



ELSEVIER

Contents lists available at ScienceDirect

Psychiatry Research

journal homepage: www.elsevier.com/locate/psychres

Relationships between cyberchondria and obsessive-compulsive symptom dimensions

Aaron M. Norr, Mary E. Oglesby, Amanda M. Raines, Richard J. Macatee, Nicholas P. Allan, Norman B. Schmidt*

Department of Psychology, Florida State University Tallahassee, FL, USA

ARTICLE INFO

Article history:

Received 26 February 2015

Received in revised form

28 July 2015

Accepted 22 September 2015

Keywords:

Cyberchondria

Online medical information

Obsessive-compulsive

Health anxiety

ABSTRACT

Researchers have recently begun to investigate a vicious cycle of escalating physical health concerns and online medical information seeking coined “cyberchondria”. Research has shown that cyberchondria is strongly associated with health anxiety (HA), but there is a dearth of work investigating the potential relationships between cyberchondria and other anxiety-related pathologies. One such condition is obsessive-compulsive disorder (OCD), which could theoretically be related to cyberchondria given the physical health relevant focus of certain types of OC symptoms. The current study sought to investigate the potential relationship between cyberchondria OCD across OC symptom dimensions. Community participants ($N=468$) were recruited via online crowdsourcing to complete a battery of self-report questionnaires including cyberchondria and OC measures. Structural equation modeling revealed significant unique associations between both contamination/washing and responsibility for harm/checking symptoms, and cyberchondria, such that greater cyberchondria was associated with greater OC symptoms after controlling for HA and trait negative affect. These results suggest that similar to proposed models of cyberchondria and HA, cyberchondria could potentially play a role in the development/maintenance of two dimensions of OC symptoms, or vice versa. Future work will need to determine the causal nature of these relationships or whether they are simply co-occurring phenomena.

© 2015 Elsevier Ireland Ltd. All rights reserved.

1. Introduction

The term “cyberchondria” has been used to describe a dysfunctional positive feedback loop of escalating physical symptom-related concerns fueled by increases in online medical information seeking (Stone and Sharpe, 2003; Ryan and Wilson, 2008; White and Horvitz, 2009). Current theories suggest that individuals who seek online health-related information either experience a decrease or increase in anxiety in response to these searches (see Starcevic and Berle, 2013, for a review). In fact, studies have demonstrated that after reviewing health information online some individuals feel more empowered about their personal health (Lemire et al., 2008), whereas other individuals feel frightened and overwhelmed (Lauckner and Hsieh, 2013). Those who experience an increase in anxiety following online medical information seeking may avoid further anxiety-provoking medical information or attempt to seek reassurance through continued medical information searches. It is those individuals that continue to seek

information through repeated online searches for health-related information who may be at risk for developing escalating health anxiety via a vicious cycle of failed anxiety-reduction efforts termed “cyberchondria” (Starcevic and Berle, 2013). Indeed, empirical research has supported this conceptualization through robust associations between frequency of online medical information searches and health anxiety (HA; Baumgartner and Hartmann, 2011; Muse, et al., 2012; Fergus, 2013).

Experimental work has also shown that exposure to medical information online can increase anxiety. Singh and Brown (2015) conducted a study where participants were instructed to spend 15 min searching online for information pertaining to personally relevant physical health symptoms. Results revealed that participants reported a significant increase in anxiety immediately following search query escalations. Another study found that after a 20 min website review period, participants who viewed medical information websites had elevated levels of anxiety sensitivity, a well-researched risk factor for the development of anxiety pathology, compared to those who saw general health and wellness websites (Norr et al., 2014).

Although excessive online medical information seeking is a core feature of cyberchondria, cyberchondria is conceptualized as a multifaceted process including: excessive online searches

* Correspondence to: Department of Psychology, Florida State University, 1107 W. Call St., Tallahassee, FL 32306-4301, USA.

E-mail address: Schmidt@psy.fsu.edu (N.B. Schmidt).

<http://dx.doi.org/10.1016/j.psychres.2015.09.034>

0165-1781/© 2015 Elsevier Ireland Ltd. All rights reserved.

(excessiveness), behavioral interference with other activities due to online searches (compulsiveness), significant anxiety/distress associated with online searches (distress), and reassurance seeking from medical health care professionals due to information uncovered during online searches (reassurance; Starcevic and Berle, 2013; Fergus, 2014; McElroy and Shevlin, 2014). To capture these various dimensions of cyberchondria, McElroy and Shevlin (2014) created the Cyberchondria Severity Scale (CSS). Positive associations between the CSS and HA (Fergus, 2014; McElroy and Shevlin, 2014; Norr et al., 2015b) further support a robust relationship between cyberchondria and HA.

Despite mounting evidence of the strong relations between cyberchondria and problematic HA, potential relationships between cyberchondria and other anxiety-related conditions have yet to be fully investigated. One such condition that could be related to cyberchondria is obsessive-compulsive disorder (OCD). OCD is a heterogeneous condition characterized by recurrent and persistent thoughts and/or images, (i.e., obsessions) that bring about subsequent distress, as well as repetitive behaviors (i.e., compulsions) aimed at eliminating or reducing the associated anxiety (American Psychiatric Association, 2013). OCD is estimated to affect approximately 2–3% of the population (American Psychiatric Association, 2013) and is associated with decreased quantity of life and significant impairment in social, occupational, and family domains (Torres et al., 2006).

Whereas the specific content matter of obsessions and compulsions can vary from person to person, research on the structure of OCD has provided consistent evidence for several distinct symptom dimensions that appear to be relatively constant over time (Stewart et al., 2008). These include: (1) contamination obsessions and washing compulsions, (2) responsibility for harm obsessions and checking compulsions, (3) symmetry obsessions and ordering compulsions, and (4) unacceptable thoughts (e.g., sexual, religious, or aggressive in nature) and neutralizing compulsions (e.g., thought suppression; Abramowitz et al., 2010). Prior research has demonstrated that these various symptom dimensions are associated with distinct genetic features, patterns of comorbidity, and treatment response (Mataix-Cols et al., 2005) suggesting that there is some utility in examining the associations between exogenous constructs and symptom clusters of OCD.

To our knowledge, only one study to date has empirically examined the relationship between OC symptoms and cyberchondria (Fergus, 2014). Fergus (2014) found cyberchondria to be significantly positively associated with OC symptoms demonstrating that these phenomena may co-occur. In fact, Fergus (2014) found significant positive correlations between OC symptoms and all of the CSS dimensions. Despite these initial findings, the specific nature of the relationship between cyberchondria and OC symptom dimensions is yet to be determined, as Fergus (2014) examined the relationship between cyberchondria and overall OC symptoms. Two OC symptom clusters that may be of particular relevance are the contamination/washing and the responsibility for harm/checking symptom domains. Given the strong link between cyberchondria and HA, it is possible that repeatedly searching for medical information online in an attempt to gain reassurance that nothing is physically wrong could increase obsessions regarding physical health, leading to increases in desires to wash in an effort to minimize contamination and prevent future illness, and/or that increases in physical health related obsessions could lead to increases in online searches. Likewise, although speculative, if individuals with cyberchondria believe that checking medical information online will help reduce the likelihood of catastrophic illness, it is possible that there would also be an association between cyberchondria and the responsibility for harm/checking domain, as medical information seeking, per se, could be seen as an attempt to prevent future illness.

The primary aim of the current study was to assess the unique relationships between OC symptom clusters and cyberchondria to further elucidate the nature of the cyberchondria and OC symptom relations discovered by Fergus (2014). We predicted that responsibility for harm/checking and contamination/washing OC symptoms would both be uniquely positively related to all of the cyberchondria dimensions, consistent with Fergus (2014), whereas symmetry/ordering symptoms and unacceptable thoughts would be unrelated to cyberchondria. Furthermore, we hypothesized that the proposed relationships would remain after covarying for HA and trait negative affect.

2. Methods

2.1. Participants

Participants consisted of 468 individuals recruited from an online crowdsourcing marketplace. The sample was primarily female (71.6%) with ages ranging from 18 to 72 years ($M=35.44$, $SD=12.54$). The sample was primarily Caucasian (85.5%), with 7.7% African American, 4.1% Asian, 1.1% American Indian or Alaskan, and 1.7% other (e.g., biracial). Additionally, 5.8% of the sample identified as Hispanic or Latino. Regarding educational status, the majority of the sample completed some college (37.4%), 34.4% obtained a 4-year degree, 11.5% completed high school or the equivalent, 12.0% obtained a graduate degree, 3.6% completed a trade or technical school, and 1.1% completed some high school. Previously established cut-offs were used to identify individuals with elevated levels of obsessive-compulsive symptoms (cut-off: 21 on the DOCS; Abramowitz et al., 2010) and health anxiety (cut-off: 27 on the SHA; Abramowitz et al., 2007; Alberts et al., 2013) as compared to other anxiety populations. In the current sample 96 individuals reported elevated levels of OC symptoms and 70 reported elevated levels of health anxiety.

2.2. Procedure

Individuals were recruited through Amazon's Mechanical Turk (MTurk) to complete an online questionnaire battery assessing various risk factors associated with anxiety and depression. To be eligible for inclusion participants had to be living in the United States, 18 years of age or older, and demonstrate high quality work on previous MTurk tasks as indicated by a Human Intelligence Task rating of 90% or greater. In addition to these criteria, two validity check items were included in the survey to check for random responding (e.g., "Are you reading this questionnaire"). Out of the 526 individuals who completed the survey, 58 individuals answered at least one of the validity check items incorrectly and were dropped from all analyses; resulting in the final sample of 468. The online survey took approximately one hour to complete and individuals were paid \$1.00 for their participation. The university's institutional review board approved all procedures and electronic informed consent was obtained from all participants prior to data collection. It should be noted that data collected through MTurk is diverse and high in quality (Buhrmester et al., 2011; Paolacci and Chandler, 2014).

2.3. Measures

2.3.1. Cyberchondria Severity Scale (CSS; McElroy and Shevlin, 2014)

The CSS is a 33-item self-report questionnaire assessing anxiety associated with online medical information seeking. Individuals were asked to read various statements and rate the degree to which the statement typically applied to them on a 5-point Likert-type scale ranging from 1 (*Never*) to 5 (*Always*). In addition to a

Download English Version:

<https://daneshyari.com/en/article/10303612>

Download Persian Version:

<https://daneshyari.com/article/10303612>

[Daneshyari.com](https://daneshyari.com)