For the concurrent NA, “Stress, Anxiety, & Worry” showed the strongest betweenness (2.37) and strength (1.37), indicating it was most often on the shortest path between other variables and also had the greatest number of connections (Opsahl, Agneessens, & Skvoretz, 2010).

On the lead-lag NA, “FearTheWorst&ChestPain” had the greatest betweenness (2.22), in-degree (largest amount of incoming directed paths; 1.67), and out-degree (largest amount of outgoing paths; 1.58).

A network analysis (NA) approach to psychopathology considers interrelations between the presenting symptoms to be the primary focus (McNally, 2016). In NA, the investigator can assess the relations between variables at the same time point (concurrent) or over time (lead-lag). Although the NA approach has become popular at the interindividual level, there has been a paucity of research using intraindividual network analysis to tailor treatment (e.g., David et al., 2017; Thornton, 2019).

The current study compared the intraindividual lead-lag and concurrent bivariate NA of the same person to create an individualized treatment plan targeting the most influential nodes.

Method

Introduction

- A network analysis (NA) approach to psychopathology considers interrelations between the presenting symptoms to be the primary focus (McNally, 2016).
- In NA, the investigator can assess the relations between variables at the same time point (concurrent) or over time (lead-lag).
- Although the NA approach has become popular at the interindividual level, there has been a paucity of research using intraindividual network analysis to tailor treatment (e.g., David et al., 2017; Thornton, 2019).
- The current study compared the intraindividual lead-lag and concurrent bivariate NA of the same person to create an individualized treatment plan targeting the most influential nodes.

Participant

- The participant was a 26-year-old woman diagnosed with GAD and OCPD via semi-structured interviews.

Procedure

- An individualized questionnaire comprised of highly relevant items was administered three-times daily for approximately one month (i.e., 83 observations) through Qualtrics using ecological momentary assessment.
- Data was first detrended at the item-level, and then a correlation matrix of items was used to create the concurrent network, and a correlation matrix of concurrent (i.e., time t) and lagged (i.e., t – 1) variables was used to create the lead-lag network.

Results

- For the concurrent NA, “Stress, Anxiety, & Worry” showed the strongest betweenness (2.37) and strength (1.37), indicating it was most often on the shortest path between other variables and also had the greatest number of connections (Opsahl, Agneessens, & Skvoretz, 2010).
- On the lead-lag NA, “FearTheWorst&ChestPain” had the greatest betweenness (2.22), in-degree (largest amount of incoming directed paths; 1.67), and out-degree (largest amount of outgoing paths; 1.58).

Conclusion

- Given this information, treatment may focus on cognitions associated with the worst happening (e.g., decatastrophizing) and reduction of physiological arousal (e.g., diaphragmatic breathing; Clark & Beck, 2010).
- Although both networks provided information used in treatment planning, the lead-lag network provided increased specificity with respect to dynamic information (e.g., incoming and outgoing).
- This study demonstrates how these two intraindividual NAs provide information useful for personalized treatment planning and future research may assess effectiveness.