



A Comparison of Two Self-rating Depression Scales: Implications for Client Screening and Outcome Measurement in Recreational Therapy

Abstract. Depression is one of the most diagnosed mental health conditions worldwide (World Health Organization, 2018). The multifaceted nature of the disorder is determined by the various symptoms, which are grouped the by Diagnostic and Statistical Manual of Mental Disorders (DSM), as Major Depressive Disorder. For clinicians to select and administer effective treatment to address the disorder, proper diagnostic assessment is essential. A preferred manner of achieving this is through the use of standardized, psychometrically sound instruments. In this retrospective study, a dataset of 59 individuals randomly assigned into intervention (n=30) or control (n=29) groups were assessed using the Patient Health Questionnaire 9 (PHQ-9) and the Quick Inventory of Depressive Symptomatology (QIDS), both screening tools for depression based on the DSM-IV. After a one-month intervention, both groups were reassessed using the same instruments. A psychometric analysis and comparison of the two instruments at baseline and post-intervention will be conducted for both groups to determine similarities and differences between the two instruments. Implications for client screening and its impact on treatment in reference to the two instruments will be discussed.

Background. The World Health Organization (2018) reports that depression affects more than 300 million people and is the leading cause of disability worldwide. Additionally, depression is linked to an estimated 800,000 deaths annually due to suicide. It is further estimated that only half of the 300,000 people with depression will receive treatment for the condition and in disadvantaged environments, less than 10% receive treatment (World Health Organization, 2018). In the United States alone, 17.3 million people experienced depression in the last year, 11 million of them were adults over 18 (National Institute of Mental Health, 2019). Of the American adults with major depression, 64% of them reported severe impairment during the depressive episode (National Institute of Mental Health, 2019). Proper assessment of depression is an essential component of the treatment process, allowing clinicians to make sound decisions regarding treatment options. Due to the prevalence of depression and its associated costs, increasing the utilization of psychometrically sound assessments for intake screening and treatment evaluation with improve both the services provided to clients as well as client outcomes.

Purpose of the Study. Due to the prevalence of depression, Recreational Therapists will need to have an understanding of assessment techniques and tools in order to create individualized treatment plans, as mandated the professional Standards of Practice (American Therapeutic Recreation Association, 2015). Essential to the incorporation of assessment data is the utilization of accurate assessment procedures. In order to facilitate this, the QIDS will be compared to a previously analyzed depression intake and outcome data measured by the PHQ-9, which utilized the same sample, timeframe, and intervention prescription.

Methods. This analysis utilizes data from a previous reported randomized controlled study Russoniello, Fish, and O’Brien (2013). Groups were randomly assigned into control (n=29) and experimental groups (n=30). All participants were screened using the PHQ-9 and the QIDS prior to engaging in any research activity. Participants in the control group were instructed to browse the National Institute of Mental Health’s webpage on depression for 30 minutes. Conversely, the experimental group was given the option of selecting which casual video and were instructed to play their game of choice for 30 minutes. Participants in the experimental group were instructed to play their chosen game for at least 30 minutes, three times per week with more than 24 hours between each playing session for one month. After one month, participants from both groups were reassessed using the PHQ-9 and QIDS.

Results. The archived data from the aforementioned study will be analyzed using an “Exempt” status from the East Carolina University Institutional Review Board. Descriptive statistics will be analyzed to compare the level of similarity between the experimental treatment versus control groups. A comparison of total scores on each instrument will be compared by correlating the two instruments to each other at baseline and post-intervention, as well as comparing the baseline and post-intervention scores using the same instrument. A factor analysis will be conducted on both instruments by analyzing each question(s) which measuring the corresponding DSM-IV symptom. Researchers will analyze and discuss the similarities and differences between the two instruments in terms of the measured symptoms at both baseline and post-intervention. By using this method, the researchers will be able to determine if factors are comparably assessed by both instruments at the same point in time. This analysis will also be used to determine which symptoms had significant changes on each instrument and if the two instruments measured comparable changes.

DSM Criteria for Depression.

1. Depressed mood most of the day.
2. Diminished interest or pleasure in all or most activities.
3. Significant unintentional weight loss or gain.
4. Insomnia or sleeping too much.
5. Agitation or psychomotor retardation noticed by others.
6. Fatigue or loss of energy.
7. Feelings of worthlessness or excessive guilt.
8. Diminished ability to think or concentrate, or indecisiveness.
9. Recurrent thoughts of death.

To meet diagnostic criteria for MDD, at least five of the nine symptoms listed must be present and have a clinically significant impact on functioning. Additionally, loss of pleasure or interest in life activity must be present (American Psychiatric Association, 2000).

Instruments. Both the PHQ-9 and the QIDS are based on the DSM criteria above, however, the PHQ-9 only has nine questions, whereas the QIDS has 16. A review of literature shows that both instruments have appropriate reliability and validity when studied separately.

References.

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PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

NAME: _____ DATE: _____

Over the last 2 weeks, how often have you been bothered by any of the following problems? (use “✓” to indicate your answer)

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite —being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3

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(Healthcare professional: For interpretation of TOTAL, please refer to accompanying scoring card).

TOTAL: _____

10. If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all	_____
Somewhat difficult	_____
Very difficult	_____
Extremely difficult	_____

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Figure 1: <https://gwep.usc.edu/patient-health-questionnaire-phq-9/>

QIDS Instrument

CHECK THE ONE RESPONSE TO EACH ITEM THAT BEST DESCRIBES YOU FOR THE PAST SEVEN DAYS.

During the past seven days...

1. Falling Asleep:

- ☐ 0 I never take longer than 30 minutes to fall asleep.
- ☐ 1 I take at least 30 minutes to fall asleep, less than half the time.
- ☐ 2 I take at least 30 minutes to fall asleep, more than half the time.
- ☐ 3 I take more than 60 minutes to fall asleep, more than half the time.

2. Sleep During the Night

- ☐ 0 I do not wake up at night.
- ☐ 1 I have a restless, light sleep with a few brief awakenings each night.
- ☐ 2 I wake up at least once a night, but I go back to sleep easily.
- ☐ 3 I awaken more than once a night and stay awake for 20 minutes or more, more than half the time.

3. Waking Up Too Early:

- ☐ 0 Most of the time, I awaken no more than 30 minutes before I need to get up.
- ☐ 1 More than half the time, I awaken more than 30 minutes before I need to get up.
- ☐ 2 I almost always awaken at least one hour or so before I need to, but I go back to sleep eventually.
- ☐ 3 I awaken at least one hour before I need to, and can't go back to sleep.

4. Sleeping Too Much:

- ☐ 0 I sleep no longer than 7-8 hours/night, without napping during the day.
- ☐ 1 I sleep no longer than 10 hours in a 24-hour period including naps.
- ☐ 2 I sleep no longer than 12 hours in a 24-hour period including naps.
- ☐ 3 I sleep longer than 12 hours in a 24-hour period including naps.

During the past seven days...

10. Concentration / Decision Making:

- ☐ 0 There is no change in my usual capacity to concentrate or make decisions.
- ☐ 1 I occasionally feel indecisive or find that my attention wanders.
- ☐ 2 Most of the time, I struggle to focus my attention or to make decisions.
- ☐ 3 I cannot concentrate well enough to read or cannot make even minor decisions.

11. View of Myself:

- ☐ 0 I see myself as equally worthwhile and deserving as other people.
- ☐ 1 I am more self-blaming than usual.
- ☐ 2 I largely believe that I cause problems for others.
- ☐ 3 I think almost constantly about major and minor defects in myself.

12. Thoughts of Death or Suicide:

- ☐ 0 I do not think of suicide or death.
- ☐ 1 I feel that life is empty or wonder if it's worth living.
- ☐ 2 I think of suicide or death several times a week for several minutes.
- ☐ 3 I think of suicide or death several times a day in some detail, or I have made specific plans for suicide or have actually tried to take my life.

13. General Interest

- ☐ 0 There is no change from usual in how interested I am in other people or activities.
- ☐ 1 I notice that I am less interested in people or activities.
- ☐ 2 I find I have interest in only one or two of my formerly pursued activities.
- ☐ 3 I have virtually no interest in formerly pursued activities.

During the past seven days...

5. Feeling Sad:

- ☐ 0 I do not feel sad.
- ☐ 1 I feel sad less than half the time.
- ☐ 2 I feel sad more than half the time.
- ☐ 3 I feel sad nearly all of the time.

Please complete either 6 or 7 (not both)

6. Decreased Appetite:

- ☐ 0 There is no change in my usual appetite.
- ☐ 1 I eat somewhat less often or lesser amounts of food than usual.
- ☐ 2 I eat much less than usual and only with personal effort.
- ☐ 3 I rarely eat within a 24-hour period, and only with extreme personal effort or when others persuade me to eat.

- OR -

7. Increased Appetite:

- ☐ 0 There is no change from my usual appetite.
- ☐ 1 I feel a need to eat more frequently than usual.
- ☐ 2 I regularly eat more often and/or greater amounts of food than usual.
- ☐ 3 I feel driven to overeat both at mealtime and between meals.

Please complete either 8 or 9 (not both)

8. Decreased Weight (Within the Last Two Weeks):

- ☐ 0 I have not had a change in my weight.
- ☐ 1 I feel as if I have had a slight weight loss.
- ☐ 2 I have lost 2 pounds or more.
- ☐ 3 I have lost 5 pounds or more.

- OR -

9. Increased Weight (Within the Last Two Weeks):

- ☐ 0 I have not had a change in my weight.
- ☐ 1 I feel as if I have had a slight weight gain.
- ☐ 2 I have gained 2 pounds or more.
- ☐ 3 I have gained 5 pounds or more.

During the past seven days...

14. Energy Level:

- ☐ 0 There is no change in my usual level of energy.
- ☐ 1 I get tired more easily than usual.
- ☐ 2 I have to make a big effort to start or finish my usual daily activities (for example, shopping, homework, cooking, or going to work).
- ☐ 3 I really cannot carry out most of my usual daily activities because I just don't have the energy.

15. Feeling Slowed Down:

- ☐ 0 I think, speak, and move at my usual rate of speed.
- ☐ 1 I find that my thinking is slowed down or my voice sounds dull or flat.
- ☐ 2 It takes me several seconds to respond to most questions and I'm sure my thinking is slowed.
- ☐ 3 I am often unable to respond to questions without extreme effort.

16. Feeling Restless:

- ☐ 0 I do not feel restless.
- ☐ 1 I'm often fidgety, wringing my hands, or need to shift how I am sitting.
- ☐ 2 I have impulses to move about and am quite restless.
- ☐ 3 At times, I am unable to stay seated and need to pace around.

Figure 2: <http://narr.bmap.ucla.edu/docs/QIDS-SREnglish16item.pdf>

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