Measuring Mental Health and Well-being During the Pandemic

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Mental health experts: Effects of COVID-19 stress enter second year

PANDEMIC FUELS MENTAL HEALTH CHALLENGES

As the COVID-19 pandemic entered its second year in late March, a regional mental health survey reported widespread effects of anxiety. The Woodlands area therapists and nonprofits have reported increased demand for mental health services amid job loss and other stressors.

Science News

COVID-19 pandemic may have in[creased mental health] issues within families

Date: April 13, 2021

Source: Penn State

Summary: When the COVID-19 pandemic hit in early 20[20], many families found themselves suddenly isolated together at home. A year later, new research has linked this period with a variety of large, detrimental effects on individuals' and families' well-being and functioning.

How the COVID-19 pandemic is affecting mental health

The World Health Organization has warned the coronavirus pandemic could have a years-long effect on mental health.

CRISIS
HO+LINE
National Center for Mental Health

24/7 NCMH Crisis Hotline
STATISTICS

NCMH CRISIS HOTLINE		
2021	TOTAL CALLS	SUICIDE-RELATED CALLS
JANUARY	1089	309
FEBRUARY	1126	311
MARCH 1-15	791	247
TOTAL	3006	867

NCMH CRISIS HOTLINE		
2020	TOTAL CALLS	SUICIDE-RELATED CALLS
JANUARY	466	33
FEBRUARY	402	34
MARCH	672	33
APRIL	1104	66
MAY	1083	80
JUNE	1115	112
JULY	1034	115
AUGUST	1053	104
SEPTEMBER	1187	143
OCTOBER	999	167
NOVEMBER	917	207
DECEMBER	985	288
TOTAL	11,017	1,282

84% OF PINOYS STRESSED BY COVID-19 PANDEMIC

The survey, conducted from July 3 to 6, found that 86 percent of Filipinos said the COVID-19 pandemic brought them stress—51 percent "great stress," a slight decline from the 55 percent in May and 35 percent "much stress," which hardly changed from 34 percent.

INQUIRER.NET

86% OF ADULT FILIPINOS STRESSED BY PANDEMIC —SWS

The coronavirus disease 2019 (COVID-19) pandemic has brought stress to 86% of adult Filipinos, a Social Weather Stations survey found. In its September 17-20, 2020 national mobile phone survey, SWS discovered that 58% of adult Filipinos experienced "great stress," while 27% had "much stress," due to the virus. Only 15% felt little or no stress. It also found that 30.7% or an estimated 7.6 million Filipinos experienced hunger. This was up by 9.8 points from 20.9% in July.

Measuring mental health : Challenges

- Diagnosis : mental health professionals rely on more complex system of assessment for diagnosis

- Screening : check of symptoms that might indicate likelihood of psychological disorders

- Prevalence : plan and allocate mental health services and resources (i.e., Tier 2 and 3 services)

- Some sectors : universal mental health screening

- *Useful even before or after the pandemic*

Tripartite model of anxiety and depression
(common psychological symptoms)

DASS-21 (Lovibond & Lovibond, 1995)

Low positive affect	**DASS-Depression**	**Feeling meaningless, down-hearted, difficult to work up initiative to do things, unable to be enthusiastic, etc.**
Physiological hyperarousal	**DASS-Anxiety**	**Feeling excessive rapid breathing (difficulty), scared without a reason, dryness of mouth, panic, trembling, difficulty winding down**
Negative affectivity	**DASS-Stress**	**Feeling touchy, intolerant, agitated, difficult to relax, tending to over-react to situations**

Tee et al. (2020). *J Affective Disorders*
N = 1879 (non-representative sample of adults)

Depression Anxiety Stress Scale (DASS-21; Lovibond & Lovibond 1995)

	DEPRESSION	ANXIETY	STRESS
Normal	1338 (71.2%)	1157 (61.6%)	1131 (60.2%)
Mild	224 (11.9%)	181 (9.6%)	496 (26.4%)
Moderate	239 (12.7%)	333 (17.7%)	179 (9.5%)
Severe to Extremely Severe	78 (4.2%)	208 (11.1%)	73 (3.9%)

Some Limitations

- Highly educated sample

- Use of English language

- Screening of symptoms with other sectors of our Philippine population

Project :
Translate and validate DASS-21 into different Philippine languages

- **Filipino (Tagalog), Cebuano, Ilocano, Hiligaynon, and Kapampangan**

- *The ITC Guidelines for Translating and Adapting Tests* **(Second edition, 2017)**
  - **Independent translation and committee review**
  - **External audit/review**
  - **Pilot with FGD**
  - **Validation study**

Project :
Translate and validate DASS-21 into different Philippine languages

- Some items that were difficult to translate
  - I felt down-hearted and blue (D)
  - I found it hard to wind down (A)
  - I experienced breathing difficulty (e.g., excessive rapid breathing)
  - I was aware of dryness of my mouth (A)
  - I felt that I was rather touchy (S)
  - I tended to over-react to situations (S)
  - I found myself getting agitated (S)
  - I felt that I was using a lot of nervous energy (S)

**Project :
Validate DASS-21
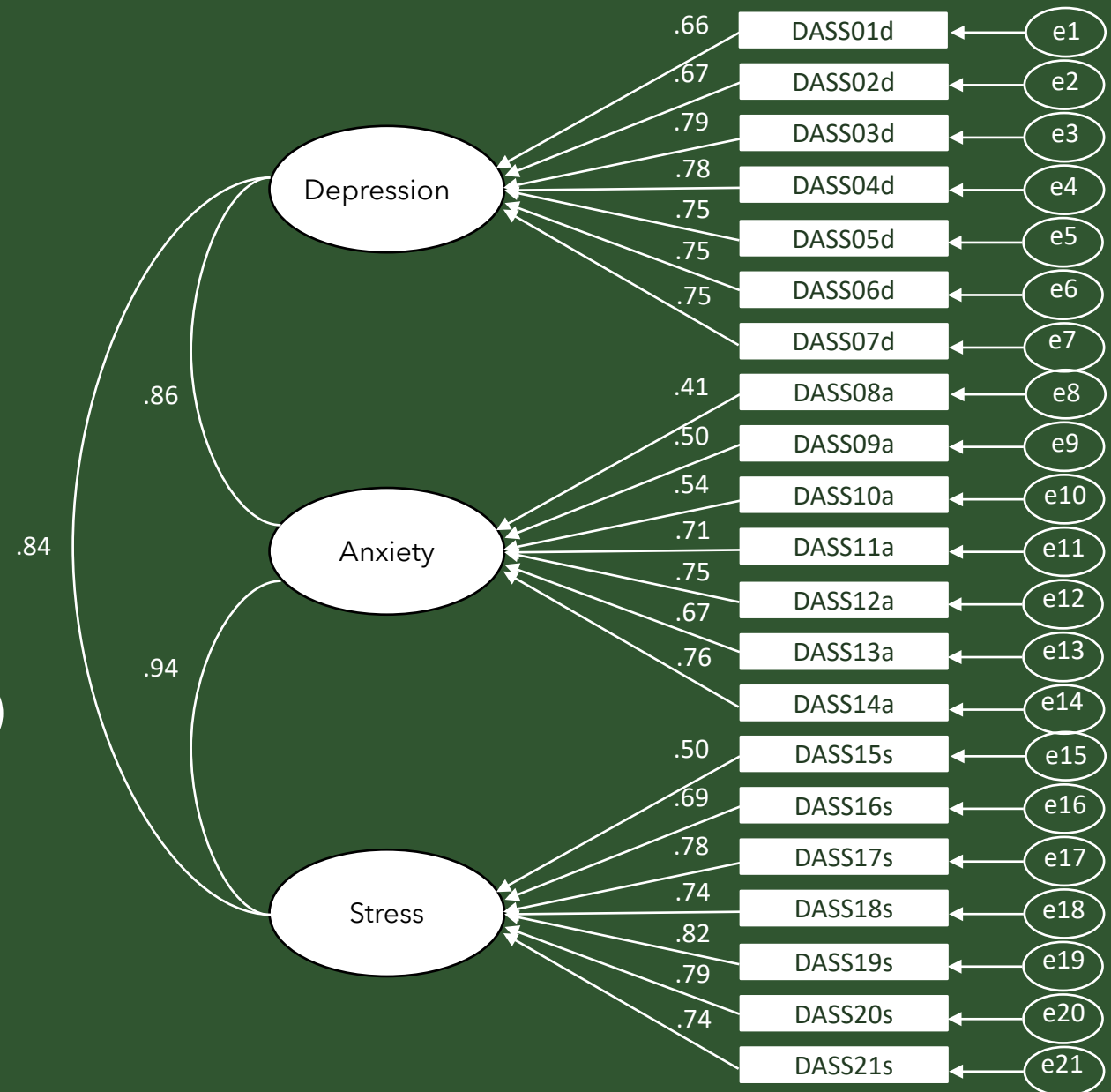into different
Philippine
languages**

- **Structural validation : Used confirmatory factor analysis to test three-factor model**

- **Established criterion validity using other measures of anxiety, depression, positive and negative affect, well-being**

DASS-Depression symptoms

	Tee et al. (2020) English	Translation studies total	Filipino	Cebuano	Ilokano	Kapam-pangan	Hiligay-non
Normal	1338 (71.2%)	1462 (55.2%)	286 (42.0%)	182 (44.4%)	513 (76.8%)	229 (47.4%)	252 (62.4%)
Mild	224 (11.9%)	336 (12.7%)	93 (13.7%)	57 (13.9%)	55 (8.2%)	79 (16.4%)	52 (12.9%)
Moderate	239 (12.7%)	433 (16.4%)	140 (20.6%)	88 (21.5%)	63 (9.4%)	87 (18.0%)	55 (13.6%)
Severe	78 (4.2%)	183 (6.9%)	75 (11.0%)	29 (7.1%)	20 (3.0%)	40 (8.3%)	19 (4.7%)
Extremely Severe		232 (8.8%)	87 (12.8%)	54 (13.2%)	17 (2.5%)	48 (9.9%)	26 (6.4%)
TOTAL	1879	2646	681	410	668	483	404

DASS-Anxiety symptoms

	Tee et al. (2020) English	Translation studies total	Filipino	Cebuano	Ilokano	Kapam-pangan	Hiligay-non
Normal	1157 (61.6%)	1484 (56.1%)	267 (39.2%)	215 (52.4%)	491 (73.5%)	255 (52.8%)	256 (63.4%)
Mild	181 (9.6%)	235 (8.9%)	52 (7.6%)	31 (7.6%)	43 (6.4%)	74 (15.3%)	35 (8.7%)
Moderate	333 (17.7%)	423 (16.0%)	135 (19.8%)	69 (16.8%)	65 (9.7%)	101 (20.9%)	53 (13.1%)
Severe	208 (11.1%)	183 (6.9%)	73 (10.7%)	33 (8.0%)	31 (4.6%)	27 (5.6%)	19 (4.7%)
Extremely Severe		321 (12.1%)	154 (22.6%)	62 (15.1%)	38 (5.7%)	26 (5.4%)	41 (10.2%)
TOTAL	1879	2646	681	410	668	483	404

DASS-Stress symptoms

	Tee et al. (2020) English	Translation studies total	Filipino	Cebuano	Ilokano	Kapam- pangan	Hiligay- non
Normal	1131 (60.2%)	1771 (66.9%)	375 (55.1%)	237 (57.8%)	551 (82.5%)	300 (62.1%)	308 (76.2%)
Mild	496 (26.4%)	242 (9.1%)	77 (11.3%)	46 (11.2%)	44 (6.6%)	50 (10.4%)	25 (6.2%)
Moderate	179 (9.5%)	301 (11.4%)	101 (14.8%)	57 (13.9%)	37 (5.5%)	72 (14.9%)	34 (8.4%)
Severe	73 (3.9%)	223 (8.4%)	85 (12.5%)	45 (5.9%)	27 (4.0%)	44 (9.1%)	22 (5.4%)
Extremely Severe		109 (4.1%)	43 (6.3%)	25 (6.1%)	9 (1.4%)	17 (3.5%)	15 (3.7%)
TOTAL	1879	2646	681	410	668	483	404

Some observations

- **More *severe* and *extremely severe* symptoms were reported in the Philippine language versions of DASS-21 (compared to English version)**

- **Surveys done over different months in 2020**

- **Sample is more diverse in Philippine language studies**

- **Symptoms seem to be more severe in areas where COVID-19 infection rates and quarantine conditions were more severe**

Some implications

- **Viability of DASS-21 in different major languages as a mental health screening tool**

- **Not just during the pandemic, but in other times**

- **Philippine translations also lend themselves to oral administration of the screening tool**

- **Need translations in other major Philippine languages that also need to be validated**

During the first months of the COVID-19 pandemic…

- **Filipino clinical psychologists : observing very specific symptoms being reported by their clients**

- **Develop an anxiety scale intended to pick up on symptoms beyond symptoms of general anxiety (e.g., DASS-Anxiety)**

Scale development

Generation of candidate items (529 items)

Reduction of items (175 items, then 21 items)

Expert review (17 items)

Pilot testing with focus group discussion

Final draft of scale

Validation of the scale

Validation study

- **Exploratory factor analysis :**
  - Could not obtain data on 4 items that referred to symptoms experienced outside the home
  - 11 items loaded into 2 factors (somatic and non-somatic); 2 items did not meet criteria for loading (.50 in factor, no loading of .15 in other factor)

- **Confirmatory factor analysis :**
  - Good fit with 2-factor model, each factor with high internal consistency

- **Good criterion validity :**
  - stronger correlation with GAD-7 than PHQ-9 and negative affect
  - Better predictor of GAD-7 & PHQ-9 than Fear of Covid Scale

Coronavirus Pandemic Anxiety Scale (CPAS-11)

- **Screening accuracy: maximum balance between sensitivity (83.6%) and specificity (81.5%) was achieved at the optimal CPAS-11 cutoff score of 15**
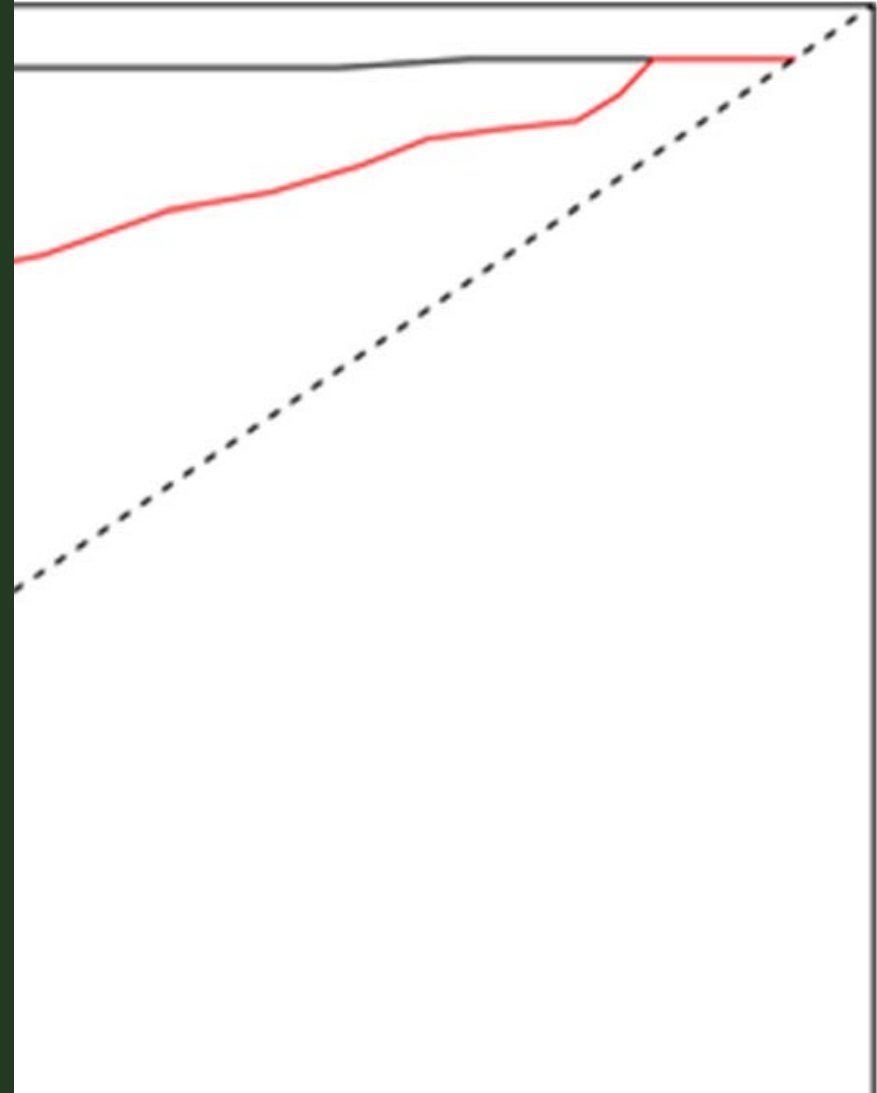
Comparison of Screening Measures of Anxiety

MEASURE OF ANXIETY	% SEVERE ANXIETY
CPAS-11 (Bernardo et al., 2020)	29.19%
GAD-7 (Bernardo & Mendoza, 2020)	13.84%
DASS-21 (Tee et al., 2020)	11.07%
DASS-21 Filipino translations	19.05%

*CPAS-11 may be screening anxiety symptoms that generalized measures of anxiety are not screening.

Free-access to scales for research purposes and for other non-commercial purposes

- Bernardo, A. B. I., Mendoza, N. B., Simon, P. D., Cunanan, A. L. P., Dizon, J. I. W. T., Tarroja, M. C. H., Balajadia-Alcala, M. A., & Saplala, J. E. G. (2020). Coronavirus Pandemic Anxiety Scale (CPAS-11): Development and initial validation. *Current Psychology*. https://doi.org/10.1007/s12144-020-01193-2

- Currently doing further validation studies, including validation of the CPAS-15.

- The different language translations of the DASS-21 will be available in the HopeLab@DLSU website after the validation studies are published.

Assessing mental health during the pandemic and beyond

- We have viable scales to screen for psychological symptoms in different linguistic groups

- Translations can be used in written or oral forms, in online forms even chatbots

- Screening is NOT diagnosis

- Screening can be a tool for mental health awareness (Tier 1) and towards efficient allocation of mental health services (Tier 2 & 3)

Assessing mental health during the pandemic and beyond

- **Need a system for screening for these symptoms**
  - **Universal screening might be difficult and ethically problematic**
  - **But vulnerable sectors might benefit from some form of universal screening (e.g., adolescents & young adults; high risk work sectors; displaced workers; displaced communities; disaster survivor communities)**
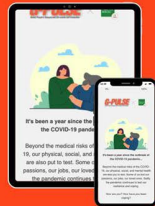
Project of
LifeRisks

#GPULSECOVID19 2.0

@LifeRisksPH

https://bit.ly/10minHealthSelfEvaluation

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Thank you for listening!