

A Public Health Psychology perspective on the pandemic crisis

Stephan Van den Broucke

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Public health psychology and COVID-19



Psychology can inform policies

- Many protective measures involve **behaviour change** of citizens & health workers
 - Response to COVID-19 is “the largest behavioural change project in the history of mankind”
 - Health psychologists are experts in health-related behavior change
- Perception that the existing health system is failing to protect citizens against the spread of the virus creates a need for people to **regain control** of their health
 - to protect oneself against the disease
 - to deal with its disruptive consequences

Concrete contributions to addressing COVID-19

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Editorial



Editorial

Why health promotion matters to the COVID-19 pandemic, and vice versa

At the time I am writing this editorial, the world is overwhelmed by the pandemic caused by the SARS-CoV-2 virus. In a desperate attempt to contain the further spread of the virus and the diffusion of the COVID-19 disease it causes, governments across the world have taken measures that are unprecedented. Entire cities, regions and countries are sealed off, travel is banned, schools and universities are closed, shops are running out of stocks, and all economic, cultural and social activities have come to a stop. Never before in modern history has a health problem had such an overwhelming impact on society. Health (or rather the threat of ill health) has become the prevailing concern that takes precedence over all others issues, making *health in all policies* become a reality, albeit not in the way it was intended.

At first sight, this pandemic and the world's response to it seems far removed from the health promotion perspectives we publish and that the International Union for Health Promotion and Education advocates for. When all hands are called on deck to prevent a contagious virus from spreading and to reinforce hospital staff facing a tsunami of patients suffering from a potentially deadly disease, there seems to be little need for specialists whose expertise lies at the other end of the continuum of care spectrum (Springer and Phillips, 2006). The real war heroes in the battle against the CoV-2 virus are virologists, epidemiologists, doctors and nurses, and even if many of the actions taken serve a preventative purpose, their focus is on the prevention of disease, not on promoting health.

Yet on the other hand, many of the measures that are now taken to prevent citizens and health workers from getting infected imply a change of behaviour. Hand washing, wearing face masks and protective gloves and 'social distancing' (which should really be termed 'spatial distancing') are all forms of human behaviour. As the expertise with regard to health behaviour change is

one of the core competencies of health educators and promoters, their advice may help governments to achieve the required behaviour change. Moreover, and perhaps more importantly, the rapid and continuous evolution of the COVID-19 problem and the scale of the measures that are put in place may, rightly or wrongly, create the perception that the existing health system is failing to protect citizens against the spread of the virus. This creates a need for people to regain control of their health, to protect oneself against the disease and to deal with its disruptive consequences.

Enabling people to increase control over their health and its determinants is at the core of health promotion. As such, health promotion may paradoxically be more important in this time of crisis than ever before. As a discipline within public health and a field of professional practice, health promotion can contribute to addressing the CoV-2 virus threat at different levels (Brownson *et al.*, 2010): at the *downstream* level focusing on individual behaviour change and disease management, at the *midstream* level through interventions affecting organizations and communities and at the *upstream* level through informing policies affecting the population.

IMPROVING PREVENTIVE BEHAVIOUR CHANGE MEASURES

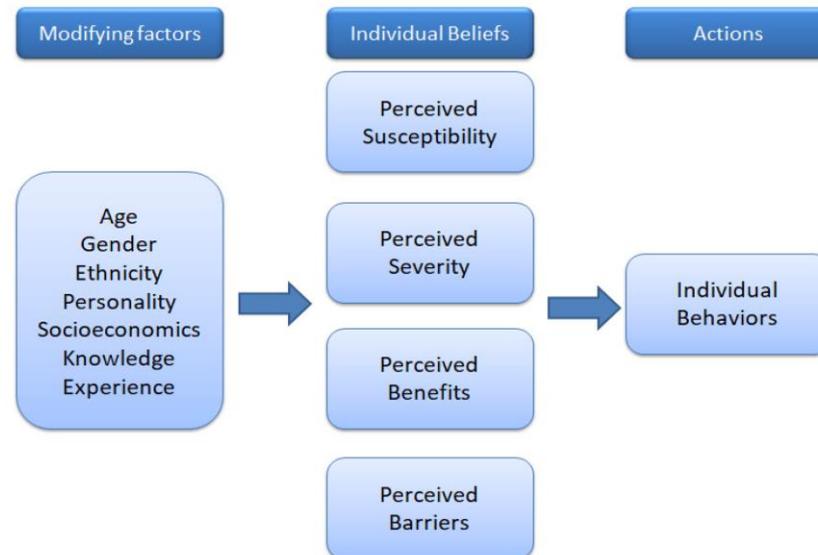
To contain the spread of the CoV-2 virus, health authorities have tried to enhance protective behaviour amongst citizens, first by issuing warnings and recommendations about the new virus, and at a later stage by imposing legal restrictions, in some cases involving a complete 'lock-down'. These measures have met with varying degrees of success. Especially in the beginning of the epidemic the public's response to warnings was often weak and ineffective, thus wasting opportunities to effectively

- Outlined in an editorial in *Health Promotion International* (April 2020)
 - Improving the adherence to preventive behaviour change measures
 - acknowledging the role of health literacy and information bias in the population
 - empowering organizations and communities to implement protective measures and address the challenges of the consequences
- Interdisciplinary research projects
 - Tackling the COVID-19 outbreak: assessing the public's risk perceptions and adherence to measures (TACOM) (IRSS)
 - Mental health, compliance with measures and health prospects during the covid-19 epidemic: the role of health literacy (Sciensano)
 - COVID-19 response for the African region (IUHPE)

TACOM

Tackling the COVID-19 outbreak: assessing the public's risk perceptions and adherence to measures

- Survey study IRSS-IPSY (funded by *Fondation Louvain*)
- Representative Belgian sample (*n=2000 drawn from an online panel; 85% - test no symptoms, 10% - test symptoms, 2% + test no symptoms*)
- Investigated the
 - Adherence to determinants of infection prevention and control measures (IPCM)
 - Sources of information, trust and understanding
 - Determinants of adherence using the **Protection Motivation Theory** (Rogers)

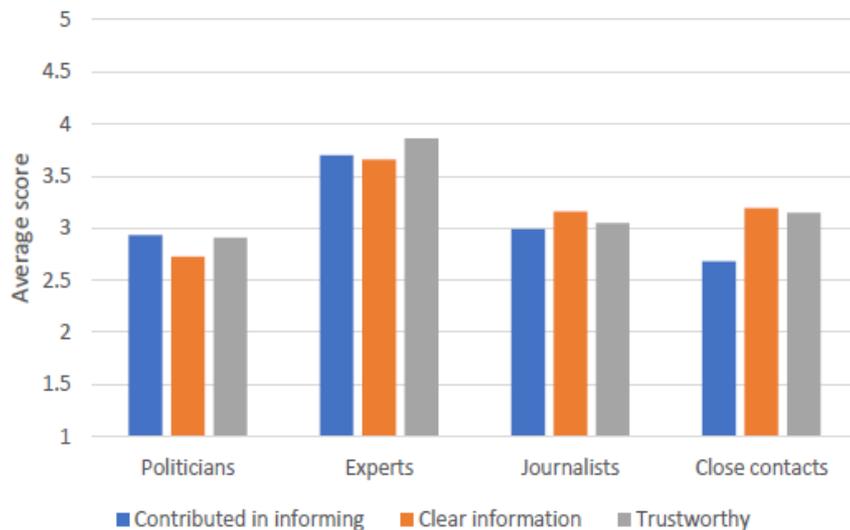


Results

Average scores in understanding, perceived usefulness, ease to adhere, past and future adherence for each of the 8 current COVID-19 measures

Measure	Useful	Easy to adhere	Past adherence	Future adherence	Comparison past / future adherence
	Mean (sd)	Mean (sd)	Mean (sd)	Mean (sd)	p-value
Social bubble limited to 5	3.54 (1.39)	3.00 (1.44)	4.00 (1.26)	3.99 (1.29)	.316
Private events limited to 10	3.66 (1.34)	3.37 (1.35)	4.42 (1.04)	4.27 (1.11)	< .001
Official events limited to 200 (indoors) or 400 (outdoors)	3.63 (1.41)	3.67 (1.27)	4.58 (0.90)	4.52 (0.93)	< .001
Homeworking strongly recommended	4.32 (1.03)	3.81 (1.27)	4.08 (1.30)	4.16 (1.25)	.580
Shop with max. one other person	3.53 (1.37)	4.00 (1.20)	4.55 (0.93)	4.45 (1.01)	< .001
Wearing a face mask in public spaces	4.16 (1.22)	3.94 (1.25)	4.68 (0.74)	4.61 (0.83)	< .001
Travel form	3.88 (1.32)	3.93 (1.13)	4.40 (1.05)	4.45 (1.00)	1.00
Travel zones	3.91 (1.26)	3.75 (1.19)	4.39 (1.03)	4.48 (0.99)	.418

Extent to which different sources contributed in informing, provided clear information and were considered trustworthy



Prediction of adherence by PMT dimensions

PMT dimension	Corrected ¹			
	Past adherence		Future adherence	
	B-value (CI)	p-value	B-value (CI)	p-value
		< .001		< .001
Vulnerability	0.0 (0.0;0.1)	.386	0.0 (0.0;0.0)	.829
Severity	0.0 (0.0;0.0)	.326	0.0 (0.0;0.0)	.232
Response efficacy	0.2 (0.2;0.2)	< .001	0.3 (0.3;0.4)	< .001
Self-efficacy	0.3 (0.3;0.3)	< .001	0.3 (0.3;0.4)	< .001

Past adherence, corrected model: R² = .394; adjusted R² = .385

Future adherence, corrected model: R² = .482; adjusted R² = .474

¹Corrected for confounders : sex, age, region, household composition, socio-economic group, dependency on care, self-reported health, taking care of someone, previous COVID-19 infection



The role of health literacy

- With respect to COVID-19, there is (too) much information
 - not all information is useful, some information is biased or wrong
 - too much information can create confusion
 - the challenge is **not** to provide **more** information, but to help people find the way to **accurate and reliable** health information
- Health literacy
 - « A person's knowledge, motivation and competences to access, understand, appraise, and apply health information in order to make judgments and take decisions in everyday life concerning healthcare, disease prevention and health promotion to maintain or improve quality of life during the life course»

Sørensen et al., Health literacy and public health: A systematic review and integration of definitions and models. *BMC Public Health*. 2012;12:80

- Survey study on the role of HL in addressing COVID-19
 - Use data of the 3rd cross-sectional online COVID survey by Sciensano (May 2020, n = 32,794)
 - Calculate relative risk (RR) of poor mental health, non-compliance with the protective measures, and health prospects (perceived health risk and when returning to normal life) in relation to health literacy

Results

Mental health, non-respect of the preventive measures and perception of the future during the COVID-19 pandemic in people with limited (baseline) versus sufficient health literacy.

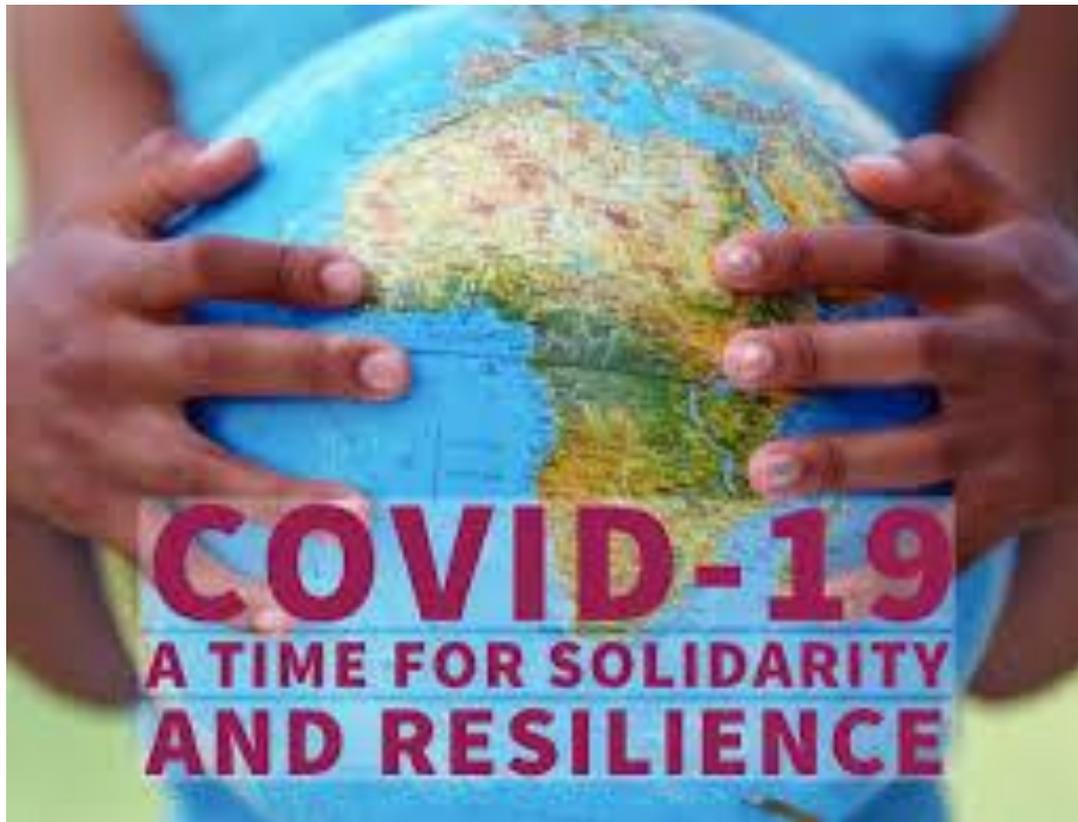
		Health literacy RR (95% CI) Model 1	Health literacy RR (95% CI) Model 2
Mental health	Anxiety disorder	0.47 (0.42 – 0.53)	0.56 (0.49 - 0.63)
	Depression	0.46 (0.40 – 0.52)	0.54 (0.47 - 0.62)
	Sleeping disorder	0.85 (0.82 – 0.87)	0.88 (0.85 - 0.91)
	Optimal vitality	2.41 (2.05 – 2.84)	2.13 (1.81 - 2.50)
Non-respect of ...	Hygiene measures	0.74 (0.66 – 0.83)	0.76 (0.68 - 0.86)
	Physical distance	0.83 (0.76 – 0.91)	0.86 (0.78 - 0.94)
	Covering mouth and nose on public transport	0.60 (0.47 – 0.77)	0.64 (0.50 – 0.83)
	Covering mouth and nose in places where physical distance cannot be respected	0.92 (0.84 – 1.00)	0.92 (0.84 - 1.01)
Future perspectives	High risk for health when returning to normal life	0.70 (0.65 – 0.77)	0.79 (0.73 - 0.87)
	Likely to be infected with COVID-19	0.75 (0.67 – 0.84)	0.81 (0.72 - 0.91)

Poisson regressions. Model 1 includes age group, gender, education and health literacy. Model 2 includes age group, gender, education, health literacy, knowledge COVID-19 and multimorbidity. RR = relative risk, CI = confidence interval.



Empowering communities

- Efforts to implement protective measures are more successful if the advice from experts is combined with **local community knowledge**
 - community members can help to improve the understanding of measures protocols
 - moderate changes can be made that better reflect the community's sensitivities
 - community engagement can strengthen the capacity to deal with the disruptive effects of the pandemic and build resilience and trust
- Project COVID-19 response for the African region
 - Participatory action research by IUHPE involving key partners on the ground in 4 African countries (South Africa, Zimbabwe, Zambia, Kenya)
 - Based on lessons learned (what worked/didn't work, unintended consequences) from previous recent disease outbreaks such as Ebola, Zika and vaccine derived polio virus
 - Plan and implement risk communication and community engagement measures based on health promotion principles
 - engage local communities and key stakeholders in the COVID-19 response
 - train community health workers in risk communication with supportive resources for tailoring materials and key messages for local communities
 - ensure that community level implementation is informed by best available knowledge, research and resources on effective risk communication and community engagement.
 - create community coalitions to coordinate local responses adapted to the needs of local communities



COVID-19
**A TIME FOR SOLIDARITY
AND RESILIENCE**