



“Communities are at the heart”

The HSRC launched the project “Street talk-Asikhulume” in March 2020 to gather behavioural data with which to provide insights into the social dynamics of the South African population’s response to the COVID-19 outbreak.

Engaging communities regarding their knowledge, beliefs, practices and attitudes as COVID-19 emerged



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Factors associated with self-efficacy in preventing COVID-19 infection in April 2020, KwaZulu-Natal

KZN COVID-19 Consortium Conference
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Overview of presentation

- Self efficacy in context
- Methods – lockdown survey wave 2
- Results – selected demographics & multivariate analyses

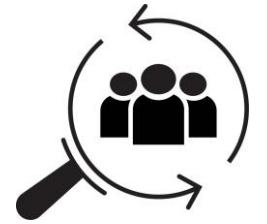


Self efficacy

Perceived self efficacy is a **belief** in being able to **exert control** over **self-motivation & behaviours** as well as over a **social environment**.¹

These beliefs impact on intentions and behaviours related to health

¹ Bandura, A. (1990). Perceived self-efficacy in the exercise of control over AIDS infection. Evaluation and Program Planning, 13(1), 9–17. [https://doi.org/10.1016/0149-7189\(90\)90004-G](https://doi.org/10.1016/0149-7189(90)90004-G)



Study design and population

- HSRC's research response: mixed methods approach using qualitative & quantitative studies
 - For the quantitative studies – surveys conducted online and telephonically (to broaden the reach)
 - General population survey 2: Lockdown survey done during lockdown level 5 during April 2020
 - Survey data were benchmarked using the general population demographics based on Stats SA's mid-year estimates allowing for generalisability of findings
 - Study sample
 - Sample of all South Africans aged ≥ 18 years
- Partnerships: UKZN, SAPRIN (Agincourt), Walter Sisulu University, National Institute for the Humanities & Social Sciences (NIHSS) and Acumen Media assisted with expansion into communities.

STUDY METHODS: DATA FOR SELF-EFFICACY IN KZN



- analysed data for KZN
- outcome variable: "I am confident that I can prevent myself from getting COVID-19 virus" (yes=1/no=0).

Variables used:

demographic: age, sex, population group, education level, employment, community type reported

adherence to lockdown rules: able to stay home during lockdown, over the past seven days, have you come into contact with people outside your home?, over the past seven days, have you left your village/suburb/township/ area?, number of people in close contact with

knowledge about prevention: staying 2 meters away from another person, wearing mask, staying away from COVID positive people, avoid touching their nose, eyes & face, hand washing

access to food: can you get food to your household easily during the lockdown?

covid test: know anyone who tested for COVID-19,

efficacy family: confidence in preventing family from getting COVID-19

risk perception: for self

- univariate and multivariate logistic regression analyses in Stata ver 15.0
- significant covariates from the multivariate model at $p \leq 0.05$ reported



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RESULTS

“I am confident that I can prevent myself from getting COVID-19 virus”

Overall, in KZN, 16.3% (95% CI 14.8-18.0, N=3066) of people said **they lacked confidence** (suggesting lower self efficacy) in preventing infection. By comparison, in Eastern Cape 24.6% (95% CI 21.0-28.7) said **they lacked confidence**.

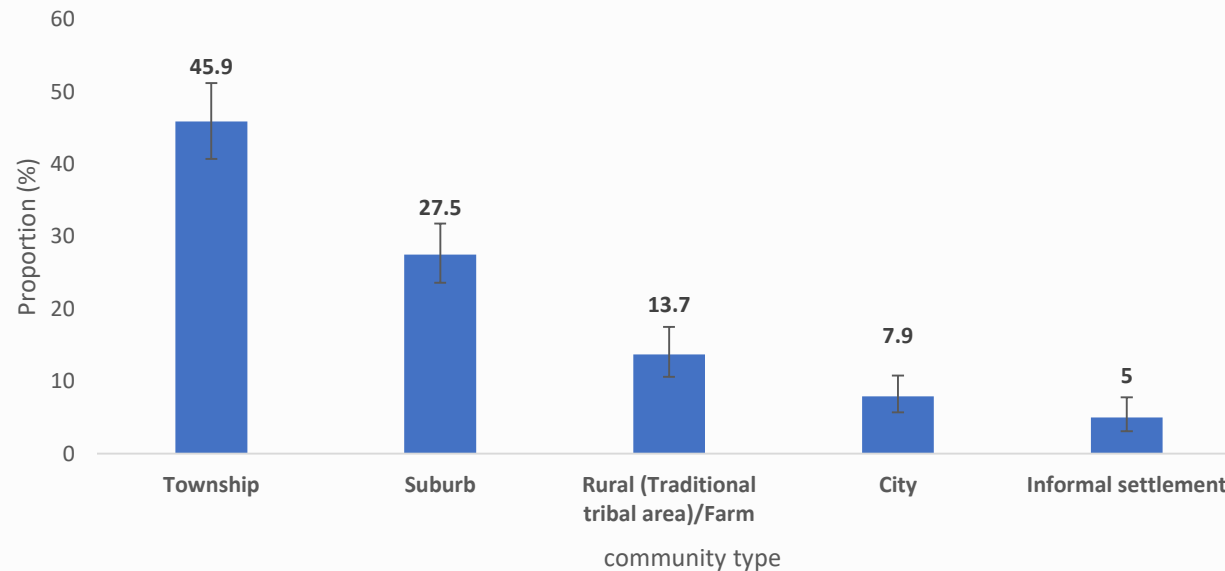
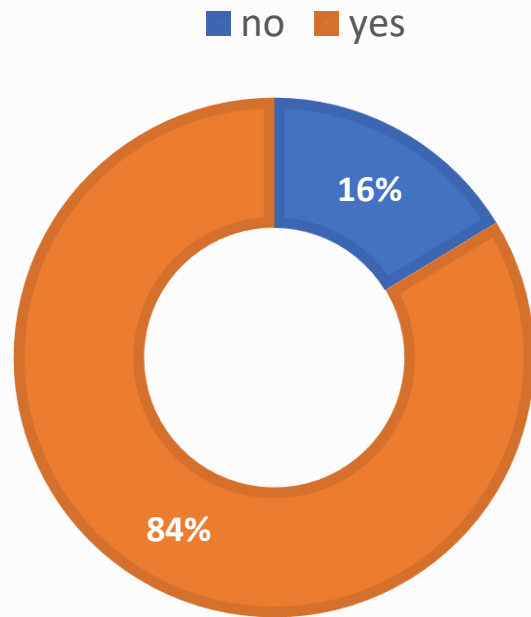


Figure: low self efficacy by community type

Lower self-efficacy was reported by those living in townships (45.9%) & suburbs (27.5%) compared to other community types ($p=0.007$).

RESULTS

“I am confident that I can prevent myself from getting COVID-19 virus”

Of those with higher self efficacy:

- **31.7%** (95% CI 29.1-34.3) said they had been at home since lockdown started and had not left.
- **51.6%** (95% CI 48.8-54.4) had to leave to get food/medicine.
- **23.4%** (95% CI 21.2-25.8) said they had left their village/ suburb/ township/area in the past 7 days (April 2020).

Of those with lower self efficacy:

- **17.6%** (95% CI 13.9-22.1) said they had been at home since lockdown started and had not left.
- **58.7%** (95% CI 53.2-64.0) had to leave to get food/medicine.
- **34.3%** (95% CI 29.6-39.4) said they had left their village/ suburb/ township/area in the past 7 days (April 2020).



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RESULTS: univariate & multivariate

Factors significantly associated with lower self efficacy (denoted by aORs <1 in table)

- having no education compared to those with tertiary education
- self-employed or employed full time compared to students
- being unsure or disagreeing that they could prevent their families from infection
- having high or moderate risk perception of contracting the virus

Variable	OR	p value	aOR	p value
Education level				
Tertiary			ref	
None	0.93	0.904	0.13	0.005
Primary	2.37	0.044	0.95	0.947
Secondary	1.41	0.089	0.72	0.221
Matric	1.31	0.031	0.96	0.859
Employment				
Student			ref	
Employed full time	0.64	0.033	0.50	0.047
Employed informal/part time	0.94	0.823	0.59	0.185
Unemployed	0.88	0.558	0.58	0.1
Self employed	0.69	0.163	0.37	0.019
Knowledge: I can prevent myself from becoming infected by Wearing a mask				
Yes			ref	
No	0.44	<0.001	0.59	0.055
Don't know	0.33	<0.001	0.37	0.05
I am confident that I can prevent my family from getting COVID-19 virus				
agree			ref	
neutral	0.02	<0.001	0.02	<0.001
disagree	0.02	<0.001	0.02	<0.001
Risk perception				
Low risk			ref	
high risk	0.32	<0.001	0.35	<0.001
Moderate risk	0.30	<0.001	0.41	<0.001

NB: masks: not wearing/don't know
Masks became mandatory on 1 May 2020 in South Africa

RESULTS: univariate & multivariate

Factors significantly associated with higher self efficacy:

Those who said they were at home since the start of lockdown & had not left home were significantly more likely to have higher self-efficacy compared to essential services workers.

Variable	OR	p value	aOR	p value
Able to stay home during lockdown				
Not applicable-I am an essential services worker			ref	
I have been at home since the start of lockdown, and have not left	3.15	<0.001	2.72	0.004
I have had to leave to get food and medicine	1.54	0.016	1.58	0.125
I had to leave to collect a social grant	1.81	0.084	1.29	0.59
I spend a lot of my time visiting my friends and neighbours and socialising	1.08	0.872	0.88	0.888

Discussion

- Self efficacy is **central** to understanding behaviours around COVID-19.
- Our data for KZN show that in the early days of the lockdown, the primary determinant of higher self efficacy towards COVID-19 was **being able to stay at home**.
- ***High/moderate risk perception & feeling unable to protect their families against COVID-19 infection***: associated with lower self efficacy during the level 5 lock down....
 - suggests there are several factors making people feel vulnerable e.g. work/home environment or general uncertainty about the pandemic in those early months.
 - Lower self efficacy against COVID-19 infection has been shown to adversely impact mental health.
- ***High risk perception can motivate people to engage in preventive behaviours***.
 - Some of our work on social distancing using the national dataset found that participants with high risk perception & lower self efficacy also said they had close physical contacts.
- **Social inequalities** - low education levels, under resourced households & communities or having type of jobs where there are challenges in keeping physically apart, impact on social distancing. This in turn lowers self efficacy.

Conclusion

- “Pandemic fatigue” - **lack of motivation**
- We highlight the need for actions that **strengthen self efficacy to overcome the fatigue.**
- Such actions could be messaging around promoting and sustaining prevention behaviours for individuals even when outside the home.
- Self efficacy & its determinants of preventive and protective behaviour should be included in health education and socio-behavioural change interventions.



Thank you

Suggested citation:

Inbarani Naidoo, Noluyiso Vondo, Tholang Mokhele, Musa Mabaso, Ronel Sewpaul, Adlai Davids, Sasiragha Priscilla Reddy. Factors associated with self-efficacy in preventing COVID-19 infection in April 2020, KwaZulu-Natal. KZN COVID-19 Consortium Conference 30th November 2020.



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