Feelings towards physical and behavioural adaptations during the Covid-19 pandemic

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Introduction

The Covid-19 pandemic has elicited universal uncertainty, alongside large-scale behavioural and social changes. These modifications have ranged from changing our daily routine to how we engage with others and the environment around us. The impact of these adaptations to our day-to-day lives is, in part, determined by individual appraisal (Taha et al., 2014). The perception of severity, as noted during previous outbreaks (Lau et al., 2007; Rubin et al., 2009), has an impact on engagement in behaviour (Janz & Becker, 1984) and perceptions can be influenced by a number of factors (Joffe, 2003). For example, being older has previously been associated with higher ratings of severity and adoption of recommended behaviours during pandemics (Bish & Michie, 2010), emotional influence is also a crucial factor in decisionmaking and behaviour change (Hartley & Phelps, 2010), and eliciting differing emotions has been associated with active coping and positive influences on behaviour, negative impact of engagement and associated avoidance (Restubog et al., 2020; Tannebaum et al., 2015). In order to mitigate Covid-19 and maintain engagement in protective behaviours, it is integral that we make efforts to understand feelings and beliefs that may in turn impact on behaviour (Mukhtar, 2020). As such, this study aimed to take stock and investigate the positive and negative emotions experienced in relation to environmental and behavioural adaptations during the Covid-19 pandemic and determine what role age and perceived pandemic severity has on these.

Method

Participants

The sample consisted of 131 participants (80.3% female); 105 had no symptoms of COVID-19 and had not been tested, 25 had symptoms but had not been tested, 1 had tested negatively, and no one had tested positively. Nine participants lived on their own, 103 lived with between 1 and 3 others, and 19 lived with 4 or more others. Only 122 participants disclosed their age (M = 40.15), which ranged between 20 and 81 years. Participants were recruited by advertising the study via the authors' social networks, across other academic intuitions, and also on psychology research participation websites.

Materials

Participants' views, thoughts, and actions concerning the COVID-19 pandemic were measured using a purposely constructed online survey. Participants were first presented with 6 behaviours they might have experienced during the pandemic (specifically: someone wearing a face mask outdoors, someone wearing gloves outdoors, seeing someone walk away to avoid them in the street, someone avoiding something they have touched, speaking to someone behind a screen, and someone they do not know walking very close to them). Each behaviour was presented alongside 6 potential feelings and participants were asked to rate the extent to which they agreed with each. For example, the first behaviour was "If I see someone wearing a face mask outdoors, I feel...", and the 6 feelings were "annoyed", "scared", "insulted", "pleased", "reassured" and "safe", and participants had to state to what extent they agreed using a 5-point Likert scale (1 = Strongly disagree; 5 = Strongly agree). Next, participants were asked to state how serious they felt the pandemic was using a visual analogue scale (0 = Not at all; 10 = Extremely). Finally, participants were asked to summarise how much they have been following the rules around social distancing, staying indoors, staying away from people they don't live with, shopping only when necessary and so on, using a 5-point Likert scale (1=Not at all; 5=As much as possible).

Procedure

The first page of the online survey contained the participant information sheet and other relevant ethical information. Participants completed a selection of demographic questions, continued to answer the 6 behaviour-based questions, and then the final questions concerning the extent to which they had been following the rules during the pandemic. After completing the survey, participants were thanked for their time and presented with a full debrief.

Results

Within each of the 6 behaviours, reliability analyses were calculated for each of the 6 items regarding feelings and were grouped into two sets of three items (annoyed/scared/insulted and pleased/reassured/safe). The reliability of the 6 behaviours for the annoyed/scared/ insulted trio and for the pleased/reassured/safe trio were high (α = .79 and α = .88 respectively). As such, a mean was calculated across the trios of items for annoyed/scared/insulted, and for pleased/reassured/safe. These two new variables were used for the remaining analysis. Spearman correlation was used due to small deviations from normality in some of the variables.

Table 1: Correlations between variables.

	Annoyed/Scared/Insulted ρ	Pleased/Reassured/Safe ρ	Perceived Severity of Pandemic ρ	Following Rules ρ	Age ρ
Annoyed/Scared/Insulted			•		
Pleased/Reassured/Safe	34***				
Perceived Severity of Pandemic	.17	.36***			
Following Rules	.12	.24**	.32***		
Age	.09	.00	.29*	.08	

^{*} *p* < .05; ** *p* < .01; *** *p* < .001

In Table 1, we report the correlations between 4 variables. Predictably, the two trios of feelings were significantly negatively related to each other due to their opposite natures. Perceiving of pandemic severity was significantly correlated with feeling pleased, reassured, and safe in consideration of the 6 observed behaviours. Interestingly, there was no relationship between the strength of the other trio of feelings and the perceived severity of the pandemic. In addition, individuals who stated they were following the rules significantly perceived the pandemic as more severe. Finally, and also understandably, the higher the age of the individual, the more severe they perceived the pandemic to be.

Discussion

The purpose of this study was to take stock of emotions related to behavioural and environmental adaptations during the Covid-19 pandemic. Based on our findings, these adaptations elicited more positive emotions, and were also associated with higher perceived severity of the virus. This complements the other finding, that individuals who stated they were following the rules closely perceived the virus as more severe. It could be that a combination of perceiving the virus as severe, and following the rules, creates a sense of safety and reassurance. It is interesting that there was no relationship between more negative emotions towards adaptations and behaviours and severity of Covid-19. This suggests an acceptability of these behaviours. What will be intriguing to discover is whether this acceptability has an impact on personal engagement in these behaviours, and the type of coping utilised.

With older individuals being more susceptible to the severe consequences of Covid-19 (World Health Organization, 2020), it is not surprising that the higher participants' age, the higher the

perceived severity of the virus, and this mirrors previous pandemic findings (Bish & Michie, 2010). Whilst of course, there are limitations to this study, namely the relatively small sample, it still offers a useful snapshot of understanding behaviour during the global pandemic, and highlights a sense of openness to adaptation and change.

References

Bish, A. & Michie, S. (2010) Demographic and attitudinal determinants of protective behaviours during a pandemic. A review. *British Journal of Health Psychology*, 15, 797-824.

Dubey, S., Biswas, P., Ghosh, R., Chatterjee, S., Dubey, M. J., Chatterjee, S., Lahiri, D. & Lavie, C. J. (2020). Psychosocial impact of COVID-19. *Diabetes & metabolic syndrome*, 14(5), 779–788.

Hartley, C. A., & Phelps, E. A. (2010). Changing Fear: The Neurocircuitry of Emotion Regulation. *Neuropsychopharmacology*, 35(1), 136-146.

Janz, N.K., & Becker, M.H. (1984). The health belief model: a decade later. *Health Education Quarterly*, 11, 1–47.

Joffe, H. 2003. Risk: From Perception to Social Representation. *British Journal of Social Psychology*, 42(1), 55–73.

Lau, J.T.F., Kim, J.H., Tsui, H-Y. & Griffiths S. (2007) Anticipated and current preventive behaviours in response to an anticipated human-to-human H5N1 epidemic in the Hong Kong Chinese general population. *BMC Infectious Disease*, 7(18), 1-12.

Mukhtar, S. (2020). Mental health and emotional impact of COVID-19: Applying Health Belief Model for medical staff to general public of Pakistan. *Brain, behavior, and immunity*, 87, 28–29.

Restubog, S., Ocampo, A., & Wang, L. (2020). Taking control amidst the chaos: Emotion regulation during the COVID-19 pandemic. *Journal of vocational behavior*, *119*, 103440.

Rubin, G.J. Amlôt, R., Page, L. & Wessely, S. (2009) Public perceptions, anxiety, and behaviour change in relation to the swine flu outbreak: cross sectional telephone survey. *British Medical Journal*, 399, 144-156.

Taha S., Matheson K., Cronin T. & Anisman H. (2014) Intolerance of uncertainty, appraisals, coping, and anxiety: the case of the 2009 H1N1 pandemic. *British Journal of Health Psychology*, *9*, 592–605.

Tannenbaum, M. B., Hepler, J., Zimmerman, R. S., Saul, L., Jacobs, S., Wilson, K., & Albarracin, D. (2015). Appealing to fear: A meta-analysis of fear appeal effectiveness and theories. *Psychological bulletin*, *141*(6), 1178-1204.

World Health Organization (2020) Advice for the public: myth busters. Retrieved from: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public/myth-busters. Accessed 8/7/20.