirect sur le respect des mesures sanitaires via une plus grande confiance (H2). La deuxième étude vise à répliquer les résultats de la première étude (H1 et H2) ainsi qu'à tester si la moralisation des mesures sanitaires modère la relation entre la proximité sociale et le respect des mesures sanitaires (H3).

Deux manipulations expérimentales ont été menées. Dans chacune des manipulations expérimentales, les participants ont répondu à un questionnaire en ligne dans lequel ils ont été assignés aléatoirement à une vignette décrivant une interaction sociale. Certains participants devaient lire une interaction au cours de laquelle ils devaient s'imaginer interagir avec leurs proches (p.ex., des amis) et les autres devaient s'imaginer interagir avec des étrangers. Les participants ont ensuite répondu à un questionnaire dans lequel ils devaient, entre autres, indiquer à quel point (1) ils respecteraient les mesures sanitaires dans la situation (maintien d'une distanciation physique et port du masque) et (2) feraient confiance aux autres personnes dans la situation. La moralisation des mesures sanitaires a également été mesurée dans la deuxième étude.

La première manipulation expérimentale a été insérée dans la 8^{ième} vague d'un vaste sondage longitudinal visant à étudier l'impact psychologique de la crise de la COVID-19 sur les Canadiens (N = 1871 ; de la Sablonnière et al., 2020). La deuxième manipulation expérimentale a été menée auprès d'un échantillon de 580 Canadien.ne.s recrutés via la plateforme *Prolific Academic*. La deuxième manipulation expérimentale a été préenregistrée sur la plateforme *Open Science Framework*. L'article a été soumis à *Social and Personality Psychology Compass*.

Chapitre 2 - Article de mémoire

Blinded by trust in close others: Examining the effect of social closeness on cooperative behaviors during the COVID-19 pandemic

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Abstract

In the context of sanitary crises such as the COVID-19 pandemic, it is essential that individuals cooperate by complying with preventive measures (e.g., wearing a mask). The current research examines how high trust in close others is linked to less cooperation – i.e., less compliance with measures – and, thus, undermines collective interests. Specifically, we test whether individuals are less willing to comply with preventive measures when interacting with close others (i.e., friends and relatives) they highly trust. To do so, we conducted two experiments in which participants read a vignette depicting a social interaction with either close others (e.g., family members) or strangers. Participants had to report the extent to which they would (1) trust the other people in the situation and (2) comply with the mask wearing and physical distancing measures in the situation. In both experiments, we find that when individuals read about interacting with close others, they report experiencing higher trust which is then linked to lower compliance with preventive measures. In experiment 2, we further demonstrate that participants report less compliance with preventive measures around close others, even when they perceive non-compliance with the measures as morally “wrong”. Our findings shed light on the challenges that compliance with preventive measures poses during social interactions with close others such as friends and family.

Keywords: Compliance with preventive measures, COVID-19 pandemic, Trust, Cooperation, Moralization

Spring 2020. The COVID-19 pandemic is at its peak. On a beautiful sunny day, you are meeting your friends at the park. At first, you and your friends are cautiously following the sanitary measures. You are all wearing masks and maintaining social distancing. After all, this cooperative behavior protects your entire community. However, as the day continues, you are getting closer and closer. You even start to share food. At the end of the gathering, you are greeting your friends with a hug. ‘Where is the harm?’ you think. These are your friends. Even though you know that compliance with the measures is important – not only to protect yourself but, also, to protect the collectivity and its most vulnerable members – you do not think that your friends could *really* pose a risk of infection. You trust them. In the present research, we examine the conditions in which interactions with highly trusted others can hinder cooperative behaviors, such as complying with preventative COVID-19 measures.

The COVID-19 pandemic was a dramatic social change as it caused rapid and significant disruptions in institutions and daily habits (de la Sablonnière, 2017). This dramatic social change led governments around the world to impose challenging measures to restrict the spread of the coronavirus, such as maintaining a safe distance from others and wearing a mask during social interactions. Experts proclaimed that compliance with these new measures is crucial to minimize the impacts of the pandemic on society (e.g., Ayouni et al. 2021; Chu et al., 2020). In this crisis, complying with the new measures pose a social dilemma: a situation in which long-term collective interests conflict with immediate personal interests (Dawes, 1980; Van Lange et al., 2013). Specifically, individuals are called upon to cooperate by complying with the restricting measures (Johnson et al., 2020, Van Bavel et al., 2020): act in ways that benefit the collective at the expense of one’s immediate personal interests (Dawes, 1980; Dawes & Thaler, 1988; Nowak, 2006; Van Lange et al., 2013). In other words, individuals are asked to pay a personal price (e.g., wear a mask with friends) to promote collective interests (e.g., prevent hospitals overload).

Previous studies identified different factors that promote cooperation between individuals (e.g., social value orientation, intragroup communication, direct reciprocity; Henrich & Muthukrishna, 2021; Kerr & Kaufman-Gilliland, 1994; Pletzer et al., 2018; Van Lange et al., 2013). Trust in others – the belief that others will act in a benevolent and cooperative manner – has been shown to be an important factor in promoting cooperation (e.g., Balliet & Van Lange, 2013; Van Lange et al., 1998). Because of its link to cooperation, trust among individuals is essential to the proper functioning of a society (La Porta et al., 1997). But does higher trust always promote cooperative behaviors? Or can it, in certain contexts, hinder collective interests?

The literature on trust has established that different types of trust are linked to different types of cooperation (Putnam, 1993; Uslaner, 2002). Specifically, generalized trust – the tendency to expect others to be benevolent and not to inflict harm – is related to cooperation with strangers (Putman, 2000). Trust in close others (or what Uslaner calls particularized trust) is more related to cooperation with one’s ingroup (i.e., parochial cooperation; Uslaner, 2002). Research on the role of generalized trust in supporting the compliance of COVID have thus far yielded inconclusive results, indicating both positive and negative role for generalized trust (Deopa & Fortunato 2020; Hafner-Fink & Uhan 2021; Jørgensen et al., 2021; Sarracino et al. 2022).¹ Instead of focusing on generalized trust, we examine how trust in close others might shape cooperative behaviors (i.e., compliance with preventive measures).

We argue that, while in many situations higher trust promotes cooperative behaviors, in some cases higher trust may lead individuals to act in ways that undermine cooperation. Specifically, in the context of the COVID-19 pandemic, we suggest that higher trust in close others may result in less cooperation (i.e., compliance with preventive measures), which in turn may harm collective interests. In the present research, we examine whether people would be less willing to comply with preventive measures when interacting with close others as compared to interacting with strangers. We also test whether trust in interaction partners mediates this effect.

Trust, Risk Perception and Risk Behavior

Trust in others plays a fundamental role in our daily interactions; it is the "fabric of our social universe" (Weiss et, al., 2021, p. 95). Trust is often conceptualized as a positive expectation of- or belief in others’ intentions and actions (e.g., Rousseau et al., 1998). The concept of trust is negatively related to the concept of risk, such that trust underlies the probability of obtaining favorable outcomes, whereas risk perception refers to the probability of obtaining unfavorable outcomes (Das & Teng, 2004).

Qualitative studies have demonstrated the negative link between trust and risk in the health domain (e.g., unprotected sexual intercourse; Flood, 2003). For example, among gay and bisexual men, when an individual trusted a sexual partner, they perceived a lower risk of being infected with HIV and, therefore, were more willing to have unprotected sexual relationships with them (Goldenberg et al., 2015). Similarly, people who use injection drugs are more likely to share needles with individuals they trust (Rhodes & Judd, 2004; Rhodes et

¹ Some of the contradictory findings are due to very different conceptualizations and measures of generalized trust.

al., 2008). In the context of the COVID-19 pandemic, perception of greater risk was linked to more compliance with preventive measures (e.g., wearing a mask; Dryhurst, 2020; Schneider et al., 2021). In line with these findings, it is possible that, when interacting with the people they trust, individuals would perceive the risk of infection to be low, thus complying less with preventive measures.

There are grounds to expect less compliance with measures when individuals interact with those they trust the most: their close others. Previous studies have demonstrated that social closeness is related to trust: people trust more those who are socially close to them (family members, friends, ingroup members) than those who are socially distant from them (strangers, outgroup members; Buchan & Croson; 2004; Riyanto & Jonathan, 2018; Weiss et al., 2020). In a recent series of studies, Cruwys et al. (2021a) examined the relationship between social closeness (i.e., shared group membership), trust, and risk behaviors. Social closeness (e.g., sharing nationality or political affiliation the individual identifies with) was related to greater trust, which in turn was associated with lower risk perception and greater risk taking. For example, in one experiment, participants indicated how risky they would find it to share a cup of coffee with either a colleague of the same nationality or a colleague of a foreign nationality. When participants identified strongly with their nationality, they trusted a member of their nationality more and perceived less risk of illness from sharing their cup. In another study, identification with other participants in events that posed health risks to those participating (e.g., jumping into the icy ocean) predicted greater trust in other participants and led individuals to spend more time at these risky events. Increased risk-taking among individuals sharing the same group membership can occur also during the COVID-19 pandemic, resulting in greater transmission of the coronavirus (Cruwys et al., 2020). Indeed, a survey of a representative Australian sample showed that individuals who identified with their neighborhood had higher trust in their neighbors – which made them less likely to follow physical distancing guidelines with their neighbours (Cruwys et al., 2021b).

Though identification with a social group is an important factor in trust and risk taking, the degree of closeness also matters. Instead of examining group membership, the current research tests how different degrees of social closeness (or relational intimacy; Linke, 2012) relate to trust and affect compliance with COVID-19 measures. We hypothesize that interacting with closer others (e.g., friends) is associated with less compliance than interacting with distant others (i.e., strangers). We further suggest that social closeness may relate to compliance through trust. Examining different degrees of closeness allows a more nuanced understanding of the social interactions in which people might be less willing to comply with measures and

permits us to pinpoint a gradation of social interactions in which compliance with preventive measures would be stronger versus weaker.

H1: In interactions with close others, individuals will be less willing to comply with preventive measures compared to interactions with strangers.

H2: Social closeness will be negatively associated with compliance with preventive measures indirectly through higher level of trust.

Overview of the Experiments

To test our hypotheses, we conducted two experiments in which we manipulated social closeness and measured willingness to comply with preventive measures during a social interaction as a measure of cooperative behavior. In both experiments, participants read vignettes depicting different social interactions. The vignettes described ambiguous situations in which compliance with preventive measures was recommended but not mandated. These situations can be described as psychologically “weak” as they do not give clear indications of the way participants should behave, allowing for more variance in participant’s answers (Snyder & Ickes, 1985). Participants reported the behaviors they would engage in the scenario described in the vignette (e.g., “how likely they would wear a mask in the situation?”). We report all measures, manipulations, and exclusions of the two experiments (see *Supplementary Materials* for the study materials).

In Experiment 1, we test whether social closeness led people to comply less with preventive measures (wearing a mask and maintaining physical distancing; H1). We also examine whether social closeness has an indirect effect on compliance to preventive measures through trust (H2). Experiment 2 is a pre-registered replication of Experiment 1. Furthermore, in Experiment 2, we explore moralization of preventive measures as a potential moderator of the relationship between social closeness and cooperation. We examine whether individuals who moralize compliance with preventive measures (i.e., perceive non-compliance as morally “wrong”) would be inclined to comply with the measures even in social interactions with close others. Both studies were approved by the Comité d'éthique de la recherche en éducation et en psychologie (CEREP) of the University of Montreal.

Experiment 1

Methods

Participants

Participants were 1871 Canadians over the age of 18 who participated in a large longitudinal survey with a representative Canadian sample (de la Sablonnière et al., 2020; see Table 16 in

Supplementary Materials for information on the participation rates between measurements times). Participants were recruited via the Delvinia's web panel *AskingCanadians*. We removed 112 participants from the analysis because they either took less than four minutes to complete the entire longitudinal survey or did not choose the right answer to two attention check items (e.g., “*This is a test item. Please select '2' for this item*”). The final sample was composed of 1759 participants (50.1% women, $M_{age} = 51.17$, $SD = 16.58$, range = 18 - 92). The sample size was determined before any data analysis. The analyses had 80% power to detect an effect size of $d = .16$ (G*Power; Faul et al., 2007).

Procedure

We ran the experiment during the 8th wave of the longitudinal study, between August 17th and September 13th, 2020. During this period, 14,572 COVID-19 cases occurred in Canada (Canadian Institute for Health Information, 2022), showing that the COVID-19 transmission was still ongoing. Participants were randomly assigned to one of four social closeness conditions in a between-subject design. In all conditions, participants read one vignette presenting a social situation: an outdoor concert taking place under a tent in a park with 20 attendees. The only difference between conditions was the social closeness between the participant and the people attending this event, who were (1) strangers (no social closeness), (2) friends of a friend (+ social closeness) (3) their friends (++ social closeness) or (4) family members who do not live in the same household (+++ social closeness). In all conditions, the number of attendees (20 persons), their age (below 60 years old), and the time spent by the participants (the duration of a few songs) in the hypothetical scenarios was fixed. All participants saw the same image depicting the venue of the outdoor concert (see *Supplementary Online Material* for the vignettes and the venue image). Participants could answer the survey in French or in English. Participants received a \$2.50 (CAD) compensation when they completed the questionnaire (in the form of points that they could exchange at the store chain of their choice).

Measures

We used single item scales to measure our main variables as Experiment 1 was included in a long large-scale survey studying the psychological impacts of COVID-19 on Canadians.

Compliance with preventive measures. Participants answered two items about following preventive measures in the situation: (1) physical distancing (“*In this situation, I would maintain physical distancing (about 2 meters) from other people under the tent*”), and (2) mask (“*In this situation, I would wear a mask and keep it on while under the tent*”). Both items were measured on a 10-point scale (1= *definitely not*, 10 = *definitely yes*).

Trust. Trust was measured with a single item (“*In this situation, to what extent do you think that you can trust the other people under the tent?*”) on a 10-point scale (1 = *Distrust completely*, 10 = *trust completely*).

Risk perception. We measured perception of risk from others to self (“*In this situation, I feel that someone could infect me with COVID-19*”) and perception of risk from self to others (“*In this situation, I feel that I could infect someone else with COVID-19*”). All items were measured on a 10-point scale (1 = *definitely not*, 10 = *definitely yes*).

Additional measures. To control for vulnerability in relation to COVID-19, we obtained participants’ answers to the following two items dichotomous (yes or no) from previous waves of the larger longitudinal survey: (1) “*Do you consider yourself a vulnerable [at-risk] person in relation to COVID-19?*” (3rd wave), and (2) “*Do you know anyone in your family or among your friends who is immunocompromised (weakened immune system) or at risk?*” (7th wave). Controlling for vulnerability to the COVID-19 virus in the analyses was important because it is a determinant of behavior in a risky social situation (e.g., Hromatko et al., 2021). We also asked participants whether they had been diagnosed with COVID-19 (yes, no, prefer not to answer): “*Have you been diagnosed with COVID-19?*” (8th wave). Controlling for whether participants had been diagnosed with COVID-19 was relevant as it might influence participants’ compliance with measures (participants might be more carefree if they had already been diagnosed with COVID-19). Participants’ demographic information (e.g., age and gender) was collected during the first wave of the longitudinal survey.

Results & Discussion

Descriptive analyses

As presented in Table 1, compliance with preventive measures was high in all conditions ($M_s > 8.47$ on a 10-point scale). Table 2 shows the correlations between all continuous measures. Trust was negatively correlated with physical distancing ($r(1757) = -.20, p < .001$) and mask wearing ($r(1757) = -.27, p < .001$). Perception of risk from others to self was positively correlated with physical distancing ($r(1757) = .38, p < .001$) and mask wearing ($r(1757) = .50, p < .001$). Perception of risk from self to others is positively correlated with physical distancing ($r(1757) = .22, p < .001$) and mask wearing ($r(1757) = .30, p < .001$). As expected, trust is negatively correlated with perception of risk from others to self ($r(1757) = -.40, p < .001$) and perception of risk from self to others ($r(1757) = -.23, p < .001$). See *Supplementary Materials* for the correlation matrixes within each of the four conditions (Tables 9, 10, 11 and 12).

Table 1*Means and standard deviations of the main variables in Experiment 1*

	Complete strangers	Friends of a friend	Friends	Family
Variables	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Trust	4.10 (2.12)	4.01 (2.12)	4.71 (2.32)	5.25 (2.27)
Physical distancing	9.25 (1.78)	8.79 (2.09)	8.78 (2)	8.48 (2.33)
Mask	8.88 (2.34)	8.70 (2.36)	8.67 (2.45)	8.53 (2.5)
Perception of risk from others to self	7.70 (2.58)	7.82 (2.30)	7.72 (2.42)	7.83 (2.39)
Perception of risk from self to others	6.23 (3.22)	6.33 (3.12)	6.16 (3.28)	6.43 (3.12)
N	433	445	436	445

Note. The variables measuring compliance with preventive measures (physical distancing and mask wearing) are not normally distributed; the distributions are negatively skewed. The trust variable shows a normal distribution. The range for all variables is 1-10.

Table 2*Correlation matrix of the main variables in Experiment 1*

	1	2	3	4
1. Physical distancing				
2. Mask	.58**			
3. Trust	-.20**	-.27**		
4. Perception of risk from others to self	.38**	.50**	-.40**	
5. Perception of risk from self to others	.22**	.30**	-.23**	.59**

Note. ** $p < .01$, * $p < .05$. The degrees of freedom for all correlations are 1757.

Main analyses

Compliance with preventive measures. To examine differences between the conditions in compliance with preventative measures, we ran non-parametric ANCOVAS (Quade's; Quade, 1967). We used a non-parametric test because both compliance variables were not normally distributed. We controlled for age and gender in all analyses because there is evidence for gender and age differences in compliance with preventive measures during the COVID-19 pandemic (i.e., women and older people comply more to the measures than men and younger people; Ferrante et al, 2020; Lin et al., 2021).

Physical distancing. We found a significant difference between conditions, $F(3, 1755) = 13.15$, $p < .001$, $\eta^2 = .02$. Post hoc analyses using the Scheffé post hoc criterion for significance indicated that compliance in the strangers condition was higher ($M = 9.25$, $SD = 1.78$) than in the friends of a friends condition ($M = 8.79$, $SD = 2.09$), $p = .009$, $d = 0.24$. Compliance in the strangers condition was also higher than in the friends condition ($M = 8.78$, $SD = 2$), $p < .001$, $d = 0.33$, and than in the family condition ($M = 8.48$, $SD = 2.5$), $p < .001$, $d = 0.41$. There were no significant differences between the friends of a friend and the friend ($p = .684$, $d = 0.08$) and family ($p = .076$, $d = 0.17$) conditions. There were no significant differences between the friends and the family conditions ($p = .589$, $d = 0.09$). When controlling

for vulnerability to the virus in addition to age and gender ($N = 1257$)², we found that there was a significant difference between the conditions, $F(3, 1253) = 7.24, p < .001, \eta^2 = .02$. Post hoc analyses using the Scheffé post hoc criterion for significance showed that compliance was higher in the strangers conditions than in the friends conditions, $p = .010, d = 0.28$. Compliance was also higher in the strangers conditions than in the family condition, $p < .001, d = 0.36$. However, there were no other significant differences between conditions (all $ps > .231$). Since the sample size was lower when we controlled for vulnerability to the virus ($N = 1257$), the analysis had 80% power to detect an effect size of $d = .19$ (G*Power; Faul et al., 2007). When controlling for having been diagnosed with COVID-19 in addition to age and gender, we found a significant difference between conditions, $F(3, 1742) = 13.25, p < .001, \eta^2 = .02$. Post hoc analyses using the Scheffé post hoc criterion for significance indicated that compliance in the strangers condition was higher ($M = 9.25, SD = 1.78$) than in the friends of a friends condition ($M = 8.79, SD = 2.09$), $p = .007, d = 0.24$. Compliance in the strangers condition was also higher than in the friends condition ($M = 8.78, SD = 2$), $p < .001, d = 0.32$, and than in the family condition ($M = 8.48, SD = 2.5$), $p < .001, d = 0.42$. There were no significant differences between the friends of a friend and the friend ($p = .768, d = 0.07$) and family ($p = .082, d = 0.17$) conditions. There were no significant differences between the friends and the family conditions ($p = .512, d = 0.10$).

Mask wearing. We found a significant difference between conditions, $F(3, 1755) = 2.67, p = .046, \eta^2 = .01$. Post hoc analyses using the Scheffé post hoc criterion for significance indicated that compliance was marginally higher in the strangers condition ($M = 8.88, SD = 2.34$) than in the family condition ($M = 8.53, SD = 8.53$), $p = .052, d = 0.19$. Compliance was similar for all other conditions (all $ps > .331$). When controlling for vulnerability to the virus in addition to age and gender ($N = 1257$), we found that there was no significant difference between conditions as for mask wearing, $F(3, 1253) = 1.43, p = .233, \eta^2 = .00$. Since the sample size was lower when we controlled for vulnerability to the virus ($N = 1257$), the analysis had 80% power to detect an effect size of $d = .19$ (G*Power; Faul et al., 2007). When controlling for having been diagnosed with COVID-19 in addition to age and gender, we found a significant difference between conditions, $F(3, 1742) = 2.84, p = .037, \eta^2 = .01$. Post hoc analyses using the Scheffé post hoc criterion for significance indicated that compliance was

² The sample size is lower when controlling for the virus because of planned missingness; only one part of the sample answered to the vulnerability to the virus items. These missing data thus have no effect on the results since they were determined at random.

higher in the strangers condition ($M = 8.88$, $SD = 2.34$) than in the family condition ($M = 8.53$, $SD = 8.53$), $p = .041$, $d = 0.20$. Compliance was similar for all other conditions (all $ps > .332$).

Mediation analyses. Using Haye's (2018) PROCESS Model 4, we examined whether the relationship between the social closeness conditions and compliance (physical distancing and mask wearing) was mediated by trust. To test the significance of the indirect effect, we used bootstrapping procedures (5000 bootstraps samples). We conducted the analysis with the strangers condition as the reference group and controlled for age and gender in the analysis. The results are presented in Tables 3 and 4.

Physical distancing. Compared to the strangers condition, the family condition is related to higher trust which, in turn, is related to lower physical distancing. The family (vs. strangers) condition predicted higher trust, $b = 1.16$, 95% CI [0.87; 1.46], $SE = 0.15$, $t = 7.77$, $p < .001$. Trust predicted lower physical distancing, $b = -0.17$, 95% CI [-0.21; -0.13], $SE = 0.02$, $t = 7.92$, $p < .001$. There was also a significant direct effect of the family (vs. strangers) condition on physical distancing, $b = -0.52$, 95% CI [-0.79; -0.25], $SE = 0.14$, $t = 3.80$, $p < .001$. Consistent with Hypothesis 2, the indirect effect of the family (vs. strangers) condition on physical distancing via trust was significant, $IE = -0.20$, $SE = 0.04$, 95% CI [-0.27; -0.13], also when controlling for vulnerability to the virus ($N = 1257$), $IE = -0.17$, $SE = 0.4$, 95% CI [-0.26; -0.10]. When controlling for having been diagnosed with COVID-19 in addition to age and gender, the indirect effect of the indirect effect of the family (vs. strangers) condition on physical distancing via trust was significant, $IE = -0.20$, $SE = 0.04$, 95% CI [-0.28; -0.13].

Compared to the strangers condition, the friends condition is related to higher trust which, in turn, predicts lower physical distancing. The friends (vs. strangers) condition predicted higher trust, $b = 0.61$, 95% CI [0.32; .91], $SE = 0.15$, $t = 4.09$, $p < .001$. There was also a significant direct effect of the friends (vs. strangers) condition on physical distancing, $b = -0.36$, 95% CI [-0.63; -0.09], $SE = 0.14$, $t = 2.64$, $p = .008$. In line with Hypothesis 2, the indirect effect of the friends (vs. strangers) condition on physical distancing via trust was significant, $IE = -0.11$, $SE = 0.03$, 95% CI [-0.17; -0.05], also when controlling for vulnerability to the virus ($N = 1257$), $IE = -0.10$, $SE = 0.03$, 95% CI [-0.17; -0.04]. When controlling for having been diagnosed with COVID-19 in addition to age and gender, the indirect effect of the friends (vs. strangers) condition on physical distancing via trust was significant, $IE = -0.10$, $SE = 0.03$, 95% CI [-0.17; -0.05]

Compared to the strangers condition, the friends of a friend condition is related to lower physical distancing but this relationship is not mediated by trust. The friends of a friend (vs. strangers) condition did not predict higher trust, $b = -0.08$, 95% CI [-0.38; 0.21], $SE = 0.15$, t

= 0.55, $p = .582$. There was a significant direct effect of the friends of a friend (vs. strangers) condition on physical distancing, $b = -0.42$, 95% CI [-0.69; -0.15], $SE = 0.14$, $t = 3.11$, $p = .002$. The indirect effect of the friends of a friend condition on physical distancing via trust was not significant, $IE = .01$, $SE = 0.02$, 95% CI [-0.03; 0.06], also when controlling for vulnerability to the virus ($N = 1257$), $IE = 0.04$, $SE = 0.03$, 95% CI [-0.02; 0.10]. When controlling for having been diagnosed with COVID-19 in addition to age and gender, the indirect effect of the friends of a friend condition on physical distancing via trust was not significant, $IE = .01$, $SE = 0.02$, 95% CI [-0.03; 0.06].

Table 3

Indirect effect of social closeness on physical distancing through trust (Experiment 1)

Control variables	IV	Effects of IV on mediator		Effect of M on DV		Direct effects		Indirect effect [95% CI]
		<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>	
Age and gender	Family	1.16	< .001	-0.17	< .001	-0.52	< .001	[-0.27, -0.13]
	Friends	0.61	< .001	-0.17	< .001	-0.36	.008	[-0.17, -0.05]
	Friends of a Friend	-0.08	.582	-0.17	< .001	-0.42	.002	[-0.03, 0.06]
Age, gender and vulnerability to the virus	Family	0.99	< .001	-0.17	< .001	-0.46	.005	[-0.26, -0.10]
	Friends	0.58	.001	-0.17	< .001	-0.36	.029	[-0.17, -0.04]
	Friends of a Friend	-0.21	.236	-0.17	< .001	-0.35	.034	[-0.02, 0.10]
Age, gender and having been diagnosed with COVID-19	Family	1.17	< .001	-0.17	< .001	-0.53	< .001	[-0.28, -0.13]
	Friends	0.60	< .001	-0.17	< .001	-0.34	.012	[-0.17, -0.05]
	Friends of a Friend	-0.08	.591	-0.17	< .001	-0.43	.002	[-0.03, 0.06]

Note. DV = dependent variable. IV = independent variable. M = mediator.

Mask wearing. Compared to the strangers condition, the family condition is related to higher trust which, in turn, is linked to lower mask wearing. The family (vs. strangers)

condition predicted higher trust, $b = 1.16$, 95% CI [0.87; 1.46], $SE = 0.15$, $t = 7.77$, $p < .001$. Trust predicted lower mask wearing, $b = -0.29$, 95% CI [-0.34; -0.24], $SE = 0.02$, $t = 11.79$, $p < .001$. There was no significant direct effect of the family (vs. strangers) condition on mask wearing, $b = 0.07$, 95% CI [-0.24; 0.38], $SE = 0.16$, $t = 0.46$, $p = .649$. As predicted, we found a significant indirect effect of the family (vs. strangers) condition on mask wearing via trust, $IE = -0.34$, $SE = 0.05$, 95% CI [-0.45; -0.24], also when controlling for vulnerability to the virus ($N = 1257$), $IE = -0.25$, $SE = 0.05$, 95% CI [-0.37; -0.16]. When controlling for having been diagnosed with COVID-19 in addition to age and gender, we found a significant indirect effect of the family (vs. strangers) condition on mask wearing via trust, $IE = -0.34$, $SE = 0.05$, 95% CI [-0.46; -0.25].

Compared to the strangers condition, the friends condition is related to higher trust which, in turn, is linked to lower compliance to the mask wearing measure. The friends (vs. strangers) condition predicted higher trust, $b = 0.61$, 95% CI [0.32; 0.91], $SE = 0.15$, $t = 4.09$, $p < .001$. There was no significant direct effect of the friends (vs. strangers) condition on mask wearing, $b = -0.02$, 95% CI [-0.33; 0.28], $SE = 0.16$, $t = 0.13$, $p = .896$. In line with Hypothesis 2, the indirect effect of the friends (vs. strangers) condition on mask wearing via trust was significant, $IE = -0.18$, $SE = 0.05$, 95% CI [-0.27; -0.09], also when controlling for vulnerability to the virus ($N = 1257$), $IE = -0.15$, $SE = 0.05$, 95% CI [-0.25; -0.06]. When controlling for having been diagnosed with COVID-19 in addition to age and gender, the indirect effect of the friends (vs. strangers) condition on mask wearing via trust was significant, $IE = -0.18$, $SE = 0.05$, 95% CI [-0.27; -0.09].

Compared to the strangers condition, the friends of a friend condition is not related to lower mask wearing via trust. The friends of a friend (vs. strangers) condition did not predict higher trust, $b = -0.08$, 95% CI [-0.38; 0.21], $SE = 0.15$, $t = 0.55$, $p = .582$. There was no significant direct effect of the friends of a friend (vs. strangers) condition on mask wearing, $b = -0.14$, 95% CI [-0.44; 0.17], $SE = 0.15$, $t = 0.88$, $p = .381$. The indirect effect of the friends of a friend (vs. strangers) condition on mask wearing via trust was not significant, $IE = 0.02$, $SE = 0.04$, 95% CI [-0.06; 0.11], also when controlling for vulnerability to the virus ($N = 1257$), $IE = 0.05$, $SE = 0.04$, 95% CI [-0.03; 0.14]. When controlling for having been diagnosed with COVID-19 in addition to age and gender, the indirect effect of the friends of a friend (vs. strangers) condition on mask wearing via trust was not significant, $IE = 0.02$, $SE = 0.04$, 95% CI [-0.06; 0.11].

Table 4*Indirect effect of social closeness on mask wearing through trust (Experiment 1)*

Control variables	IV	Effects of IV on mediator		Effect of M on DV		Direct effects		Indirect effect [95% CI]
		<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>	
Age and gender	Family	1.16	< .001	-0.29	< .001	0.07	.649	[-0.45, -0.24]
	Friends	0.61	< .001	-0.29	< .001	-0.02	.896	[-0.27, -0.09]
	Friends of a Friend	-0.08	.582	-0.29	< .001	-0.14	.381	[-0.06, 0.11]
Age, gender and vulnerability to the virus	Family	0.99	< .001	-0.26	< .001	0.10	.567	[-0.37, -0.16]
	Friends	0.58	.001	-0.26	< .001	0.16	.386	[-0.25, -0.06]
	Friends of a Friend	-0.21	.236	-0.26	< .001	0.04	.824	[-0.03, 0.14]
Age, gender and having been diagnosed with COVID-19	Family	1.17	< .001	-0.29	< .001	0.06	.685	[-0.46, -0.25]
	Friends	0.60	< .001	-0.29	< .001	-0.02	.892	[-0.27, -0.09]
	Friends of a Friend	-0.08	.591	-0.29	< .001	-0.15	.343	[-0.06, 0.11]

Note. DV = dependent variable. IV = independent variable. M = mediator.

Exploratory Analyses

As risk perception is conceptualized as being negatively linked to trust (Das & Teng, 2004), we used Haye's (2018) PROCESS Model 6 to test if trust and perception of risk from others to self had a serial indirect effect on the relationship between the social closeness conditions and compliance.

Physical Distancing. Compared to the strangers condition, the relationship between the family condition and physical distancing was serially mediated by trust and perception of risk from others to self. The family condition significantly predicted higher trust, $b = 1.16$, 95% CI [0.87; 1.46], $SE = 0.15$, $t = 7.77$, $p < .001$. Trust significantly predicted lower risk perception, $b = -0.45$, 95% CI [-0.50; -0.41], $SE = 0.02$, $t = 19.05$, $p < .001$. Risk perception significantly predicted higher physical distancing, $b = 0.31$, 95% CI [0.27; 0.35], $SE = 0.02$, $t = 15.11$, $p < .001$. The direct effect of the family condition on physical distancing was significant, $b = -0.73$, 95% CI [-0.99; -0.48], $SE = 0.13$, $t = 5.64$, $p < .001$. The indirect effect

of the family condition on physical distancing via trust and risk perception was significant, $IE = -0.16$, $SE = 0.03$, 95% CI [-0.22; -0.11], also when controlling for vulnerability to the virus ($N = 1257$), $IE = -0.14$, $SE = 0.03$, 95% CI [-0.21; -0.09].

Compared to the strangers condition, the relationship between the friends condition and physical distancing was serially mediated by trust and risk perception. The friends condition significantly predicted higher trust, $b = 0.61$, 95% CI [0.32; 0.91], $SE = 0.15$, $t = 4.09$, $p < .001$. Trust significantly predicted lower risk perception, $b = -0.45$, 95% CI [-0.50; -0.41], $SE = 0.02$, $t = 19.05$, $p < .001$. Risk perception significantly predicted higher physical distancing, $b = 0.31$, 95% CI [0.27; 0.35], $SE = 0.02$, $t = 15.11$, $p < .001$. The direct effect of the friends condition on physical distancing was significant, $b = -0.45$, 95% CI [-0.71; -0.20], $SE = 0.13$, $t = 3.54$, $p < .001$. The indirect effect of the friends condition on physical distancing via trust and risk perception was significant, $IE = -0.09$, $SE = 0.02$, 95% CI [-0.13; -0.04], also when controlling for vulnerability to the virus ($N = 1257$), $IE = -0.08$, $SE = 0.03$, 95% CI [-0.14; -0.03].

Compared to the strangers condition, the relationship between the friends of a friend condition and physical distancing was not serially mediated by trust and risk perception. The friends of a friend condition did not significantly predict higher trust, $b = -0.08$, 95% CI [-0.38; 0.21], $SE = 0.15$, $t = 0.55$, $p = .582$. Trust significantly predicted lower risk perception, $b = -0.45$, 95% CI [-0.50; -0.41], $SE = 0.02$, $t = 19.05$, $p < .001$. Risk perception significantly predicted higher physical distancing, $b = 0.31$, 95% CI [0.27; 0.35], $SE = 0.02$, $t = 15.11$, $p < .001$. The direct effect of the friends of a friend condition on physical distancing was significant, $b = -0.46$, 95% CI [-0.71; -0.21], $SE = 0.13$, $t = 3.58$, $p < .001$. The indirect effect of the friends of a friend condition on physical distancing via trust and risk perception was not significant, $IE = 0.01$, $SE = 0.02$, 95% CI [-0.03; 0.05], also when controlling for vulnerability to the virus ($N = 1257$), $IE = 0.03$, $SE = 0.02$, 95% CI [-0.01; 0.08].

Mask Wearing. Compared to the strangers condition, the relationship between the family condition and mask wearing was serially mediated by trust and perception of risk from others to self. The family condition significantly predicted higher trust, $b = 1.16$, 95% CI [0.87; 1.46], $SE = 0.15$, $t = 7.77$, $p < .001$. Trust significantly predicted lower risk perception, $b = -0.45$, 95% CI [-0.50; -0.41], $SE = 0.02$, $t = 19.05$, $p < .001$. Risk perception significantly predicted higher mask wearing, $b = 0.46$, 95% CI [0.41; 0.50], $SE = 0.02$, $t = 20.57$, $p < .001$. The direct effect of the family condition on physical distancing was significant, $b = -0.24$, 95% CI [-0.52; 0.04], $SE = 0.14$, $t = 1.71$, $p = .087$. The indirect effect of the family condition on mask wearing via trust and risk perception to others from the self was significant, $IE = -0.24$,

$SE = 0.04$, 95% $CI [-0.32; -0.17]$, also when controlling for vulnerability to the virus ($N = 1257$), $IE = -0.20$, $SE = 0.04$, 95% $CI [-0.29; -0.13]$.

Compared to the strangers condition, the relationship between the friends condition and mask wearing was serially mediated by trust and risk perception. The friend condition significantly predicted higher trust, $b = 0.61$, 95% $CI [0.32; 0.91]$, $SE = 0.15$, $t = 4.09$, $p < .001$. Trust significantly predicted lower risk perception, $b = -0.45$, 95% $CI [-0.50; -0.41]$, $SE = 0.02$, $t = 19.05$, $p < .001$. Risk perception significantly predicted higher mask wearing, $b = 0.46$, 95% $CI [0.41; 0.50]$, $SE = 0.02$, $t = 20.57$, $p < .001$. The direct effect of the friends condition on mask wearing was not significant, $b = -0.16$, 95% $CI [-0.44; 0.11]$, $SE = 0.14$, $t = 1.15$, $p = .249$. The indirect effect of the friend condition on mask wearing via trust and risk perception was significant, $IE = -0.13$, $SE = 0.03$, 95% $CI [-0.20; -0.06]$, also when controlling for vulnerability to the virus ($N = 1257$), $IE = -0.12$, $SE = 0.04$, 95% $CI [-0.20; -0.04]$.

Compared to the strangers condition, the relationship between the friends of a friend condition and mask wearing was not serially mediated by trust and risk perception. The friends of a friend condition did not significantly predict higher trust, $b = -0.08$, 95% $CI [-0.38; 0.21]$, $SE = 0.15$, $t = 0.55$, $p = .582$. Trust significantly predicted lower risk perception, $b = -0.45$, 95% $CI [-0.50; -0.41]$, $SE = 0.02$, $t = 19.05$, $p < .001$. Risk perception significantly predicted higher mask wearing, $b = 0.46$, 95% $CI [0.41; 0.50]$, $SE = 0.02$, $t = 20.57$, $p < .001$. The direct effect of the friends of a friend condition on mask wearing was not significant, $b = -0.19$, 95% $CI [-0.46; 0.08]$, $SE = 0.14$, $t = 1.36$, $p = .173$. The indirect effect of the friends of a friend condition on mask wearing via trust and risk perception was not significant, $IE = 0.01$, $SE = 0.03$, 95% $CI [-0.04; 0.08]$, also when controlling for vulnerability to the virus ($N = 1257$), $IE = 0.04$, $SE = 0.04$, 95% $CI [-0.03; 0.12]$.

The results of Experiment 1 offer initial support to Hypothesis 1. Participants who read about interacting with friends of a friend, friends and family members were less inclined to maintain physical distancing than participants who read about interacting with strangers. The results for mask wearing were in the same direction, albeit weaker. Participants who read about interacting with family as compared to strangers were less inclined to wear a mask, although this difference was only marginally significant. The other conditions were not significantly different from one another. Moreover, when we controlled for the vulnerability to the virus, there were no longer significant differences between conditions as for mask wearing. It is possible that the participants imagined that they would wear the mask to a greater extent than maintaining physical distancing because of the nature of the situation described in the vignettes. Indeed, they were asked to imagine themselves assisting at a concert; in that context, there is

less incentive to take off the mask as the attendees are typically not having conversations during such activities. Hypothesis 2 received partial support. Participants who read about interacting with friends and family members (but not with friends of a friend) compared to strangers reported experiencing higher trust which, in turn, partly explained lower intention to comply with both preventive measures. Exploratory analyses also showed that, when participants imagined themselves interacting with friends and their family (vs strangers), they experienced more trust which was then linked to lower perception of risk of being infected with the virus – this lower perception of risk was associated with lower compliance with both preventive measures.

Experiment 2

As Experiment 1 was not pre-registered, we conducted Experiment 2 as a pre-register replication (https://osf.io/wekq3/?view_only=692e43f86e304a53bd188d28729c121f). We also aimed to extend Experiment 1 by examining moralization of preventive measures as a boundary condition for the effect of social closeness on compliance. Specifically, we examined whether individuals who view noncompliance with preventive measures as morally “wrong” would comply even when interacting with close others.

Moralization and Compliance with Preventive Measures

In the context of the COVID-19 pandemic, some individuals may moralize compliance with preventive measures (Ekberg et al., 2021; Francis & McNabb, 2022; Graso et al., 2021; Prosser et al., 2020). Moralization is the process by which an originally neutral object, behavior, or attitude gain moral attributes (Rozin, 1999). Thus, engaging in behaviors that were originally neutral (e.g., wearing a mask, maintaining physical distance) may now be perceived as a moral issue. Individuals who moralized compliance would consider it morally “wrong” not to follow preventive measures.

Why would individuals who moralize compliance with preventive measures comply with close others as much as with strangers? Because moral convictions are uniquely considered “universal” by the individuals that uphold them (Skitka, 2010), a person who moralizes compliance would consider it universally “wrong” not to comply with the measures, and thus, would believe that preventive measures must be followed by everyone, at all times, and in all situations. Even when interacting with close others such as family members, not complying would be morally “wrong”. Furthermore, moral convictions are impervious to majority influence, and thus individuals are unlikely to change their mind even when they expect others not to follow their conviction (e.g., Aramovich et al., 2012).

We suggest that because moral convictions are perceived as “always true”, individuals who moralize compliance with preventive measures would be less sensitive to context and therefore would comply with measures even in social situations in which people are generally less compliant (e.g., when interacting with close others). Thus, we hypothesize that the moralization of preventive measures will moderate the relationship between social closeness and compliance.

H3: Individuals who moralize compliance with preventive measures will be less affected by social closeness than individuals who do not moralize compliance with preventive measures.

Method

Participants

We recruited 580 Canadian participants between 18-60 years old via *Prolific Academic*. Based on power analysis (G*Power; Faul et al., 2007) using the effect size from Experiment 1 for the comparison between the strangers and friends conditions ($f = .25$) we needed 578 participants to achieve 85% statistical power. We recruited only participants under 60 years old to avoid participants from at-risk groups for COVID-19. We further removed 2 participants from the analysis because their answer (e. g. “Watching YouTube fitness channel and follow it to do exercise”) to a quality-check open-ended question (“*What was the winter activity you read about at the very beginning of the survey? Please explain briefly the winter activity*”) did not indicate that they read the vignette. In addition, we excluded 142 participants who reported that they would never be in the situation described in the vignette. Responses from one participant could not be analyzed because this participant did not consent that we use their data at the end of the survey. The final sample included 435 participants (46.4% women, 52.2% male, 1.4% other, $M_{age} = 30.43$, $SD = 8.71$, range = 18-59). The sample size was determined before any data analysis. The analyses had 80% power to detect an effect size of $d = .30$ (G*Power; Faul et al., 2007).

Procedure

We ran Experiment 2 online, between March 24th and April 6th, 2021. Throughout this period, there were 78,574 active COVID-19 cases in Canada (Canadian Institute for Health Information, 2022) – the virus transmission was, thus, still going on. The procedure was very similar to Experiment 1. We randomly assigned participants to one of three social closeness conditions in between-subjects experimental design. We decided to use only friends as the high social closeness condition, as the friends and family conditions in experiment 1 were very similar. We changed the social interaction to a winter activity (skating on an outdoor skating

ring with around 20 people) to fit the season. All participants read a vignette depicting the social interaction. The only difference between conditions was the social closeness between the participant and the people attending this event: (1) strangers (no social closeness), (2) friends of a friend (+ social closeness) or (3) friends (++ social closeness). We controlled for the location of the outdoor activity: all participants saw the same image depicting an outdoor ice rink (see *Supplementary Material* for the vignettes and image). After completing the survey, participants received a \$1.62 (CAD) compensation. Participants had the possibility to answer the survey either in English or in French.

Measures

Compliance with preventive measures. Compliance was measured with two items: (1) “*In this situation, I would maintain physical distancing (about 2 meters) from other people on the ice rink*”; and (2) “*In this situation, I would wear a mask and keep it on the ice rink*”. Both items were measured using a 10-point scale (1 = *definitely not*, 10 = *definitely yes*).

Trust. Trust was measured with a single item: “*In this situation, to what extent do you think that you can trust the other people on the ice rink?*” on a 10-point scale (1 = *Distrust completely*, 10 = *trust completely*).

Risk perception. We measured perception of risk from others to self (“*In this situation, I worry that someone could infect me with COVID-19*”) and perception of risk from self to others (“*In this situation, I worry that I could infect someone else with COVID-19*”); on a 10-point scale (1 = *definitely not*, 10 = *definitely yes*).

Moralization. To assess moralization, we created three items, based on Skitka et al. (2005) and Feinberg et al. (2019): *Please rate to what extent you agree with each statement about following government preventive measures (e.g. wearing a mask):* (1) “*I choose to follow government measures because doing so reflects my own moral convictions*”; (2) “*I choose to follow government measures because doing so reflects my personal beliefs about right and wrong*”; (3) “*I believe that refusing to follow government measures is morally wrong*” ($\alpha = .83$, $M = 7.46$, $SD = 2.10$).

Additional variables. Participants reported their gender identity, age, and area of residence (urban, suburban area, or rural area). We also measured their general risk perception of COVID-19 (“*In general, are you worried about getting seriously sick with COVID-19?*”) on a 10-point scale (1 = *not at all worried*, 10 = *extremely worried*).

Manipulation check. Participants rated the level of social closeness they felt towards the other persons in their assigned condition (“*How close do you feel to the other people in the situation?*”) on a on a 10-point scale (1 = *not close at all*, 10 = *extremely close*).

Results & Discussion

Descriptive analyses

Similar to Experiment 1, the mean compliance to the mask wearing and physical distancing measures were high in all conditions ($M_s > 7.34$ on a 10-point scale, see Table 1). As presented in Table 6, trust was negatively correlated with physical distancing ($r(433) = -.23, p < .001$) and mask wearing ($r(433) = -.26, p < .001$). Perception of risk from others to self was positively correlated with physical distancing ($r(433) = .53, p < .001$), mask wearing ($r(433) = .63, p < .001$), and negatively correlated with trust ($r(433) = -.43, p < .001$). Perception of risk from self to others was positively correlated with physical distancing ($r(433) = .28, p < .001$), mask wearing ($r(433) = .39, p < .001$), and negatively correlated with trust ($r(433) = -.25, p < .001$). Moralization was positively correlated with physical distancing ($r(433) = .44, p < .001$) and mask wearing ($r(433) = .45, p < .001$). See *Supplementary Materials* for the correlation matrixes within each of the three conditions (Tables 13, 14, 15).

Table 5*Means and standard deviations of the main variables in Experiment 2*

	Complete Strangers	Friends of a friend	Friends
Variables	Mean (SD)	Mean (SD)	Mean (SD)
Trust	4.35 (1.84)	4.72 (1.9)	5.89 (1.76)
Physical distancing	7.91 (2.43)	7.74 (2.39)	7.35 (2.27)
Mask	8.45 (2.53)	8.14 (2.58)	8.04 (2.60)
Perception of risk from others to self	7.13 (2.65)	7.14 (2.59)	6.91 (2.42)
Perception of risk from self to others	5.43 (2.77)	5.25 (2.68)	5.36 (2.65)
Moralization	7.44 (2.23)	7.25 (2.22)	7.71 (1.81)
N	140	155	140

Note. The variables measuring compliance with preventive measures (physical distancing and mask wearing) are not normally distributed; the distributions are negatively skewed. The trust variable shows a normal distribution. The range for all variables is 1-10.

Table 6*Correlation matrix of the main variables in Experiment 2*

	1	2	3	4	5
1. Physical distancing					
2. Mask	.48**				
3. Trust	-.23**	-.26**			
4. Perception of risk from others to self	.53**	.63**	-.43**		
5. Perception of risk from self to others	.28**	.39**	-.25**	.56**	
6. Moralization	.44**	.45**	-.16**	.54**	.31**

Note. ** $p < .01$, * $p < .05$. The degrees of freedom for all correlations are 433.

Pre-registered main analyses

Manipulation check. To examine whether there were differences in social closeness between the three conditions we ran a one-way ANOVA. There was a significant difference between conditions, $F(2, 432) = 69.83, p < .001$. Post-hoc tests with Bonferroni correction indicated that participants felt closer to friends ($M = 6.72, SD = 1.8$) than to friends of a friend ($M = 4.21, SD = 1.83$), $p < .001, d = 1.38$. Participants also felt closer to friends than to strangers ($M = 4.47, SD = 2.28$), $p < .001, d = 1.10$. There was no difference between the friends of a friend and the strangers conditions, $p = .787, d = 0.13$.

Compliance with preventive measures. We ran non-parametric ANCOVAS (Quade's) to test for differences between the conditions in compliance with the physical distancing and mask wearing measures. We used a non-parametric test because both compliance variables had non-normal distributions. As in Experiment 1, we controlled for age and gender. Different from Experiment 1, we also controlled for the area of residence in the analysis, because there might also be variations in compliance depending on the area of residence (e.g., because urban areas had higher rates of COVID-19 infections; Xia et al., 2022).

Physical distancing. Replicating the results of Experiment 1, we found a significant difference between conditions, $F(2, 432) = 4.51, p = .011, \eta^2 = .02$. Post hoc analyses using the

Scheffé post hoc criterion for significance indicated that compliance was significantly higher in the strangers condition ($M = 7.91, SD = 2.43$) as compared to the friends condition ($M = 7.35, SD = 2.27$), $p = .014, d = 0.35$. There were no significant differences between the strangers and the friends of a friend conditions ($M = 7.74, SD = 2.39$), $p = .620, d = 0.11$. There were no significant differences between the friends and the friends of a friend condition, $p = .127, d = 0.24$. When controlling for general risk perception of COVID-19 in addition to age, gender and area of residence, we found significant differences between conditions as for physical distancing, $F(2, 432) = 5.46, p = .005, \eta^2 = .03$. Post hoc analyses using the Scheffé post hoc criterion for significance showed that compliance was higher in the strangers condition compared to the friends condition, $p = .010, d = 0.36$. Compliance was also higher in the friend of a friend condition compared to the friends condition, $p = .030, d = 0.32$. There were not significant differences between the strangers and the friends of a friend conditions, $p = .901, d = 0.05$.

Mask wearing. There were no significant differences between the conditions in mask wearing, $F(2, 432) = 2.64, p = .073, \eta^2 = .01$. Post hoc analyses using the Scheffé post hoc criterion for significance demonstrated that compliance was similar for all conditions (all p 's $> .075$). When controlling for general risk perception of COVID-19 in addition to age, gender and area of residence, we did not find significant differences between conditions in mask wearing, $F(2, 432) = 2.90, p = .056, \eta^2 = .01$.

Mediation analysis. We used PROCESS (Model 4; Hayes, 2018) to test for an indirect effect of social closeness condition on compliance with preventive measured through trust. We used bootstrapping procedures (5000 bootstraps samples) to test the significance of the indirect effects. As in Experiment 1, the strangers condition was the reference group. We controlled for age, gender and the area of residence in the analyses. The findings of Experiment 1 were replicated. The results are presented in Tables 7 and 8.

Physical distancing. Compared to the strangers condition, the friend condition predicts higher trust which, in turn, is linked to less compliance with physical distancing. The friends condition compared to the strangers condition significantly predicted higher trust, $b = 1.52, 95\% CI [1.09; 1.95], SE = 0.22, t = 6.97, p < .001$. Trust significantly predicted less physical distancing, $b = -0.24, 95\% CI [-0.36; -0.12], SE = 0.06, t = 3.98, p < .001$. The direct effect of the friends condition (vs. strangers condition) on compliance was not significant, $b = -0.22, 95\% CI [-0.79; 0.34], SE = 0.29, t = 0.77, p = .441$. Importantly, as in Experiment 1, the indirect effect of the friends condition on compliance via trust was significant, $IE = -0.37, SE = 0.12, 95\% CI [-0.63; -0.16]$. However, when controlling for general risk perception of COVID-19 in

addition to age, gender and area of residence, the indirect effect of the friends condition compared to the strangers condition on compliance via trust was not significant, $IE = -0.08$, $SE = 0.09$, 95% $CI [-0.27; 0.10]$.

Compared to the strangers condition, the friends of a friend condition is not linked to less compliance via trust. The friends of a friend (vs. strangers) condition did not predict higher trust, $b = 0.34$, 95% $CI [-0.08; 0.77]$, $SE = 0.22$, $t = 1.59$, $p = .112$. The direct effect of the friends of a friend condition on compliance was not significant, $b = -0.11$, 95% $CI [-0.65; 0.42]$, $SE = 0.27$, $t = .42$, $p = .675$. The indirect effect of the friends of a friend condition on compliance via trust was also not significant, $IE = -0.08$, $SE = 0.06$, 95% $CI [-0.23; 0.02]$, also when controlling for general risk perception of COVID-19, $IE = -0.01$, $SE = 0.02$, 95% $CI [-0.07; 0.02]$.

Table 7

Indirect effect of social closeness on physical distancing through trust (Experiment 2)

Control variables	IV	Effects of IV on mediator		Effect of M on DV		Direct effects		Indirect effect [95% CI]
		<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>	
Age, gender and area	Friends	1.52	< .001	-0.24	< .001	-0.22	.442	[-0.63, -0.16]
	Friends of a Friend	0.34	.112	-0.24	< .001	-0.11	.675	[-0.23, 0.02]
Age, gender, area and general risk perception	Friends	1.51	<.001	-0.05	.378	-0.49	.067	[-0.27, 0.10]
	Friends of a Friend	0.25	.218	-0.05	.378	-0.04	.888	[-0.07, 0.02]

Note. DV = dependent variable. IV = independent variable. M = mediator.

Mask wearing. Compared to the strangers condition, the friends condition predicts higher trust which, in turn, is associated with less compliance with mask wearing. Compared to the strangers condition, the friends condition significantly predicted higher trust, $b = 1.52$, 95% $CI [1.09; 1.95]$, $SE = 0.22$, $t = 6.97$, $p < .001$. Trust significantly predicted lower mask wearing, $b = -0.34$, 95% $CI [-0.47; -0.21]$, $SE = 0.07$, $t = 5.23$, $p < .001$. The direct effect of the friends condition on mask wearing was not significant, $b = 0.11$, 95% $CI [-0.50; 0.73]$, $SE = 0.31$, $t = 0.36$, $p = .718$. As in Experiment 1, the indirect effect of the friends condition

compared to the strangers condition on physical distancing via trust was significant, $IE = -0.52$, $SE = 0.13$, 95% $CI [-0.81; -0.29]$, also when controlling for general risk perception of COVID-19, $IE = -0.20$, $SE = 0.10$, 95% $CI [-0.42; -0.02]$.

Compared to the strangers condition, the friends of a friend condition was not linked to lower mask wearing via trust. The friend of a friend (vs. strangers) condition did not predict higher trust, $b = 0.34$, 95% $CI [-0.08; 0.77]$, $SE = 0.22$, $t = 1.59$, $p = .112$. The direct effect of the friends of a friend condition on physical distancing was not significant, $b = -0.21$, 95% $CI [-0.79; 0.37]$, $SE = 0.29$, $t = 0.72$, $p = .471$. The indirect effect of the friends of a friend condition compared to the strangers condition on physical distancing via trust was not significant, $IE = -0.12$, $SE = 0.08$, 95% $CI [-0.30; 0.03]$, also when controlling for general risk perception of COVID-19, $IE = -0.03$, $SE = 0.04$, 95% $CI [-0.12; 0.02]$.

Table 8

Indirect effect of social closeness on mask wearing through trust (Experiment 2)

Control variables	IV	Effects of IV on mediator		Effect of M on DV		Direct effects		Indirect effect [95% CI]
		<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>	
Age, gender and area	Friends	1.52	< .001	-0.34	< .001	0.11	.718	[-0.81, -0.29]
	Friends of a Friend	0.34	.112	-0.34	< .001	-0.21	.471	[-0.30, 0.03]
Age, gender, area and general risk perception	Friends	1.51	<.001	-0.13	.040	-0.19	.514	[-0.42, -0.02]
	Friends of a Friend	0.25	.218	-0.13	.040	-0.12	.644	[-0.12, 0.02]

Note. DV = dependent variable. IV = independent variable. M = mediator.

Moderation analysis. We used PROCESS (Model 1; Hayes, 2018) to examine whether moralization of preventive measures moderated the relationship between the social closeness conditions and compliance with preventive measures. We used bootstrapping procedures (5000 bootstrap samples) to test the significance of the interaction effects. To facilitate interpretation, we combined the strangers and the friends of a friend conditions into a ‘low social closeness’ group, as there was no significant difference in social closeness between these conditions. The

'low social closeness' group was the reference group. We controlled for gender and the area of residence in the analysis.

Physical distancing. There was not a significant interaction between social closeness and moralization, $b = 0.09$, 95% CI [-0.14; 0.31], $SE = 0.11$, $t = 0.77$, $p = .443$, also when controlling for general risk perception of COVID-19, $b = 0.05$, 95% CI [-0.16; 0.27], $SE = 0.11$, $t = 0.50$, $p = .617^3$.

Mask wearing. There was not a significant interaction between social closeness and moralization, $b = 0.05$, 95% CI [-0.19; 0.29], $SE = 0.12$, $t = 0.40$, $p = .689$, also when controlling for general risk perception of COVID-19, $b = 0.01$, 95% CI [-0.22; 0.24], $SE = 0.12$, $t = 0.09$, $p = .928^4$.

These results do not support H3, suggesting that moralization does not moderate the relationship between social closeness and compliance.

Exploratory Analyses

As in Experiment 1, we used Haye's (2018) PROCESS Model 6 to test if trust and perception of risk from others to self had a serial indirect effect on the relationship between the social closeness conditions and compliance.

Physical Distancing. Compared to the strangers condition, the relationship between the friends condition and physical distancing is serially mediated by trust and perception of risk from others to self. The friends condition significantly predicted higher trust, $b = 1.52$, 95% CI [1.09; 1.95], $SE = 0.22$, $t = 6.97$, $p < .001$. Trust significantly predicted lower risk perception, $b = -0.59$, 95% CI [-0.71; -0.47], $SE = 0.06$, $t = 9.68$, $p < .001$. Risk perception significantly predicted higher physical distancing, $b = 0.48$, 95% CI [0.40; 0.57], $SE = 0.04$, $t = 11.53$, $p < .001$. The direct effect of the friends condition on physical distancing was

³ Without combining the friends of a friend and the friends condition, there was not a significant interaction between the friends condition (vs strangers) and moralization, $b = 0.20$, 95% CI [-0.05; 0.45], $SE = 0.13$, $t = 1.59$, $p = .113$. There was not a significant interaction between the friends of a friend condition (vs strangers) and moralization, $b = 0.22$, 95% CI [-0.00; 0.43], $SE = 0.11$, $t = 1.96$, $p = .05$. When controlling for general risk perception, we did not find a significant interaction between the friends condition (vs strangers) and moralization, $b = 0.17$, 95% CI [-0.07; 0.41], $SE = 0.12$, $t = 1.42$, $p = .157$. However, we found a significant interaction between the friends of a friend condition (vs strangers) and moralization, $b = 0.22$, 95% CI [0.02; 0.43], $SE = 0.11$, $t = 2.13$, $p = .033$. The relationship between moralization and physical distancing is stronger for the friends of a friend condition than the strangers condition.

⁴ Without combining the friends of a friend and the friends condition, there was not a significant interaction between the friends condition (vs strangers) and moralization, $b = -0.03$, 95% CI [-0.30; 0.24], $SE = 0.14$, $t = 0.25$, $p = .805$. There was not a significant interaction between the friends of a friend condition (vs strangers) and moralization, $b = -0.17$, 95% CI [-0.40; 0.07], $SE = 0.12$, $t = 1.39$, $p = .165$. When controlling for general risk perception, we did not find a significant interaction between the friends condition (vs strangers) and moralization, $b = -0.07$, 95% CI [-0.32; 0.19], $SE = 0.13$, $t = 0.52$, $p = .602$. We did not find a significant interaction between the friends condition (vs strangers) and moralization, $b = -0.16$, 95% CI [-0.38; 0.07], $SE = 0.11$, $t = 1.37$, $p = .171$.

significant: $b = -0.55$, 95% $CI [-1.05; -0.05]$, $SE = 0.25$, $t = 2.17$, $p = .031$. The indirect effect of the friends condition on physical distancing via trust and risk perception was significant, $IE = -0.43$, $SE = 0.09$, 95% $CI [-0.63; -0.28]$, also when controlling for general risk perception of COVID-19, $IE = -0.18$, $SE = 0.05$, 95% $CI [-0.28; -0.10]$.

Compared to the strangers condition, the relationship between the friends of a friend condition and physical distancing was not serially mediated by trust and risk perception. The friends of a friend condition did not significantly predicted higher trust, $b = 0.34$, 95% $CI [-0.08; 0.77]$, $SE = 0.22$, $t = 1.59$, $p = .112$. Trust significantly predicted lower risk perception, $b = -0.59$, 95% $CI [-0.71; -0.47]$, $SE = 0.06$, $t = 9.68$, $p < .001$. Risk perception significantly predicted higher physical distancing, $b = 0.48$, 95% $CI [0.40; 0.57]$, $SE = 0.04$, $t = 11.53$, $p < .001$. The direct effect of the friends of a friend condition on physical distancing was not significant, $b = -0.22$, 95% $CI [-0.69; 0.24]$, $SE = 0.24$, $t = 0.94$, $p = .347$. The indirect effect of the friends of a friend condition on physical distancing via trust and risk perception was not significant, $IE = -0.10$, $SE = 0.07$, 95% $CI [-0.24; 0.02]$, also when controlling for general risk perception of COVID-19, $IE = -0.03$, $SE = 0.03$, 95% $CI [-0.09; 0.02]$.

Mask Wearing. Compared to the strangers condition, the relationship between the friends condition and mask wearing was serially mediated by trust and perception of risk from others to self. The friends condition significantly predicted higher trust, $b = 1.52$, 95% $CI [1.09; 1.95]$, $SE = 0.22$, $t = 6.97$, $p = < .001$. Trust significantly predicted lower risk perception, $b = -0.59$, 95% $CI [-0.71; -0.47]$, $SE = 0.06$, $t = 9.68$, $p < .001$. Risk perception significantly predicted higher mask wearing: $b = 0.63$, 95% $CI [0.55; 0.72]$, $SE = 0.04$, $t = 15.08$, $p < .001$. The direct effect of the friends condition on mask wearing was significant, $b = -0.32$, 95% $CI [-0.82; 0.18]$, $SE = 0.25$, $t = 1.25$, $p = .212$. The indirect effect of the friends condition on mask wearing via trust and risk perception was significant, $IE = -0.57$, $SE = 0.11$, 95% $CI [-0.81; -0.37]$, also when controlling for general risk perception of COVID-19, $IE = -0.27$, $SE = 0.07$, 95% $CI [-0.42; -0.15]$.

Compared to the strangers condition, the relationship between the friends of a friend condition and mask wearing was not serially mediated by trust and risk perception. The friends of a friend condition did not significantly predicted higher trust, $b = 0.34$, 95% $CI [-0.08; 0.77]$, $SE = 0.22$, $t = 1.59$, $p = .112$. Trust significantly predicted lower risk perception, $b = -0.59$, 95% $CI [-0.71; -0.47]$, $SE = 0.06$, $t = 9.68$, $p < .001$. Risk perception significantly predicted higher mask wearing: $b = 0.63$, 95% $CI [0.55; 0.72]$, $SE = 0.04$, $t = 15.08$, $p < .001$. The direct effect of the friends of a friend condition on mask wearing was not significant, $b = -0.36$, 95% $CI [-0.82; 0.11]$, $SE = 0.24$, $t = 1.49$, $p = .135$. The indirect effect of the friends of

a friend condition on mask wearing via trust and risk perception was not significant, $IE = -0.13$, $SE = 0.08$, 95% $CI [-0.30; 0.03]$, also when controlling for general risk perception of COVID-19, $IE = -0.04$, $SE = 0.04$, 95% $CI [-0.12; 0.03]$.

Experiment 2 replicates the results of Experiment 1. Indeed, we found that when participants read about interacting with friends compared to strangers, they reported less intention to comply to the physical distancing measure (H1). We didn't find any difference between the social closeness conditions as for mask wearing. As in Experiment 1, participants didn't show less intention to wear the mask when interacting with friends or friends of a friend compared to strangers. As for the indirect effect of trust in the relationship between social closeness and compliance to preventive measures, we found similar results as in Experiment 1. When participants read about interacting with friends compared to strangers, they felt higher trust which then explained lower compliance to both preventive measures (H2). As in Experiment 1, exploratory analyses showed that social closeness is positively related to trust, which in turn is related to lower risk perception from others to self. Lower risk perception predicts lower compliance, both with social distancing and with mask wearing.

Hypothesis 3 was not corroborated. Results showed that the moralization of preventive measures did not moderate the relationship between social closeness and compliance with measures. Participants who moralized compliance were not less affected by social closeness than participants who did not moralize compliance. Thus, it seems that participants showed less intention to maintain physical distancing when they interacted with friends regardless of whether they perceived compliance with preventive measures as a moral issue or not.

General Discussion

The challenges posed by the COVID-19 pandemic and compliance with preventive measures can be understood as a social dilemma – a situation in which individuals have to choose between engaging in behaviors that promote long-term collective interests (i.e., cooperating by complying with preventive measures) and behaviors that promote their own short-term interests (i.e., not complying with measures; Dawes, 1980; Van Lange et al., 2013). In the present research, we examined factors that could subvert (i.e., social closeness and trust) or promote (i.e., moralization) cooperative behaviors in the context of the COVID-19 crisis. To do so, we conducted two experiments – we asked participants to imagine that they participated in a social event in which they interacted with either close others (e.g., friends) or strangers. In Experiment 1, we found that individuals reported complying less with physical distancing and mask wearing measures when interacting with close others. Indeed, participants rated that they would maintain less physical distancing when they imagined themselves being

with family members and friends compared to strangers. Participants even reported maintaining less physical distance with friends of a friend compared to strangers, although this effect disappeared when we controlled for participants' and their close others' vulnerability to the COVID-19 virus. Furthermore, participants rated that they would be less inclined to wear a mask when interacting with family members compared to strangers. Lower compliance in social interactions with close others was explained by higher trust. Experiment 2 replicated these results. In Experiment 2, we demonstrated that the moralization of preventive measures, i.e., perceiving non-compliance as morally “wrong”, did not moderate the relationship between social closeness and compliance. Therefore, it appears that individuals comply less with the measures when they are with close others, whether they moralize compliance or not.

Theoretical and Practical Implications

Overall, our results suggest that, at least in some contexts, trust can lead to *less* cooperation. Our findings suggest an exception for the well-documented positive link between trust and cooperation (e.g., Balliet & Van Lange, 2013): trust may not always lead individuals to engage in cooperative behaviors, aimed at promoting collective interests. More specifically, in social interactions with close others, higher trust might lead individuals to undertake more risky behaviors (e.g., not wearing a mask) which ultimately undermine the interests of the collectivity.

Interestingly, we found that individuals were less inclined to comply with preventive measures with close others *even though* they perceived compliance as a moral issue. In social interactions with close others, individuals might have to choose between opposing moral “social goals” when making the decision to comply or not with preventive measures (Turiel, 2018). Indeed, as stated by Turiel (2018), “coordination between different social goals is central in decision making” (p. 13). Namely, individuals might disregard their moral conviction (i.e., compliance with the measures) in favor of another moral norm. One possibility could be that individuals choose to disregard a preventative measure to signal that they trust their close others not to be infectious. Some support for this idea comes from research by Dunning et al. (2014, 2019) that found that individuals show their trust to others also because trusting others is a moral norm. More specifically, signaling trust represents a sign of respect towards the person with whom one interacts because it presupposes that they perceive them to be honest and virtuous. Therefore, individuals could be inclined not to comply with measures when interacting with close others (e.g., not maintaining physical distancing) to demonstrate their trust and show them respect. Further studies could test whether individuals signal trust by not complying with preventive measures with close others.

On the practical level, our results can help guide interventions to promote compliance with preventive measures. Since individuals seem to have a tendency to trust close others, it might be less effective to present them as a source of risk for infection. Instead, it could be more beneficial to frame compliance as a way to protect friends and relatives (Côté et al., 2021). Indeed, there is evidence that wanting to protect family members constitutes a driver for compliance with preventive measures (Wang et al., 2021). Also, our results allow us to identify the social situations in which compliance might be lower, i.e., situations of high trust in which people interact with their close others (e.g., friends and family gatherings). Thus, governments could focus their interventions on these types of social interactions.

Limitations and Future Directions

Our experiments present some limitations. First, we measured behavioral intentions, which might not accurately reflect actual behaviors (e.g., Williams et al., 2015). In fact, it is possible that with a real behavioral measure, we would see greater effect of the social-closeness manipulation on compliance with preventive measures, such that compliance would be even lower in situations in which people interact with family or friends. Relatedly, we found that participants reported high levels of compliance in both experiments. These high levels of compliance can be explained by biases associated with self-report measures (e.g., social desirability concerns). Nonetheless, participants still admitted that they would comply less with the measures in certain social situations – again suggesting that the effect might be stronger in the real world.

Conclusion

In extreme social situations, such as a pandemic, it is often essential that individuals comply with challenging measures to promote collective interests. In this paper, we identified a social context in which individuals are less inclined to adhere to preventive measures, i.e., when they interact with close others – the people they trust the most. In interactions with close others (as compared to strangers), people experience more trust and tend to disregard the measures, even when they see adherence to measures as a moral issue. Our findings highlight possible challenges in implementation of preventive measures to ensure public health in future sanitary crises.

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Supplementary Materials

Study Materials

Experiment 1

Items from Experiment 1 came from a large longitudinal survey aiming to measure the psychological and social impacts of the COVID-19 pandemic on Canadians (de la Sablonnière, 2020). The survey covers three major themes in relation to the COVID-19 pandemic: (1) Compliance with preventive measures (e.g., variables linked to compliance), (2) Social cohesion (e.g., attitudes toward people of Chinese descent) and (3) Well-being (e.g., self-compassion). Due to the large number of items in the survey (more than 400 items in total) we only present the ones we used in the experiment. Participants chose whether to receive an English or a French version.

Social Closeness Manipulation.

Strangers Condition.

Imagine that you are walking through a public park. You are in no hurry today and you are a bit tired from walking when you see a group of musicians playing under a tent similar to the one in the picture below. You decide to go in and listen to a few songs. At the moment it looks like there are about 20 people under the tent, all seem to be under the age of 60.

Friends of a Friend Condition.

Imagine that your friend, a musician, has organized a concert to celebrate his birthday. The concert is in a park, under a tent similar to the one in the picture below. Except for your friend and his girlfriend, you don't really know the other people there. You can't stay for too long, but you decide to go in and listen to a few songs. At the moment it looks like there are about 20 people under the tent, all seem to be under the age of 60.

Friends Condition.

Imagine that your friend, a musician, has organized a concert to celebrate his birthday. The concert is in a park, under a tent similar to the one in the picture below. All the people there are good friends of yours. You can't stay for too long, but you decide to go in and listen to a few songs. At the moment it looks like there are about 20 people under the tent, all seem to be under the age of 60.

Family Condition.

Imagine that your cousin, a musician, has organized a concert to celebrate his birthday. The concert is in a park, under a tent similar to the one in the picture below. All the people there are your relatives (siblings, uncles/aunts, nieces, cousins). You can't stay for too long, but you

decide to go in and listen to a few songs. At the moment it looks like there are about 20 people under the tent, all seem to be under the age of 60.

Figure 3

Picture of the location depicted in the vignettes of Experiment 1



Items.

Compliance.

In this situation I would...

1. Maintain physical distancing (about 2 meters) from other people under the tent.
2. Wear a mask and keep it on while under the tent.

1: Definitely not

10: Definitely yes

Trust.

In this situation, to what extent do you think that you can trust the other people under the tent?

1: Distrust completely

10: Trust completely

Risk Perception.

1. In this situation, I feel that someone could infect me with COVID-19.
2. In this situation, I feel that I could infect someone else with COVID-19.

1: Strongly disagree

10: Strongly agree

Open-Ended Question.

Previously, using the scale from 1 (Definitely not) to 10 (Definitely yes), you answered this to the questions about physical distance and wearing a mask.

Please explain in a few words why you think you would behave this way regarding maintaining physical distancing and wearing a mask.

Additional Measures.

1. Do you consider yourself a vulnerable [at-risk] person in relation to COVID-19? (*3rd wave*)
2. Do you know anyone in your family or among your friends who is immunocompromised (weakened immune system) or at risk? (*7th wave*)

1: Yes

2: No

Demographic Informations (1st Wave).

How old are you?

What is your gender identity?

1: Female

2: Male

3: Other

Experiment 2

Social Closeness Manipulation.

Strangers Condition.

Imagine that you went ice skating today. You are skating on a small outdoor rink similar to the one in the picture below. At the moment it looks like there are about 20 people on the ice rink, all under the age of 60. All the people there are strangers; you don't know any of them.

Friends of a Friend Condition.

Imagine that you went ice skating today with your friend. You are skating on a small outdoor rink which your friend reserved. The ice rink is similar to the one in the picture below. At the moment it looks like there are about 20 people on the ice rink, all under the age of 60. All the people there are friends of your friend, but you don't know them.

Friends Condition.

Imagine that you went ice skating today with your friends. You are skating on a small outdoor rink which your friend reserved. The ice rink is similar to the one in the picture below. At the moment it looks like there are about 20 people on the ice rink, all under the age of 60. All the people there are your friends.

Figure 4

Picture of the location depicted in the vignettes of Experiment 2



Items.

Manipulation Check.

How close do you feel to the other people in the situation?

1: Not close at all

10: Extremely close

Compliance.

In this situation, I would ...

1. Maintain physical distancing (about 2 meters) from other people on the ice rink
2. Wear a mask and keep it on while on the ice rink

1: Definitely not

10: Definitely yes

Trust.

In this situation, to what extent do you think that you can trust the other people on the ice rink?

1: Distrust completely

10: Trust completely

Risk Perception.

To what extent do you agree with the following statements regarding the situation?

1. In this situation, I worry that someone could infect me with COVID-19.
2. In this situation, I worry that I could infect someone else with COVID-19.

1: Strongly disagree

10: Strongly agree

Relate to Conditions.

How likely is it that you could be in an outdoor gathering with strangers/friends of a friend/friends?

1. I would never be in a similar situation
2. Not very likely but I could be in a similar situation
3. Somewhat likely that I could be in a similar situation
4. Very likely that I could be in a similar situation

General Risk Perception.

In general, are you worried about getting seriously sick with COVID-19?

1: Not at all worried

10: Extremely worried

Moralization (Based on Skitka et al., 2005; Feinberg et al., 2019).

Please rate to what extent you agree with each statement about following government preventive measures (e.g., wearing a mask):

1. I choose to follow government measures because doing so reflects my own moral convictions
2. I choose to follow government measures because doing so reflects my personal beliefs about right and wrong
3. I believe that refusing to follow government measures is morally wrong

1: Strongly disagree

10: Strongly agree

Compliance (Gatherings).

Have you attended indoor social gatherings before Christmas break?

1: Yes

2: No

Demographics.

What is your gender identity?

1: Male

2: Female

3: Other

In which province do you live?

1. Alberta
2. British Columbia
3. Manitoba

4. New Brunswick
5. Newfoundland and Labrador
6. Northwest Territories
7. Nova Scotia
8. Nunavut
9. Ontario
10. Prince Edward Island
11. Quebec
12. Saskatchewan
13. Yukon
14. Outside of Canada

How old are you? (open-ended question) _____

Where do you live?

1. Urban area
2. Suburban area
3. Rural area

Including you, how many people currently live in your household?

1. 1 (I live alone)
2. 2
3. 3
4. 4 or more

How many people in your household are under 18 years old?

1. none
2. 1
3. 2
4. 3
5. 4 or more

During the year 2020, what was your family annual income before taxes?

1. Less than \$10,000
2. \$10,000 - \$19,999
3. \$20,000 - \$29,999
4. \$30,000 - \$39,999
5. \$40,000 - \$49,999
6. \$50,000 - \$59,999

7. \$60,000 - \$69,999
8. \$70,000 - \$79,999
9. \$80,000 - \$99,999
10. \$100,000 - \$119,999
11. \$120,000 - \$149,999
12. \$150,000 or more
13. I prefer not to answer

What is your current employment status?

1. Working for pay full-time
2. Working for pay part-time
3. Self-employed (with or without employees)
4. Retired
5. Unemployed / looking for work
6. Student
7. Caring for your family
8. Disabled
9. Student and working for pay
10. Caring for your family and working for pay
11. Retired and working for pay
12. Other _____

Regarding politics, people often speak of the "left" and "right." Where would you place yourself on the following scale?

1: Strongly left

10: Strongly right

Are currently in a face-to-face contact with anyone who is at risk of more severe disease or outcomes from COVID-19?

1. An older adult (over 60 years)
2. Someone with chronic medical conditions (for example, lung disease, heart disease, high blood pressure, diabetes, kidney disease, liver disease, stroke or dementia)
3. Someone who is immunocompromised, including someone with an underlying medical condition (for example, cancer) or taking medications which lower the immune system (for example, chemotherapy)
4. Someone living with obesity

Quality-Check Open-Ended Question.

What was the winter activity you read about at the very beginning of the survey? Please explain briefly the winter activity.

Tables

Experiment 1

Table 9

Correlation matrix of the main variables in Experiment 1 (strangers condition)

1	1	2	3	4
1. Physical distancing				
2. Mask	.55**			
3. Trust	-.10*	-.20**		
4. Perception of risk from others to self	.25**	.44**	-.37**	
5. Perception of risk from self to others	.13**	.31**	-.24**	.65**

Note. ** $p < .01$, * $p < .05$.

Table 10*Correlation matrix of the main variables in Experiment 1 (friends of a friend condition)*

	1	2	3	4
1. Physical distancing				
2. Mask	.58**			
3. Trust	-.17**	-.27**		
4. Perception of risk from others to self	.39**	.54**	-.40**	
5. Perception of risk from self to others	.22**	.29**	-.28**	.58**

*Note. ** $p < .01$, * $p < .05$.***Table 11***Correlation matrix of the main variables in Experiment 1 (friends condition)*

	1	2	3	4
1. Physical distancing				
2. Mask	.54**			
3. Trust	-.20**	-.24**		
4. Perception of risk from others to self	.41**	.44**	-.41**	
5. Perception of risk from self to others	.25**	.24**	-.25**	.61**

*Note. ** $p < .01$, * $p < .05$.*

Table 12*Correlation matrix of the main variables in Experiment 1 (family condition)*

	1	2	3	4
1. Physical distancing				
2. Mask	.63**			
3. Trust	-.23**	-.33**		
4. Perception of risk from others to self	.49**	.59**	-.46**	
5. Perception of risk from self to others	.28**	.36**	-.20**	.55**

Note. ** $p < .01$, * $p < .05$.

Experiment 2

Table 13

Correlation matrix of the main variables in Experiment 2 (strangers condition)

	1	2	3	4	5
1. Physical distancing					
2. Mask	.45**				
3. Trust	-.12	-.28**			
4. Perception of risk from others to self	.44**	.64**	-.55**		
5. Perception of risk from self to others	.21*	.41**	-.38**	.63**	
6. Moralization	.35**	.55**	-.21*	.57**	.33**

** $p < .01$, * $p < .05$.

Table 14*Correlation matrix of the main variables in Experiment 2 (strangers condition)*

	1	2	3	4	5
1. Physical distancing					
2. Mask	.53**				
3. Trust	-.32**	-.29**			
4. Perception of risk from others to self	.64**	.61**	-.50**		
5. Perception of risk from self to others	.30**	.34**	-.24**	.51**	
6. Moralization	.55**	.41**	-.27**	.58**	.28**

** $p < .01$, * $p < .05$.

Table 15*Correlation matrix of the main variables in Experiment 2 (friends condition)*

	1	2	3	4	5
1. Physical distancing					
2. Mask	.45**				
3. Trust	-.19*	-.20*			
4. Perception of risk from others to self	.48**	.65**	-.24**		
5. Perception of risk from self to others	.35**	.43**	-.15	.55**	
6. Moralization	.45**	.42**	-.05	.47**	.34**

** $p < .01$, * $p < .05$.**Exploratory Analyses: Risk Perceptions**

In both experiments, we also measured risk perception in the social interaction participants had to imagine. Because perception of risk is often conceptualized as the opposite of trust (Das & Teng, 2004), we run exploratory analyses with risk as a mediator (instead of trust). Specifically, using Haye's (2018) PROCESS Model 4, we examined whether the relationship between the social closeness conditions and compliance (physical distancing and mask wearing) was indirectly explained by perception of risk (1) from self to others and (2) from others to self. The strangers condition was the reference group. We conducted the same mediation analyses for both experiments. These analyses were not preregistered.

Experiment 1

We controlled for age and gender in all analyses reported below.

Perception of Risk from Self to Others.

Physical Distancing. Compared to the strangers condition, the family condition is not linked to lower physical distancing via perception of risk from self to others. The family condition did not significantly predict lower risk perception, $b = 0.14$, 95% $CI [-0.28; 0.56]$,

$SE = 0.21, t = 0.64, p = .520$. Risk perception significantly predicted higher physical distancing, $b = 0.15, 95\% CI [0.12; 0.18], SE = 0.01, t = 10.26, p < .001$. The direct effect of the family condition on physical distancing was significant, $b = -0.74, 95\% CI [-1.01; -0.48], SE = 0.13, t = 5.55, p < .001$. The indirect effect of the family condition on physical distancing via risk perception was not significant, $IE = 0.02, SE = 0.03, 95\% CI [-0.04; 0.09]$, also when controlling for vulnerability to the virus ($N = 1257$), $IE = 0.05, SE = 0.04, 95\% CI [-0.02; 0.13]$.

Compared to the strangers condition, the friends condition is not linked to lower physical distancing via risk perception. The friends condition did not predict lower risk perception to others from the self, $b = -0.07, 95\% CI [-0.49; 0.35], SE = 0.22, t = 0.33, p = .740$. The direct effect of the friends condition on physical distancing was significant, $b = -0.45, 95\% CI [-0.72; -0.19], SE = 0.13, t = 3.38, p < .001$. The indirect effect of the friends condition on physical distancing via risk perception was not significant, $IE = -0.01, SE = 0.03, 95\% CI [-0.08; 0.06]$, also when controlling for vulnerability to the virus ($N = 1257$), $IE = 0.01, SE = 0.04, 95\% CI [-0.07; 0.09]$.

Compared to the strangers condition, the friends of a friend condition is not linked to lower physical distancing via risk perception. The friends of a friend condition did not predict lower risk perception, $b = 0.06, 95\% CI [-0.36; 0.48], SE = 0.21, t = 0.28, p = .783$. The direct effect of the friends of a friend condition on physical distancing was significant, $b = -0.42, 95\% CI [-0.68; -0.15], SE = 0.13, t = 3.10, p = .002$. The indirect effect of the friends of a friend condition on physical distancing via risk perception was not significant, $IE = 0.01, SE = 0.03, 95\% CI [-0.06; 0.07]$, also when controlling for vulnerability to the virus ($N = 1257$), $IE = 0.02, SE = 0.04, 95\% CI [-0.06; 0.10]$.

Mask Wearing. Compared to the strangers condition, the family condition is not associated to lower mask wearing via perception of risk from self to others. The family condition did not significantly predict lower risk perception, $b = 0.14, 95\% CI [-0.28; 0.56], SE = 0.21, t = 0.64, p = .520$. Risk perception significantly predicted higher mask wearing, $b = 0.24, 95\% CI [0.21; 0.27], SE = 0.02, t = 14.25, p < .001$. The direct effect of the family condition on mask wearing was significant, $b = -0.30, 95\% CI [-0.60; -0.00], SE = 0.15, t = 1.97, p = .049$. The indirect effect of the family condition on mask wearing via risk perception was not significant, $IE = .03, SE = 0.05, 95\% CI [-0.07; 0.14]$, also when controlling for vulnerability to the virus ($N = 1257$), $IE = 0.07, SE = 0.06, 95\% CI [-0.04; 0.19]$.

Compared to the strangers condition, the friends condition is not linked to lower mask wearing via risk perception. The friends condition did not predict lower risk perception to others from the self, $b = -0.07, 95\% CI [-0.49; 0.35], SE = 0.22, t = 0.33, p = .740$. The direct

effect of the friends condition on mask wearing was not significant, $b = -0.18$, 95% $CI [-0.48; 0.12]$, $SE = 0.15$, $t = 1.19$, $p = .233$. The indirect effect of the friends condition on mask wearing via risk perception was not significant, $IE = -0.02$, $SE = 0.05$, 95% $CI [-0.12; 0.09]$, also when controlling for vulnerability to the virus ($N = 1257$), $IE = 0.02$, $SE = 0.06$, 95% $CI [-0.10; 0.14]$.

Compared to the strangers condition, the friends of a friend condition is not linked to lower mask wearing via risk perception. The friends of a friend condition did not predict lower risk perception, $b = 0.06$, 95% $CI [-0.36; 0.48]$, $SE = 0.21$, $t = 0.28$, $p = .783$. The direct effect of the friends of a friend condition on mask wearing was not significant, $b = -0.13$, 95% $CI [-0.42; 0.17]$, $SE = 0.15$, $t = 0.83$, $p = .409$. The indirect effect of the friends of a friend condition on mask wearing via risk perception was not significant, $IE = 0.01$, $SE = 0.05$, 95% $CI [-0.08; 0.12]$, also when controlling for vulnerability to the virus ($N = 1257$), $IE = 0.03$, $SE = 0.06$, 95% $CI [-0.08; 0.15]$.

Perception of Risk from Others to Self.

Physical Distancing. Compared to the strangers condition, the family condition is not associated to lower physical distancing via perception of risk from others to self. The family condition did not significantly predict lower risk perception, $b = 0.16$, 95% $CI [-0.16; 0.48]$, $SE = 0.16$, $t = 0.98$, $p = .326$. Risk perception significantly predicted higher physical distancing, $b = 0.32$, 95% $CI [0.28; 0.36]$, $SE = 0.02$, $t = 17.24$, $p < .001$. The direct effect of the family condition on physical distancing was significant, $b = -0.77$, 95% $CI [-1.02; -0.52]$, $SE = 0.13$, $t = 6.07$, $p < .001$. The indirect effect of the family condition on physical distancing via risk perception was not significant, $IE = 0.05$, $SE = 0.05$, 95% $CI [-0.05; 0.16]$, also when controlling for vulnerability to the virus ($N = 1257$), $IE = 0.09$, $SE = 0.06$, 95% $CI [-0.03; 0.22]$.

Compared to the strangers condition, the friends condition is not linked to lower physical distancing via risk perception. The friends condition did not predict lower risk perception, $b = 0.03$, 95% $CI [-0.29; 0.35]$, $SE = 0.16$, $t = 0.18$, $p = .856$. The direct effect of the friends condition on physical distancing was significant, $b = -0.47$, 95% $CI [-0.72; -0.22]$, $SE = 0.13$, $t = 3.71$, $p < .001$. The indirect effect of the friends condition on physical distancing via risk perception was not significant, $IE = 0.01$, $SE = 0.05$, 95% $CI [-0.10; 0.12]$, also when controlling for vulnerability to the virus ($N = 1257$), $IE = 0.05$, $SE = 0.07$, 95% $CI [-0.07; 0.18]$.

Compared to the strangers condition, the friends of a friend condition is not linked to lower physical distancing via risk perception. The friends of a friend condition did not predict lower risk perception, $b = 0.15$, 95% $CI [-0.17; 0.47]$, $SE = 0.16$, $t = 0.95$, $p = .345$. The direct effect of the friends of a friend condition on physical distancing was significant, $b = -0.46$, 95% $CI [-0.71; -0.21]$, $SE = 0.13$, $t = 3.58$, $p < .001$. The indirect effect of the friends of a friend

condition on physical distancing via risk perception was not significant, $IE = 0.05$, $SE = 0.05$, 95% $CI [-0.05; 0.16]$, also when controlling for vulnerability to the virus ($N = 1257$), $IE = 0.08$, $SE = 0.06$, 95% $CI [-0.04; 0.21]$.

Mask Wearing. Compared to the strangers condition, the family condition is not linked to lower mask wearing via perception of risk from others to self. The family condition did not significantly predict lower risk perception, $b = 0.16$, 95% $CI [-0.16; 0.48]$, $SE = 0.16$, $t = 0.98$, $p = .326$. Risk perception significantly predicted higher mask wearing: $b = 0.49$, 95% $CI [0.45; 0.53]$, $SE = 0.02$, $t = 24.09$, $p < .001$. The direct effect of the family condition on mask wearing was significant, $b = -0.35$, 95% $CI [-0.62; -0.07]$, $SE = 0.14$, $t = 2.48$, $p = .013$. The indirect effect of the family condition on mask wearing via risk perception was not significant, $IE = 0.08$, $SE = 0.08$, 95% $CI [-0.09; 0.24]$, also when controlling for vulnerability to the virus ($N = 1257$), $IE = 0.13$, $SE = 0.09$, 95% $CI [-0.04; 0.32]$.

Compared to the strangers condition, the friends condition is not linked to lower mask wearing via risk perception. The friends condition did not predict lower risk perception, $b = 0.03$, 95% $CI [-0.29; 0.35]$, $SE = 0.16$, $t = 0.18$, $p = .856$. The direct effect of the friends condition on mask wearing was not significant, $b = -0.21$, 95% $CI [-0.49; 0.06]$, $SE = 0.14$, $t = 1.53$, $p = .126$. The indirect effect of the friends condition on mask wearing via risk perception was not significant, $IE = 0.01$, $SE = 0.08$, 95% $CI [-0.15; 0.18]$, also when controlling for vulnerability to the virus ($N = 1257$), $IE = 0.08$, $SE = 0.09$, 95% $CI [-0.11; 0.26]$.

Compared to the strangers condition, the friends of a friend condition is not linked to lower mask wearing via risk perception. The friends of a friend condition did not predict lower risk perception, $b = 0.15$, 95% $CI [-0.17; 0.47]$, $SE = 0.16$, $t = 0.95$, $p = .345$. The direct effect of the friends of a friend condition on mask wearing was not significant, $b = -0.19$, 95% $CI [-0.46; 0.09]$, $SE = 0.14$, $t = 1.34$, $p = .179$. The indirect effect of the friends of a friend condition on physical distancing via risk perception was not significant, $IE = 0.08$, $SE = 0.08$, 95% $CI [-0.08; 0.23]$, also when controlling for vulnerability to the virus ($N = 1257$), $IE = 0.12$, $SE = 0.09$, 95% $CI [-0.05; 0.31]$.

Experiment 2

We controlled for gender and area of residence in all analyses reported below.

Perception of Risk from Self to Others.

Physical Distancing. Compared to the strangers condition, the friends condition is not associated to lower physical distancing via lower perception of risk from self to others. The friends condition did not significantly predict lower risk perception, $b = -0.10$, 95% $CI [-0.73; 0.54]$, $SE = 0.32$, $t = 0.30$, $p = .768$. Risk perception significantly predicted higher physical

distancing: $b = 0.24$, 95% $CI [0.16; 0.31]$, $SE = 0.04$, $t = 5.88$, $p < .001$. The direct effect of the friends condition on physical distancing was significant, $b = -0.57$, 95% $CI [-1.10; -0.04]$, $SE = 0.27$, $t = 2.13$, $p = .034$. The indirect effect of the friends condition compared to the strangers condition on physical distancing via risk perception was not significant, $IE = -0.02$, $SE = 0.08$, 95% $CI [-0.17; 0.13]$, also when controlling for general risk perception of COVID-19, $IE = -0.01$, $SE = 0.03$, 95% $CI [-0.07; 0.05]$.

Compared to the strangers condition, the friends of a friend condition is not linked to lower physical distancing via lower risk perception. The friend of a friend condition did not predict lower risk perception, $b = -0.23$, 95% $CI [-0.86; 0.40]$, $SE = 0.32$, $t = 0.71$, $p = .480$. The direct effect of the friends of a friend condition on physical distancing was not significant, $b = -0.17$, 95% $CI [-0.69; 0.35]$, $SE = 0.27$, $t = 0.65$, $p = .519$. The indirect effect of the friends of a friend condition on physical distancing via risk perception was not significant, $IE = -0.05$, $SE = 0.08$, 95% $CI [-0.21; 0.09]$, also when controlling for general risk perception of COVID-19, $IE = -0.00$, $SE = 0.03$, 95% $CI [-0.06; 0.05]$.

Mask Wearing. Compared to the strangers condition, the friends condition is not associated to lower mask wearing via lower perception of risk to others from self. The friends condition did not significantly predict lower risk perception, $b = -0.10$, 95% $CI [-0.73; 0.54]$, $SE = 0.32$, $t = 0.30$, $p = .768$. Risk perception significantly predicted higher mask wearing, $b = 0.36$, 95% $CI [0.28; 0.44]$, $SE = 0.04$, $t = 8.51$, $p < .001$. The direct effect of the friends condition on mask wearing was not significant, $b = -0.37$, 95% $CI [-0.93; 0.19]$, $SE = 0.28$, $t = 1.31$, $p = .193$. The indirect effect of the friends condition on mask wearing through risk perception was not significant, $IE = -.03$, $SE = 0.12$, 95% $CI [-0.26; 0.20]$, also when controlling for general risk perception of COVID-19, $IE = -0.01$, $SE = 0.06$, 95% $CI [-0.14; 0.11]$.

Compared to the strangers condition, the friends of a friend condition is not linked to lower mask wearing via lower risk perception. The friend of a friend condition did not predict lower risk perception, $b = -0.23$, 95% $CI [-0.86; 0.40]$, $SE = 0.32$, $t = 0.71$, $p = .480$. The direct effect of the friends of a friend condition on mask wearing was not significant, $b = -0.22$, 95% $CI [-0.77; 0.33]$, $SE = 0.28$, $t = 0.79$, $p = .428$. The indirect effect of the friend of a friend condition on mask wearing via risk perception was not significant, $IE = -0.08$, $SE = 0.11$, 95% $CI [-.30; .14]$, also when controlling for general risk perception of COVID-19, $IE = -0.01$, $SE = 0.06$, 95% $CI [-0.13; 0.12]$.

Perception of Risk from Others to Self.

Physical Distancing. Compared to the strangers condition, the friends condition is not linked to lower physical distancing via perception of risk from others to self. The friends

condition did not significantly predict lower risk perception, $b = -0.22$, 95% $CI [-0.81; 0.38]$, $SE = 0.30$, $t = 0.72$, $p = .473$. Risk perception significantly predicted higher physical distancing, $b = 0.47$, 95% $CI [0.40; 0.55]$, $SE = 0.04$, $t = 12.32$, $p < .001$. The direct effect of the friends condition on physical distancing was significant, $b = -0.49$, 95% $CI [-0.96; -0.02]$, $SE = 0.24$, $t = 2.05$, $p = .041$. The indirect effect of the friends condition on physical distancing via risk perception was not significant, $IE = -0.10$, $SE = 0.14$, 95% $CI [-0.39; 0.17]$, also when controlling for general risk perception of COVID-19, $IE = -0.06$, $SE = 0.09$, 95% $CI [-0.25; 0.10]$.

Compared to the strangers condition, the friends of a friend condition is not linked to lower physical distancing via risk perception. The friend of a friend condition did not significantly predict lower risk perception to the self from others, $b = 0.02$, 95% $CI [-0.56; 0.61]$, $SE = 0.30$, $t = 0.08$, $p = .934$. The direct effect of the friends of a friend condition on physical distancing was not significant, $b = -0.24$, 95% $CI [-0.70; 0.23]$, $SE = 0.24$, $t = 1.00$, $p = .320$. The indirect effect of the friends of a friend condition on physical distancing via risk perception was not significant, $IE = 0.01$, $SE = 0.14$, 95% $CI [-0.28; 0.29]$, also when controlling for general risk perception of COVID-19, $IE = 0.10$, $SE = 0.08$, 95% $CI [-0.05; 0.26]$.

Mask Wearing. Compared to the strangers condition, the friends condition is not linked to lower mask wearing via lower perception of risk from others to self. The friends condition did not significantly predict lower risk perception, $b = -0.22$, 95% $CI [-0.81; 0.38]$, $SE = 0.30$, $t = 0.72$, $p = .473$. Risk perception significantly predicted higher mask wearing, $b = 0.62$, 95% $CI [0.55; 0.70]$, $SE = 0.04$, $t = 16.36$, $p < .001$. The direct effect of the friends condition on mask wearing was not significant, $b = -0.27$, 95% $CI [-0.74 ; 0.20]$, $SE = 0.24$, $t = 1.11$, $p = .266$. The indirect effect of the friends condition on mask wearing via risk perception was not significant, $IE = -0.14$, $SE = 0.19$, 95% $CI [-0.52; 0.24]$, also when controlling for general risk perception of COVID-19, $IE = -0.10$, $SE = 0.13$, 95% $CI [-0.37; 0.16]$.

Compared to the strangers condition, the friends of a friend condition is not linked to mask wearing via lower risk perception. The friend of a friend condition did not predict lower risk perception, $b = 0.02$, 95% $CI [-.56; .61]$, $SE = 0.30$, $t = 0.08$, $p = .934$. The direct effect of the friends of a friend condition on physical distancing was not significant, $b = -0.32$, 95% $CI [-0.79; 0.15]$, $SE = 0.23$, $t = 1.34$, $p = .180$. The indirect effect of the friends of a friend condition on mask wearing via risk perception was not significant, $IE = 0.02$, $SE = 0.19$, 95% $CI [-0.36; 0.39]$, also when controlling for general risk perception of COVID-19, $IE = 0.15$, $SE = 0.13$, 95% $CI [-0.08; 0.41]$.

In both experiments, we found that the extent to which people perceived risk from self to others – i.e., the risk they would infect others with the virus in the social situation – did not mediate the relationship between social closeness and compliance with the social distancing and mask wearing measures. Similarly, perception of risk from others to self – i.e., the risk of others infecting one with the virus – did not mediate the relationship between social closeness and compliance with both preventive measures. It seems that risk alone, without the aspect of trust, does not play a significant role in explaining this type of cooperative behavior as a function of social closeness.

Exploratory Analyses: Moderated Mediation Analyses

Using Haye's (2018) PROCESS Model 14, we conducted a moderated mediation to examine whether the indirect link between the social closeness conditions and compliance through trust was moderated by moralization. We controlled for age, gender, and area of residence in the analyses.

Physical distancing. The indirect effect of social closeness on physical distancing via trust was not significantly moderated by moralization, Index = .06, *SE* = .05, 95% *CI*[-0.02; 0.17], also when controlling for general risk perception, Index = .05, *SE* = .05, 95% *CI*[-0.03; 0.15]⁵.

Mask wearing. The indirect effect of social closeness on mask wearing via trust was not significantly moderated by moralization, Index = .01, *SE* = .05, 95% *CI*[-0.08; 0.11], also when controlling for general risk perception, Index = -.01, *SE* = .05, 95% *CI*[-0.10; 0.09]⁶.

⁵ Without combining the friends of a friend and the friends condition, we found that the indirect effect of the friends condition on physical distancing via trust was not significantly moderated by moralization, Index .07, *SE* = .06, 95% *CI*[-0.02; 0.19], also when controlling for general risk perception, Index = .06, *SE* = .05, 95% *CI*[-0.03; 0.18]. The indirect effect of the friends of a friend condition on physical distancing via trust was not significantly moderated by moralization, Index = .02, *SE* = .02, 95% *CI*[-0.01; 0.07], also when controlling for general risk perception, Index = .01, *SE* = .01, 95% *CI*[-0.01; 0.05].

⁶ Without combining the friends of a friend and the friends condition, we found that the indirect effect of the friends condition on mask wearing via trust was not significantly moderated by moralization, Index = .01, *SE* = .05, 95% *CI*[-0.09; 0.12], also when controlling for general risk perception, Index = -.01, *SE* = .05, 95% *CI*[-0.11; 0.10]. The indirect effect of the friends of a friend condition on mask wearing via trust was not significantly moderated by moralization, Index = .00, *SE* = .01, 95% *CI*[-0.02; 0.04], also when controlling for general risk perception, Index = -.00, *SE* = .01, 95% *CI*[-0.02; 0.02].

Information about the survey

Table 16

Participation rates between the waves

Wave	N	Participation rate
1	3617	-
2	2282	63.0%
3	2369	65.5%
4	2296	63.5%
5	2154	59.6%
6	2116	58.5%
7	2072	57.6%
8	1871	51.7%
9	1821	50.3%
10	1883	52.5%
11	2002	55.4%
12	1672	46.2%

Chapitre 3 – Conclusion

Résumé des objectifs de recherche et des résultats

Dans le contexte d'une crise sanitaire telle que celle de la COVID-19, il est essentiel que les individus modifient en profondeur leurs comportements afin de contrer la propagation du virus. Plus particulièrement, les individus sont appelés à adhérer à des mesures sanitaires contraignantes (p. ex., porter un masque) afin de limiter les impacts de la pandémie sur la société. En d'autres mots, il est demandé à la population de coopérer, c'est-à-dire, d'accomplir des sacrifices personnels pour favoriser les intérêts collectifs (Dawes, 1980 ; Van Lange et al., 2013). De nombreuses études ont tenté d'identifier les facteurs qui favorisent ou non l'adhésion aux mesures sanitaires (p. ex., Burton et al., 2022 ; Clark et al., 2020 ; Pollak, 2020 ; Wright et al., 2021). Dans ce mémoire, nous nous sommes concentrés sur le rôle de la confiance envers autrui et de la moralisation des mesures sanitaires. Plus particulièrement, nous avons examiné si la confiance mène les individus à moins adhérer aux mesures lorsqu'ils interagissent avec leurs proches. Nous avons également testé si les individus sont portés à respecter les mesures sanitaires avec leurs proches lorsqu'ils moralisaient l'adhésion aux mesures.

Dans l'article présenté dans ce mémoire, nous avons entrepris deux études. Dans la première étude, nous avons présenté à chacun des participants une vignette décrivant un événement social (un concert extérieur dans un parc). Nous avons manipulé le niveau de proximité sociale ; les participants étaient assignés aléatoirement à une de quatre conditions expérimentales. Plus particulièrement, ils devaient s'imaginer participer à l'évènement en compagnie de soit : (1) des membres de leur famille, (2) des amis, (3) des amis d'un ami ou (4) des inconnus. Il a été demandé aux participants de rapporter à quel point ils maintiendraient une distanciation physique et porteraient le masque dans la situation. Nous avons également mesuré à quel point les participants feraient confiance aux autres personnes dans le scénario hypothétique. Les résultats montrent que les participants rapportaient avoir moins tendance à maintenir une distanciation physique lorsqu'ils s'imaginaient avec des membres de leur famille, des amis et même avec des amis d'un ami qu'avec des étrangers. Les participants étaient également moins enclins à porter le masque lorsqu'ils s'imaginaient interagir avec des membres de leur famille qu'avec des étrangers. Il a été démontré que la confiance agissait comme médiateur dans la relation entre la proximité sociale et le respect des mesures sanitaires. Lorsque les individus s'imaginaient interagir avec leurs amis et leur famille, ils rapportaient avoir davantage confiance – cette plus grande confiance expliquait leur moindre adhésion aux mesures de distanciation physique et de port du masque. La deuxième étude avait une

méthodologie similaire à la première : les participants devaient s'imaginer en train de patiner sur une patinoire extérieure avec soit : (1) des amis, (2) des amis d'un ami ou (3) des inconnus. Les résultats de la première étude ont été répliqués. Il a également été démontré que la moralisation des mesures sanitaires ne modérait pas la relation entre la proximité sociale et le respect des mesures sanitaires. Les individus sont donc moins portés à respecter les mesures avec leurs proches, même lorsqu'ils perçoivent le respect des mesures comme un enjeu moral.

Implications théoriques

L'association positive entre la confiance et la coopération ait été corroborée dans de nombreux articles (p. ex., Balliet & Van Lange, 2013 ; Van Lange & Van Gut, 1998). Par exemple, dans une méta-analyse conduite par Balliet & Van Lange (2013), il a été démontré que, dans le contexte de dilemmes sociaux expérimentaux, la confiance envers un ou des partenaires était fortement associée à davantage de coopération avec ce(s) dernier(s). Néanmoins, il apparaît que, lors d'interactions sociales avec les proches, la confiance peut mener à moins de comportements coopératifs afin de contrer la propagation de la COVID-19. Les études présentées dans ce mémoire soutiennent que, lors d'une crise sanitaire, la confiance mène les individus à baisser leur garde et à adopter des comportements à risque avec des gens de confiance. En d'autres mots, nos recherches démontrent que, dans certains contextes, la confiance envers autrui peut nuire aux intérêts de la collectivité. Ces résultats sont cohérents avec une étude de Jørgensen et al. (2021) mettant de l'avant que, lors de la première vague de la pandémie, la confiance interpersonnelle était associée à une moindre adhésion aux mesures sanitaires dans huit différents pays. Une étude de Min (2020) a aussi mis en évidence que les pays où les individus rapportaient de hauts niveaux de confiance particulière (*particularized trust* ; i.e., la confiance envers les membres de l'endogroupe tels que nos proches) ont connu une transmission du virus plus rapide au début de la crise.

Nos études se distinguent des recherches antérieures, car nous démontrons comment la confiance interpersonnelle peut être associée à une moindre adhésion aux mesures sanitaires dans le contexte d'interactions sociales spécifiques, et ce, à l'aide de devis expérimentaux. En effet, en manipulant le degré de proximité sociale, nous avons pu mettre en évidence le lien entre la confiance et l'adhésion aux mesures dans le contexte d'interactions avec des étrangers, des amis d'amis, des amis et des membres de la famille. Ces résultats permettent une compréhension plus approfondie des comportements coopératifs dans le cadre d'une crise sanitaire.

Nos résultats montrent également que, même si les individus ont des convictions morales en faveur du respect des mesures sanitaires, ceux-ci sont tout de même poussés à moins

respecter les mesures lors d'interactions sociales avec leurs proches. Ces résultats sont surprenants dans la mesure où plusieurs études ont démontré que les convictions morales étaient des prédicteurs importants des comportements (p. ex., des intentions de vote ; Morgan et al., 2010 ; Skitka & Bauman, 2008). Il a également été démontré que la moralisation des comportements préventifs en lien avec la pandémie de la COVID-19 prédisait de l'adoption de ces comportements par les individus (Francis & McNabb, 2022). D'ailleurs, nos résultats montrent, que de façon générale, il existe une corrélation positive entre la moralisation et le respect des mesures sanitaires. Néanmoins, dans ce mémoire, nous avons pu identifier un contexte particulier au cours duquel les individus sont amenés à agir en contradiction avec leurs convictions morales, c'est-à-dire, à adopter des comportements qu'ils considèrent eux-mêmes comme moralement répréhensibles.

Pourquoi les individus n'agissent-ils pas de façon cohérente avec leurs convictions morales lorsqu'ils interagissent avec leurs proches ? Lors d'interactions sociales avec leurs proches, il se peut que les individus soient poussés à choisir entre des « buts sociaux » conflictuels lorsque vient le temps de décider s'ils vont adhérer aux mesures sanitaires (Turiel, 2018). En effet, tel que souligné par Turiel (2018), « la coordination entre différents buts sociaux est centrale dans la prise de décision » (traduction libre ; p. 13). Plus particulièrement, les individus peuvent être amenés à faire fi de leurs convictions morales (c'est-à-dire, le respect des mesures sanitaires) en faveur d'une autre norme morale. Il est possible que les individus décident de ne pas respecter les mesures afin de signaler à leurs proches qu'ils leur font confiance de ne pas être infectieux. Cette idée est étayée par les recherches de Dunning et al. (2014, 2019) démontrant que les individus signalent leur confiance, entre autres, car la confiance envers autrui constitue une norme morale. Plus précisément, signaler sa confiance représente un signe de respect envers la personne avec laquelle on interagit, car cela présuppose qu'on la perçoit comme étant honnête et vertueuse. Par conséquent, les individus pourraient être enclins à ne pas adhérer aux mesures lorsqu'ils interagissent avec leurs proches (p. ex., en ne maintenant pas de distanciation physique) afin de signaler leur confiance et leur témoigner du respect. Par exemple, un individu pourrait être amené à enlever son masque avec un ami, car il aurait peur de le blesser ou bien de lui manquer de respect s'il continue de le porter en sa présence. Enlever son masque permettrait à l'individu de signaler à son ami qu'il lui fait confiance, c'est-à-dire, de lui démontrer qu'il considère que son ami est prudent et qu'il n'est pas susceptible de le contaminer avec le virus.

Implications pratiques

Les résultats présentés dans ce mémoire peuvent servir aux autorités politiques pour la mise en place d'interventions visant à favoriser l'adhésion aux mesures sanitaires. Étant donné qu'il a été démontré qu'une moindre adhésion survient principalement lors d'interactions sociales avec les proches, les autorités pourraient cibler ce type d'interactions dans leurs interventions. Par exemple, les interventions pourraient sensibiliser la population quant à l'adhésion aux mesures lors de rassemblements familiaux ou entre amis. De plus, afin de favoriser l'adhésion aux mesures, les autorités politiques auraient avantage à moins mettre l'accent sur le fait que les proches constituent une source de risque d'infection. Présenter les proches de cette façon pourrait être moins efficace étant donné la tendance naturelle que nous avons à faire confiance à nos amis et les membres de notre famille. Les interventions pourraient plutôt encourager les individus à respecter les mesures afin de protéger leurs proches (Côté et al., 2021). En effet, dans une étude qualitative visant à identifier les raisons poussant les individus à respecter les mesures sanitaires, Wang et al. (2021) ont démontré que les individus étaient motivés à adhérer aux mesures, entre autres, afin de protéger les membres de leur famille. Les gouvernements pourraient donc mettre sur pied des campagnes publicitaires mettant l'accent sur le fait que l'adhésion aux mesures permet de protéger ceux qui nous sont le plus chers ; par exemple, ces interventions, présentées sous forme d'annonces télévisées, pourraient mettre de l'avant comment le port du masque permet de limiter la contamination des membres les plus vulnérables de notre famille (p. ex., nos aînés). Ainsi, en ne mettant pas l'accent sur le fait que nos amis ou notre famille sont à risque de nous contaminer avec le virus, ces publicités ne sous-tendraient pas que ces derniers ne sont pas dignes de confiance. Ces publicités viseraient plutôt à présenter le respect des mesures comme un geste d'amour pour nos proches.

Limites

Ce mémoire comporte certaines limites au niveau méthodologique. Premièrement, dans les manipulations expérimentales, nous avons mesuré les intentions comportementales (p.ex., intention de porter le masque) et non les comportements réels. Il s'agit d'une limite dans la mesure où les intentions ne reflètent pas nécessairement les vrais comportements des individus (p. ex., Williams et al., 2015). Il est possible qu'en mesurant les comportements réels, nous observions une moindre adhésion lors d'interactions sociales avec les proches. Il se peut également que les réponses des participants aient été influencées par les biais associés aux mesures auto-rapportées (p. ex., le biais de désirabilité sociale). En effet, les participants ont rapporté de hauts niveaux d'adhésion dans toutes les conditions expérimentales. Néanmoins,

le fait que les participants aient tout de même rapporté qu'ils adhèreraient moins aux mesures dans certaines conditions expérimentales laisse supposer que l'effet serait encore plus important dans le monde réel. Le fait que l'approche par vignette ait été utilisée dans nos manipulations expérimentales représente également une limite. En effet, nous avons demandé aux participants d'imaginer comme ils agiraient dans une situation spécifique – bien que, dans la seconde étude, nous ayons exclu les participants qui ne pouvaient pas s'identifier à la situation, il est possible que cette approche ne soit pas garante d'une bonne validité écologique. Les participants pourraient être amenés à agir différemment dans le monde réel. Enfin, nous avons utilisé des items uniques pour mesurer plusieurs de nos construits ; ceci pourrait représenter une limite au niveau de la validité de nos mesures. En effet, il est possible que certaines nuances associées à nos construits ne puissent pas être capturées par des items uniques. De plus, nos items mesurant la moralisation des mesures sanitaires auraient été plus précis. Nous aurions pu demander directement aux participants à quel point ils moralisaient chacune des mesures sanitaires (maintien de la distanciation physique et port du masque). De cette façon, nous aurions pu nous assurer que les participants pensaient bien à ces deux mesures en répondant aux items.

Au niveau théorique, il est possible de remettre en question l'idée comme quoi l'enjeu du respect des mesures sanitaires représente nécessairement un dilemme social. En effet, dans le présent mémoire, nous mettons de l'avant l'idée que de respecter les mesures est bénéfique pour la société à long terme mais que cela peut aller à l'encontre des intérêts personnels de l'individu, tel que cela avait été conceptualisé dans des articles antérieurs (p. ex., Johnson et al., 2020). Toutefois, respecter les mesures sanitaires (i.e. coopérer) pourrait ne pas nécessairement constituer un sacrifice personnel pour l'individu ; cela peut être avantageux pour ce dernier dans la mesure où ce comportement lui permet de protéger sa santé. Dans le contexte de la COVID-19, ne pas respecter les mesures sanitaires pourrait donc être coûteux pour l'individu, surtout si ce dernier appartient à un groupe à risque. Dans de futures études, il serait pertinent de prendre en compte que le respect des mesures sanitaires ne constitue pas nécessairement un dilemme social pour tous.

Nous avons également conceptualisé le respect des mesures sanitaires tel un comportement coopératif qui est bénéfique pour la société dans son ensemble. Cependant, dans nos études, nous examinons la coopération dans le contexte d'interactions sociales avec les proches. Il est possible d'argumenter que, dans ce contexte, les comportements d'adhésion aux mesures ne sont pas nécessairement synonymes de coopération aux yeux des individus présents; voire, ne pas respecter les mesures pourrait plutôt représenter un comportement

coopératif dans ces situations. Par exemple, ne pas maintenir de distanciation physique avec ses proches pourrait être perçu comme bénéfique pour le groupe si les individus présents ne souhaitent pas respecter les mesures sanitaires. La confiance, ici, serait liée à une coopération différente que celle conceptualisée dans le présent mémoire – cela pourrait donc potentiellement représenter une limite au niveau de l'interprétation de nos résultats.

Conclusion

Dans ce mémoire, nous avons identifié des situations sociales au cours desquelles les individus sont moins susceptibles d'adhérer aux mesures sanitaires, c'est-à-dire, à moins maintenir de distanciation physique et à moins porter le masque. Il apparaît que l'adhésion diminue lors d'interactions sociales avec les proches (p. ex., amis et membres de la famille) et que ce phénomène peut s'expliquer par la plus grande confiance éprouvée envers nos proches, comparativement aux inconnus. La tendance à moins adhérer aux mesures avec les proches est si importante que les individus sont portés à avoir de tels comportements même lorsqu'ils moralisent le respect des mesures sanitaires, c'est-à-dire, lorsqu'ils considèrent immoral le non-respect des mesures. Ces résultats sont d'autant plus surprenants, car nos proches sont, de façon générale, les individus que nous désirons le plus protéger. Lorsque nous ne respectons pas les mesures sanitaires avec nos proches, nous mettons ceux qui nous sont le plus chers à risque. Ce mémoire met donc en relief les défis associés à l'adhésion aux mesures sanitaires lors d'interactions sociales avec les proches. Dans le contexte de futures pandémies, des efforts devront être entrepris afin de promouvoir l'adhésion aux mesures dans ces situations en particulier afin de réduire un vecteur de propagation.

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Annexe A

Formulaire de consentement – Étude 1

Chercheurs : Roxane de la Sablonnière, professeure titulaire, Département de psychologie, Université de Montréal ;

Jean-Marc Lina, professeur, Département de génie électrique, École de technologie supérieure (ETS) ;

Dietlind Stolle, professeure James McGill, Département de science politique, Université McGill ;

Donald M. Taylor, professeur titulaire, Département de psychologie, Université McGill.

Vous êtes invité(e)s à participer à un projet de recherche. Avant d'accepter, veuillez prendre le temps de lire ce document présentant les conditions de participation au projet. N'hésitez pas à poser toutes les questions que vous jugerez utiles.

A) RENSEIGNEMENTS AUX PARTICIPANTS

1. Objectifs de la recherche

Ce projet de recherche vise à mieux comprendre l'influence des politiques publiques entourant la maladie à coronavirus (COVID-19) sur les attitudes et le bien-être de la population.

2. Participation à la recherche

Votre participation consiste à remplir un questionnaire qui nécessitera 12 minutes de votre temps, et ce, toutes les 2 semaines pendant 5 mois (10 fois au total). Vous serez avisé par courriel quand le moment sera venu de remplir le questionnaire de nouveau. Vous aurez une semaine environ pour répondre au questionnaire.

3. Risques et inconvénients

Outre le temps nécessaire pour remplir les questionnaires (environ 12 minutes toutes les 2 semaines pendant 65 mois), il n'y a pas de risques particuliers, connus ou anticipés à participer à ce projet.

4. Avantages et bénéfices

Il n'y a pas d'avantage particulier à participer à ce projet. Vous contribuerez cependant à l'avancement des connaissances en psychologie sociale et à une meilleure compréhension du bien-être des sociétés et des individus.

5. Confidentialité

Les renseignements personnels que vous nous donnerez demeureront confidentiels. Aucune information permettant de vous identifier d'une façon ou d'une autre ne sera publiée. De plus, chaque participant à la recherche se verra attribuer un code et seuls les chercheurs et leur équipe pourront connaître son identité. Les données seront conservées sur un ordinateur sécurisé par un mot de passe. Toute information personnelle sera détruite sept ans après la fin du projet. Seules les données ne permettant pas de vous identifier seront conservées après cette période. Les données récoltées dans

le cadre de cette étude (p. ex., les réponses aux questionnaires) seront rendues accessibles à la communauté scientifique après avoir été rendues complètement anonymes. Puisque les données partagées seront rendues complètement anonymes, aucune information communiquée à d'autres chercheurs ne permettra de vous identifier.

6. Compensation

Vous serez récompensé pour votre temps par l'entremise d'un incitatif nominal. 7. Droit de retrait Votre participation à ce projet est entièrement volontaire et vous pouvez à tout moment vous retirer de la recherche en cessant de répondre au questionnaire sans devoir justifier votre décision et sans conséquence pour vous. À votre demande, toutes les données qui vous concernent pourront aussi être détruites. Si vous désirez retirer toutes les données vous concernant de la recherche, veuillez communiquer avec le chercheur au numéro de téléphone indiqué ci-dessous. Cependant, une fois les résultats publiés, il sera impossible de retirer vos données des analyses et de modifier les résultats.

Si vous en ressentez le besoin, vous pouvez communiquer avec la chercheuse afin d'être redirigé vers des ressources psychologiques. Si vous désirez avoir accès aux résultats généraux de l'étude, vous pouvez communiquer avec la chercheuse et un rapport de recherche vous sera envoyé. Si vous avez des inquiétudes en lien avec vos droits ou les responsabilités des chercheurs, vous pouvez contacter le Comité d'éthique de la recherche en éducation et en psychologie.

B) CONSENTEMENT

Déclaration du participant

- Je comprends que je peux prendre mon temps pour réfléchir avant d'accepter ou de refuser de participer à la recherche.
- Je peux poser des questions à l'équipe de recherche et exiger des réponses satisfaisantes.
- Je comprends qu'en participant à ce projet de recherche, je ne renonce à aucun de mes droits ni ne dégage les chercheurs de leurs responsabilités.
- J'ai pris connaissance du présent formulaire d'information et de consentement et j'accepte de participer au projet de recherche.

Pour toute question relative à l'étude ou pour vous retirer de la recherche, veuillez communiquer avec Roxane de la Sablonnière au 514 343-6732 ou à roxane.de.la.sablonniere@umontreal.ca

Pour toute préoccupation sur vos droits ou les responsabilités des chercheurs concernant votre participation à ce projet, vous pouvez contacter le Comité d'éthique de la recherche en éducation et en psychologie par courriel à cerep@umontreal.ca ou par téléphone au 514 343-6111 ou encore consulter le site Web <http://recherche.umontreal.ca/participants> Toute plainte relative à votre participation à cette recherche peut être adressée à l'ombudsman de l'Université de Montréal en appelant au 514 343-2100 ou en communiquant par courriel à ombudsman@umontreal.ca (l'ombudsman accepte les appels à frais virés).

En répondant au questionnaire suivant, je déclare avoir pris connaissance des renseignements ci-dessus, savoir que je peux obtenir les réponses à mes questions sur ma participation à la recherche auprès de la chercheuse et comprendre le but, la nature, les avantages, les risques et les inconvénients de cette recherche. Je consens librement à prendre part à cette recherche. Je sais que je peux cesser de participer en tout temps sans préjudice et sans devoir justifier ma décision.

J'accepte de participer à cette recherche.

Oui

Non

Annexe B

Formulaire de consentement pré-test – Étude 2

Nom du questionnaire: Activités hivernales et COVID-19

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A. RENSEIGNEMENTS AUX PARTICIPANTS

1. Objectifs du projet de recherche

Ce projet vise à mieux comprendre les facteurs qui influencent les comportements des Canadiens et des Canadiennes dans le cadre de la pandémie actuelle.

Le projet est autorisé par le Comité d'éthique de la recherche en éducation et en psychologie de l'Université de Montréal (Projet no CEREP-20-165-D).

2. Participation à la recherche

Votre participation au projet de recherche est entièrement volontaire. Si vous y consentez, votre participation consiste à compléter un questionnaire en ligne.

Dans ce questionnaire, vous serez amenés à lire sur une activité hivernale et à essayer de vous imaginer dans la situation décrite. Vous devrez par la suite répondre à des questions en lien avec la situation. Finalement, vous répondrez à des questions démographiques générales. Le questionnaire prend environ 10 minutes à compléter.

3. Avantages et bénéfices

Il n'y a pas d'avantage particulier à participer à ce projet. Vous contribuerez cependant à l'avancement des connaissances en psychologie sociale et à une compréhension plus approfondie de la crise actuelle.

4. Risques et inconvénients

Il n'y a pas de risque particulier, connus ou anticipés, à participer à ce projet.

5. Confidentialité et anonymat

Les renseignements personnels que vous nous donnerez demeureront confidentiels. Aucune information permettant de vous identifier d'une façon ou d'une autre ne sera publiée. Les données seront conservées sur une plateforme informatique et sur les ordinateurs des chercheurs sécurisés par un mot de passe. Toute information personnelle sera détruite 7 ans après la fin du projet. Seules les données ne permettant pas de vous identifier seront conservées après cette période.

Vous répondrez au questionnaire par le biais d'un questionnaire en ligne géré par Qualtrics. Lorsque des informations sont transmises sur internet, la confidentialité ne peut être garantie. Il existe toujours un risque que vos réponses soient interceptées par un tiers (par exemple, des organismes gouvernementaux, des pirates informatiques). Qualtrics recueille temporairement l'adresse IP de votre ordinateur pour éviter les réponses en double dans la base de données, mais nous ne conserverons pas cette information. Si vous préférez ne pas soumettre vos réponses au questionnaire par l'intermédiaire de cet hôte, veuillez ne pas vous inscrire à cette étude.

6. Compensation

Vous serez remercié pour votre temps par l'entremise d'un incitatif nominal de 1,82\$.

7. Transmission des résultats aux participants

Les résultats généraux de l'étude seront présentés sur le site web suivant : <https://csdc-cccd.wixsite.com/covid19csi/resultats>

8. Déclaration de liens d'intérêt

Les chercheurs n'ont aucun conflits ou liens d'intérêt à déclarer.

9. Droit de retrait

Votre participation à ce projet est entièrement volontaire et vous pouvez à tout moment vous retirer de la recherche en cessant de répondre au questionnaire, sans devoir justifier votre décision, sans conséquence pour vous.

À votre demande, tous les renseignements qui vous concernent pourront aussi être détruits. Si vous désirez retirer tous les renseignements vous concernant de la recherche, veuillez communiquer avec le chercheur à l'adresse suivante: eloise.cote.1@umontreal.ca. Cependant, après le déclenchement du processus de publication, il sera impossible de détruire les analyses et les résultats portant sur vos données.

10. Utilisation des données de recherche

Les données anonymisées relatives à votre participation peuvent être soumises à un dépôt ou à un journal en libre accès (par exemple, les données peuvent être accessibles au public). Ces données seront complètement anonymisées avant d'être soumises et seront présentées sous forme agrégée dans des publications. Ce processus fait partie intégrante du processus de

recherche car il permet à d'autres chercheurs de vérifier les résultats et d'éviter la duplication des recherches. D'autres personnes peuvent accéder à ces données en accédant au dépôt en libre accès. Bien que l'ensemble de données sans identifiants puisse être partagé publiquement, votre identité restera toujours confidentielle.

B. DÉCLARATION DU PARTICIPANT

- Je reconnais qu'on m'a expliqué clairement la nature de ma participation à la recherche.
- Je comprends que je peux prendre mon temps pour réfléchir avant de donner mon consentement à participer à la recherche aux conditions énoncées dans le présent formulaire.
- Je peux poser des questions au chercheur et exiger des réponses satisfaisantes.
- Je comprends qu'en participant à ce projet de recherche, je ne renonce à aucun de mes droits ni ne dégage le chercheur de ses responsabilités.

C. DEMANDE DE CONSENTEMENT

J'ai pris connaissance du présent formulaire d'information et de consentement. Je consens à ce que les données de recherche puissent être communiquées à d'autres chercheurs ou utilisées dans le cadre d'études subséquentes. En répondant au présent questionnaire, j'accepte de participer au projet de recherche selon les informations énoncées.

D. PERSONNES-RESSOURCES

Pour toute question relative à l'étude, veuillez communiquer avec Éloïse Côté à l'adresse courriel suivante: eloise.cote.1@umontreal.ca.

Pour toute préoccupation sur vos droits ou sur les responsabilités des chercheurs concernant votre participation à ce projet, vous pouvez contacter le Comité d'éthique de la recherche en éducation et en psychologie par courriel à l'adresse cerp@umontreal.ca ou par téléphone au 514 343-6111 poste 1896 ou encore consulter le site Web <http://recherche.umontreal.ca/participants>.

Toute plainte relative à votre participation à cette recherche peut être adressée à l'ombudsman de l'Université de Montréal en appelant au numéro de téléphone 514 343-2100 ou en communiquant par courriel à l'adresse ombudsman@umontreal.ca (l'ombudsman accepte les appels à frais virés).

Annexe C

Formulaire de consentement post-test – Étude 2

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Merci d'avoir participé à cette étude - nous apprécions grandement votre contribution à notre recherche. Le but de cette page d'information post-expérimentale est de fournir des détails supplémentaires sur l'étude à laquelle vous venez de participer.

Comme nous vous l'avons indiqué au début du questionnaire, nous étudions les comportements des individus dans le contexte de la pandémie de la COVID-19. Cependant, il y a des détails que nous ne pouvions pas vous faire part au départ, car les connaître avant de participer aurait pu affecter la façon dont vous auriez répondu, ce qui invaliderait l'étude. Pour évaluer les opinions et les réactions naturelles des participants, nous avons omis certains détails concernant le but de l'étude. Nous aimerions maintenant vous expliquer les détails de l'étude que nous n'avons pas pu vous donner au départ.

Dans cette recherche, nous explorons comment différentes situations sociales influencent les comportements liés aux mesures sanitaires, comme le port d'un masque et le maintien de la distanciation physique. Par conséquent, vous avez été assigné aléatoirement à une des trois conditions décrivant différents rassemblements sociaux.

Nous nous excusons de ne pas vous avoir fourni d'informations complètes et exactes sur le but, les objectifs et les procédures de cette étude, mais nous espérons que vous comprenez pourquoi cela était nécessaire. Nous avons utilisé ces méthodes afin d'évaluer les attitudes et les réactions naturelles des participants. Si nous n'avions pas obtenu les réactions naturelles des participants, les résultats de l'étude auraient été invalides.

Les renseignements personnels que vous nous donnerez demeureront confidentiels. Aucune information permettant de vous identifier d'une façon ou d'une autre ne sera publiée. Les données seront conservées sur une plateforme informatique et sur les ordinateurs des chercheurs sécurisés par un mot de passe. Toute information personnelle sera détruite 7 ans après la fin du projet. Seules les données ne permettant pas de vous identifier seront conservées après cette période.

Cette étude a été revue et approuvée par un comité d'éthique de la recherche de l'Université de Montréal (projet no CEREP-20-165-D). Si vous désirez poser des questions au Comité, vous pouvez communiquer avec le Comité d'éthique de la recherche en éducation et en psychologie

de l'Université de Montréal par courriel à cerep@umontreal.ca, par téléphone au 514 343-6111 ou sur leur site Web à <http://recherche.umontreal.ca/participants>.

FORMULAIRE DE CONSENTEMENT POST-DEBRIEFING

Étant donné que certains éléments de l'étude sont différents de ce qui a été expliqué au début du questionnaire, il y a un autre formulaire de consentement que vous pouvez lire et remplir, si vous êtes prêt à nous permettre d'utiliser les informations que vous avez fournies. Ce consentement représente également une preuve que l'objectif complet de l'étude vous a été expliqué.

Si vous avez des questions sur l'utilisation de la duperie dans cette étude, veuillez contacter Éloïse Côté à eloise.cote.1@umontreal.ca

J'autorise les chercheurs à utiliser mes données et / ou les informations que j'ai fournies dans le questionnaire en ligne pour cette étude.

Oui

Non