OLPD Graduate Program Fall 2019
Master's Degree Student Results

Within the OLPD Master's Degree Graduate Program Mental Health Survey there are five scales or instruments. These instruments measure and/or screen for depression, perception of stress, social isolation, perseverance related to long-term goals, intolerance of uncertainty and tolerance for ambiguity. A description of each instrument is given, followed by the results from the survey.

The Patient Health Questionnaire (PHQ-9) is a multipurpose instrument for screening, diagnosing, monitoring and measuring the severity of depression (*Kroenke K, Spitzer R, Williams W. The PHQ-9: Validity of a brief depression severity measure. JGIM, 2001, 16:606-616*). The intent of including the PHQ9 in this survey is to provide insight into the potential prevalence of depression among graduate students. In the context of this survey it is not being used as a diagnostic instrument.

The survey respondent is asked the following: Over the last 2 weeks, how often have you been bothered by any of the following problems? This is followed by nine items, examples are as follows:

Little interest or pleasure in doing things
Feeling down, depressed, or hopeless
Trouble falling or staying asleep, or sleeping too much

The response options are: not at all; several days; more than half the days and nearly every day. The options are assigned points from 0 to 3. The points when tallied ranged from 0 to 27.

Categorization of the scores appear within the following table.

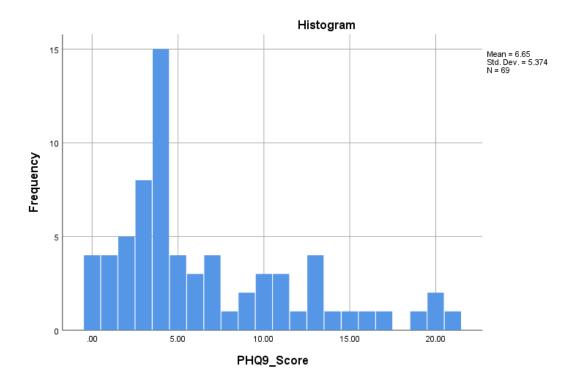| PHQ9 Score	Depression Severity
0-4	None to minimal
5-9	Mild
10-14	Moderate
15-19	Moderately severe
20-27	Severe

Survey results for PHQ9

Descriptive:
N=69
Mean=6.65 (sd=5.4)
Median=4.0
Range=0 to 21 (possible range: 0 to 27)

Frequency:

PHQ9 Category of Depression	Count	Percent
None to minimal	36	52.2
Mild	14	20.3
Moderate	12	17.4
Moderately severe	4	5.8
Severe	3	4.3

Histogram

Mean = 6.65
Std. Dev. = 5.374
N = 69

The **Perceived Stress Scale (PSS)** is a psychological instrument for measuring the perception of stress. (*Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. Journal of Health and Social Behavior, 24, 385-396*) The instrument measures the degree to which situations in one's life are appraised as stressful.

The survey respondent is instructed that the questions ask you about feelings and thoughts during the last month. And in each instance, indicate how often you felt or thought a certain way.

There are 10 questions, examples of these questions are:

In the past month, how often have you been upset because of something that happened unexpectedly?
In the past month, how often have you felt nervous or stressed?
In the past month, how often have you felt that things were going your way?

The response options are: never; almost never; sometimes; fairly often and very often. The options are assigned points from 0 to 4. Positively worded questions are reversed scored. The points when tallied ranged from 0 to 40. Higher scores indicated higher level of perceived stress.

Categorization of the scores appear within the following table.

Perceived Stress Scale (PSS) Score	Interpretative Categories for PSS
0-7	Much lower than average PSS
8-11	Slightly lower than average PSS
12-15	Average PSS
16-20	Slightly higher than average PSS
21-40	Much higher than average PSS

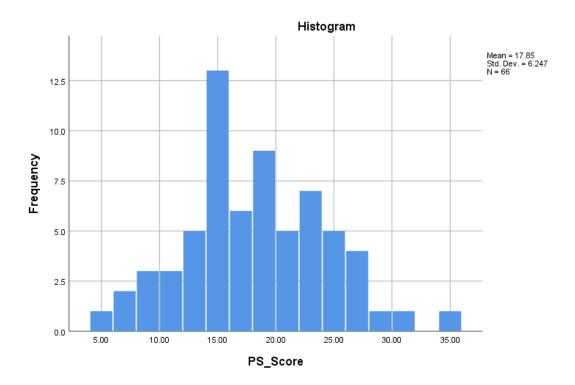**Survey results for Perceived Stress Scale (PSS)**

Descriptive:
N=66
Mean=17.84 (sd=6.2)
Median=17.5
Range=5 to 35 (possible range: 0 to 40)

Frequency:

Categories of PSS	Count	Percent
Much lower than average PSS	3	4.5
Slightly lower than average PSS	6	9.1
Average PSS	18	27.3
Slightly higher than average PSS	17	25.8
Much higher than average PSS	22	33.3

Histogram

Mean = 17.85
Std. Dev. = 6.247
N = 66

The three-Item **Loneliness Scale (SIS)** gauges general feelings of loneliness. Social relationships are fundamental to our emotional fulfillment, behavioral adjustment, and cognitive function. Disruption or absence of stable social relationships can significantly affect our mental and physical well-being. (*Hughes, M. E., Waite, L. J., Hawkley, L. C., & Cacioppo, J. T. (2004). A Short Scale for Measuring Loneliness in Large Surveys: Results From Two Population-Based Studies. Research on Aging, 26(6), 655–672. http://doi.org/10.1177/0164027504268574*)

The survey respondent reads the following: The next questions are about how you feel about different aspects of your life. There are three questions, the questions are:

First, how often do you feel that you lack companionship: Hardly ever, some of the time, or often?
How often do you feel left out: Hardly ever, some of the time, or often?
How often do you feel isolated from others?

The response options are: hardly ever; some of the time; often. The options are assigned points from 1 to 3. The points when tallied ranged from 3 to 9. Higher scores indicated higher level of loneliness.

Categorization of the scores appear within the following table.

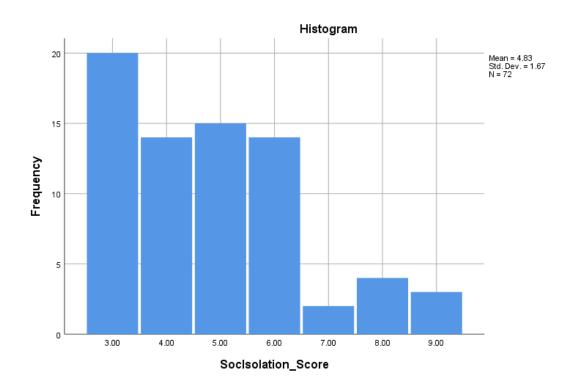| Social Isolation Scale (SIS) Score	Interpretative Categories for SIS
3-5	Less feelings of isolation
6	Middle of isolation scale
7-9	More feelings of isolation

Survey results for Social Isolation Scale (SIS)

Descriptive:
N=72
Mean=4.83(sd=1.7)
Median=5.0
Range=3 to 9 (Possible range: 3 to 9)

Frequency:

Categories of SIS	Count	Percent
Less feelings of isolation	49	68.1
Middle of isolation scale	14	19.4
More feelings of isolation	9	12.5

Histogram

Mean = 4.83
Std. Dev. = 1.67
N = 72

The **Grit Score** is a brief 8-item summary measure of the respondent's tendency to sustain interest in and effort toward very long-term goals (*Duckworth AL, Peterson C, Mathews MD and Kelly DR. (2007). Grit: Perseverance and passion for long-term goals. Journal of Personality and Social Psychology, 92(6), 1087-1101.*). On average students who would have a higher grit score are also more self-controlled, but the correlation between grit and self-control is not perfect and the relationship should be viewed cautiously.
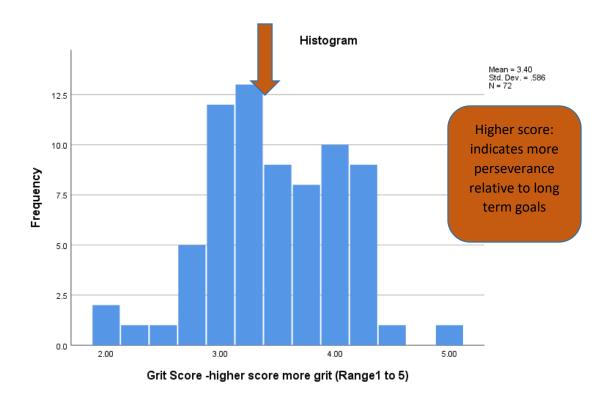
The survey respondent reads the following: Here are a number of statements that may or may not apply to you. For the most accurate score, when responding, think how you compare to most people –not just people you know well, but most people in the world. There are no right or wrong answers, so just answer honestly. Using the 1-5 scale, indicate your agreement with each item. The following are examples, of those eight items.

New ideas and projects sometimes distract me from previous ones
Setbacks don't discourage me
I am a hard worker

The response options are: very much like me, mostly like me, somewhat like me, not much like me and not like me at all. The options are assigned points from 1 to 5; half of the questions are reversed scored. The point totals are added and then divided by 8. Maximum score is 5 indicating extremely gritty and the lowest score is 1 (not gritty at all).

Survey results for Grit Score (GS)

Descriptive:
N=72
Mean=3.40 (sd=.59)
Median=3.37
Range=2.00 to 4.88 (Possible score 1 to 5)

Histogram

Mean = 3.40
Std. Dev. = .586
N = 72

Higher score: indicates more perseverance relative to long term goals

Grit Score -higher score more grit (Range1 to 5)

The **Intolerance of Uncertainty Scale –Short Form (IU)** is a 12-item measure. Intolerance of uncertainty is the respondent's tendency to consider the possibility of a negative event occurring unacceptable, regardless of the probability of occurrence. (*Carleton RN, Norton MAPJ, and Asmundson GJG*. (2006) Fearing the unknown: A short version of the Intolerance of Uncertainty Scale. Journal of Anxiety Disorder 21: 105-117). Intolerance of uncertainty may be a central construct in explaining worry and anxiety. (Ladouceur R, Dugas MJ, and Freeston MH. (1995) Intolerance of uncertainty in normal and excessive worry. In TD Borkovec & G Bultler (Chairs). Recent developments in research on worry and the treatment of generalized Anxiety Disorder. Symposium presented at the World Congress of behavioral and cognitive therapies, Copenhagen, Denmark).

The survey respondent reads the following: Please select the response that best corresponds to how much you agree with each statement. The following are examples, of those twelve items.

Unforeseen events upset me greatly
It frustrates me not having all the information I need
Uncertainty keeps me from living a full life

The response options are: Not at all characteristic of me, A little characteristic of me, Somewhat characteristic of me, Very characteristic of me and Entirely characteristic of me. The options are assigned points from 1 (not at all characteristic of me) to 5 (entirely characteristic of me). The Intolerance of Uncertainty (IU) has two sub-scales: 7 questions comprise a "prospective IU", measuring fear and anxiety in response to future events and 5 questions makeup the second sub-scale "inhibitory

IU", measuring the propensity for uncertainty to alter or inhibit action or experiences by the individual. Higher scores are indicators of less tolerance of uncertainty.

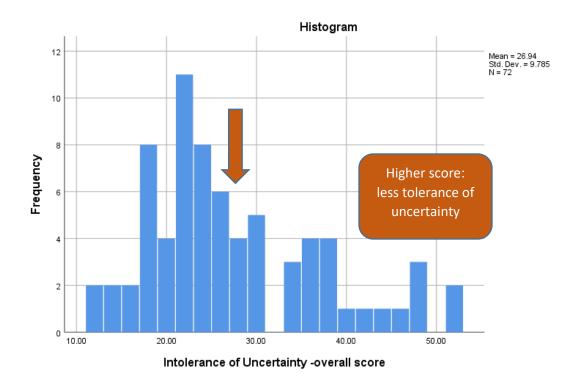**Survey results for Intolerance of Uncertainty -total (IU_total)**

Descriptive:
N=72
Mean=26.94 (sd=9.8)
Median=24.0
Range= 12 to 51 (Possible range: 12 to 60)

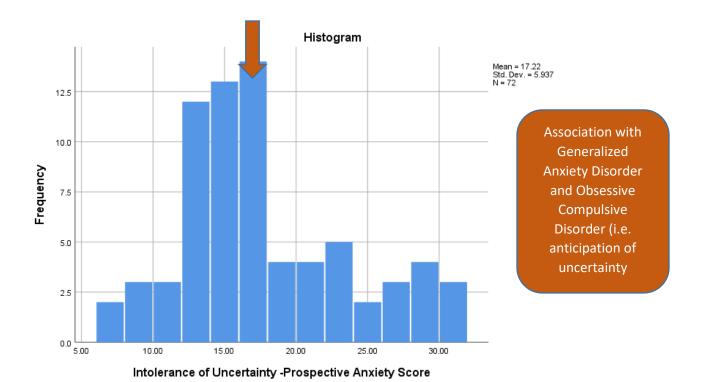**Survey results for Intolerance of Uncertainty -prospective (IU_prospective)**

Descriptive:
N=72
Mean=17.22 (sd=5.9)
Median=16.0
Range= 7 to 31 (Possible range: 7 to 35)

Histogram

Mean = 17.22
Std. Dev. = 5.937
N = 72

Frequency (y-axis)
Intolerance of Uncertainty -Prospective Anxiety Score (x-axis)

Association with Generalized Anxiety Disorder and Obsessive Compulsive Disorder (i.e. anticipation of uncertainty

Survey results for Intolerance of Uncertainty -inhibitory (IU_inhibitory)

Descriptive:
N=72
Mean=9.72 (sd=4.5)
Median=8.0
Range= 5 to 20 (Possible range: 5 to 25)

Histogram

Mean = 9.72
Std. Dev. = 4.46
N = 72

Association with panic disorder, SAD and depression (i.e. uncertainty produces inhibition)

Y-axis: Frequency
X-axis: Intolerance of Uncertainty -Inhibitory Anxiety Score

The **Ambiguity Tolerance-20** is a 20-item measure. Intolerance of ambiguity is viewed as the respondent's general tendency to perceive ambiguous material or situations as threatening. Whereas tolerance of ambiguity indicates that ambiguous situations are desirable, or a willingness to accept situations that could be interpreted with alternative viewpoints. (*MacDonald Jr, AP (1970). Revised Scale for Ambiguity Tolerance: Reliability and Validity. Psychological Reports 26; 791-798.*).

The survey respondent reads the following: Please do not spend too much time on the following items. There are no right or wrong answers and therefore your first response is important. The following are examples, of those twenty items.

A problem has little attraction for me if I don't think it has a solution
I am just a little uncomfortable with people unless I feel that I can understand their behavior
There's a right and a wrong way to do almost everything

The response options are: True or False. For twelve of the questions choosing to answer the question as "false" would result in a score of one while choosing "true" for that question would result in being a assigned a zero score for that item; the other eight questions were reverse scored. A higher total score indicates a higher level of tolerance for ambiguity.
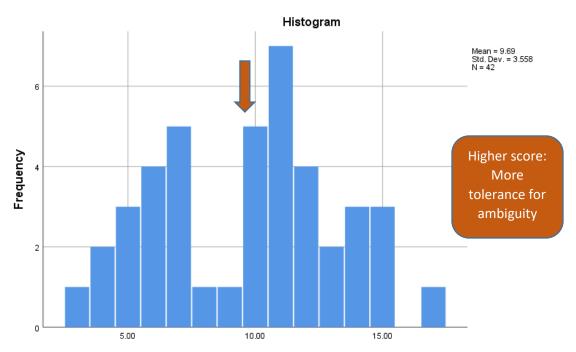
Survey results for Tolerance of Ambiguity (TA-20)

Descriptive:
N=42
Mean=9.69 (sd=3.6)
Median=10.0
Range= 3 to 17 (Possible range: 0 to 20)

Higher score: More tolerance for ambiguity