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"Distinguishing Cyberchondria from Adaptive Online Health Research: Clinical and Rehabilitative Advancements."

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Abstract

The use of new technologies within healthcare practices is constantly growing. While these innovations represent clear progress, facilitating and improving care, in some cases they are a concern. The autonomous use by patients of technologies that can answer clinical questions is a source of apprehension. In this sense, cyberchondria represents a problematic pattern of behavior through which subjects seek information related to existing or plausible medical conditions. This is done in the absence of scientific training that can discriminate against the information received. Such behavior consistently has a negative impact on the clinical and rehabilitation pathways. This phenomenon is attracting increasing attention, yet clear definitions and distinctions are needed. Apart from a clear definition of cyberchondria, it should be distinguished from adaptive online health research. This paper aims to produce clear definitions, to relate cyberchondria with health anxiety and other related phenomena, as well as to produce a representation of current etiological theories and future clinical and rehabilitative implications. A better understanding and analysis of the state of the art would in fact produce improvement on clinical activities and on the classification of phenomena.

Keywords: Clinical Psychology; Cognitive rehabilitation; Cyberchondria; Diagnosis; Health anxiety; Psychopathology.

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1. Cyberchondria

'Cyberchondria' refers to a problematic pattern of behaviour wherein individuals repeatedly seek medical information online in a manner that culminates in increased anxiety and distress regarding their medical condition (Starcevic et al., 2020; Zheng et al., 2021). Originally coined in a media commentary in the 1990s on the rising public concern of individuals misdiagnosing themselves via the internet (Starcevic & Berle, 2013), this construct is etymologically derived from 'cyber' and 'hypochondriasis,' capturing the notion of anxiety regarding one's health in the context of seeking reassurance via information on the internet. Empirical literature is increasingly extending its focus towards the psychological basis of cyberchondria and the extent to which this phenomenon is distinct from other mental health difficulties, such as health anxiety. In light of this, given the technological means that drive the development of this problematic pattern, cognitive rehabilitation interventions must remain linked to the emergence of scientific evidence. Given the ambiguity in the literature, clear definitions and distinctions are needed.

This paper will begin by outlining cyberchondria and its relevance to health anxiety. The distinction between adaptive and maladaptive online health research will then be outlined, followed by consideration of how the definition of cyberchondria could be expanded to include broader systemic and cultural dynamics. Lastly, this article concludes with a discussion of theoretical and clinical implications.

2. Health Anxiety

Health anxiety refers to extensive worry and distress regarding having or developing a medical condition and is typically accompanied by regular checking and seeking reassurance that one is healthy (Lebel et al., 2020). Contemporary explanations of cyberchondria implicitly draw on cognitive-behavioural models of health anxiety (Salkovskis et al., 2003; Warwick & Salkovskis, 1990), which posit that individuals interpret benign bodily sensations (e.g., headaches) as signs of serious illness and engage in safety-seeking behaviours (such as excessive symptom monitoring, checking and reassurance) aiming to reduce their anxiety. These behaviours may inadvertently maintain or worsen both anxiety and physical sensations.

Two related, but distinct, mechanisms have been put forward to account for the maintenance of health anxiety (Blakey & Abramowitz, 2016). First, it has been argued that threat-based interpretations of ambiguous bodily sensations are positively reinforced when individuals encounter information which seems to confirm the possibility of serious illness. For example, this may include seemingly confirmatory information from an external source, such as a doctor or the internet, or through resolution of the 'threatening' bodily sensation following engagement in safety-seeking behaviours. Second, it has been argued that safety-seeking behaviours are negatively reinforced, as their enactment culminates in a sense of relief that serious illness has been avoided.

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In structural terms, health anxiety should be declined to different clinical realities. In fact, reality testing represents the ability to apply critical judgement distinguishing among perceptions, imagery and fantasy. When absent due to neurocognitive conditions, anosognosia denies the possibility to link deficits to the disease (Mograbi & Morris, 2018). When related to psychosis, absence of insight and related disavowal of symptomatology characterise behaviour (McCormack et al., 2014). These two conditions, both in terms of neurocognitive disorders and expressions of the psychotic spectrum, represent severe source of maladjustment. In particular, the lack of reality testing and its consequences prevent the patient from realising a possible difference between thought and evidence. The absence of awareness of pathology also produces a form of refuse of verification. As known from a clinical perspective, in fact, absolute subjective certainty, the impermeability of the contents to evidence and verification, incontrovertibility and incorrigibility characterize these forms of symptomatic presentation.

If maintained but influenced (neurosis), minor ego functions alterations mediate the relationship with inner and external phenomena, finally influencing decision-making and actions (Kellerman & Burry, 2007; Rimvall et al., 2019). Thus, general psychological functioning of subjects should be considered (Jamalamadaka et al., 2020), including clear distinctions between clinical states and personality issues (Kim & Lee, 2017; Skjernov et al., 2020). Psychological functioning affecting subjects' health status and quality of life represents a prosperous field of research (Caputo et al., 2022; Di Giuseppe, 2024; Jiakponna et al., 2024). For these reasons, cognitive interventions useful to reduce the maladjustment produced by cyberchondria must address issues related to the altered psychological functioning of subjects and their mechanisms. Clarity and evidence produced by high-level scientific work represent the secure basis for future diagnostic and rehabilitative contributions.

3. Cyberchondria and Health Anxiety

At present, it is unclear whether cyberchondria and health anxiety are underpinned by similar cognitive-behavioural mechanisms. This is partially attributable to the absence of a formalised definition of cyberchondria. While the etymological root of 'hypochondriasis' makes reference to similar cognitive underpinnings as health anxiety (i.e., persistent illness fears consequential to catastrophic misinterpretations of bodily sensations; Warwick & Salkovskis, 1990), cyberchondria is typically regarded as being more concerned with its behavioural manifestation (i.e., seeking medical information online).

Defining a condition by its consequences inherently introduces conceptual ambiguity (Myles, 2021), as it is entirely possible that several psychological processes may culminate in identical behavioural manifestations and/or that one psychological process may culminate in multiple behavioural manifestations (Myles & Johnson, 2023). Indeed, it is equally possible that seeking medical information online may represent a causal factor in the development of cyberchondria, a factor maintaining

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cyberchondria and/or a correlated, yet secondary, consequence of some other condition (e.g., health anxiety; McMullan et al., 2019).

Despite this lack of conceptual clarity, a growing body of research has attempted to operationalise cyberchondria (Starcevic et al., 2020). This has largely been done through the development of psychometric tools, such as the Cyberchondria Severity Scale (CSS; McElroy & Shevlin, 2014) and Short Cyberchondria Scale (SCS; Jokić-Begić et al., 2019). Items typically capture the cognitive and behavioural dimensions of health anxiety, worded to the contexts of online health research. For example, the CSS comprises five subscales, including 'Compulsion' (difficulty controlling or stopping health-related searches), 'Distress' (emotional upset related to searching), 'Excessiveness' (disproportionate effort and time searching for resources), 'Reassurance Seeking' (searching aiming to reduce uncertainty or disconfirm suspicions of catastrophic threat) and 'Mistrust of Medical Professionals' (preference of online information over healthcare providers).

However, these tools are not without their own theoretical assumptions regarding the psychological processes underpinning cyberchondria. Accordingly, research examining the causal bases of cyberchondria risks engaging in circular reasoning and arriving at tautological conclusions. In other words, they may only offer support for the theoretical models that are already built into the design of the measures themselves, and evidence derived from these tools may appear to confirm specific psychological processes, but perhaps only as the measures are inherently constructed to highlight them. For example, these tools typically portray cyberchondria as merely a digital manifestation of health anxiety, rather than a construct with distinct underlying mechanisms (Menon et al., 2020). This assumption, which remains to be examined, may constrain inquiry into the unique factors influencing cyberchondria, such as systemic and cultural trends in internet culture, algorithmic information delivery (tailored content based on previous activity) and exposure to misinformation (Shafiq, 2024). Serious risks emerge since cognitive patterns and lack of knowledge which often guide subjects in their search and lead to groundless forms of certainty, must be taken into account in cognitive intervention.

4. Cyberchondria and Online Health Research

To advance conceptual clarity, it would be prudent to distinguish cyberchondria from otherwise 'healthy' online health information-seeking, commonly termed 'online health research' (OHR), 'symptom googling' or, colloquially, consulting Dr Google (Brown et al., 2020; McMullan et al., 2019). While the former refers to a clinical phenomenon, the latter may serve a range of psychological functions that are not necessarily maladaptive.

The broader act of searching for health information online is widespread and typically a benign behaviour (Brown et al., 2020; Lagoe & Atkin, 2015; Morahan-Martin, 2004). A significant proportion of

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people use the internet as their first source of information about their own health, either prior to or instead of consulting a healthcare provider (Maloney-Krichmar & Preece, 2005). Online health research can serve several normative functions, ranging from practical information-gathering and curiosity-driven exploration to preparatory research prior to medical appointments. Accordingly, OHR is not inherently pathological, nor does it always result in anxiety amplification.

Nevertheless, emerging literature suggests symptom googling can culminate in maladaptive anxiety (McMullan et al., 2019), suggesting the clinical relevance of OHR depends on the psychological function it serves. Indeed, health anxiety has increased in prevalence over the last thirty years (Kosic et al., 2020), which is perhaps unsurprising given the increasing availability of the internet (Bailey, 2024).

The availability and accessibility of potentially inaccurate, ambiguous, alarmist or contradictory health-related information, publicity of global health threats (e.g., pandemics or rare diseases; Casula et al., 2025), public health campaigns and health-related social influencers may produce or activate health-anxious beliefs. Moreover, the availability of easily accessible health-related information (e.g., via search engines, symptom checkers and online medical communities) may engender or exacerbate health-anxious beliefs. Thus, maladaptive OHR (i.e., cyberchondria) may have contributed to a greater frequency of health anxiety diagnoses. Therefore, rigorous processes to highlight the variables at stake are needed. Rehabilitation processes based on reliable data and evidence-based research processes are essential.

5. The Function of Online Health Research in Cyberchondria

To distinguish between adaptive OHR and maladaptive OHR (i.e., cyberchondria), it is helpful to identify the potential functions of OHR as a health-anxious safety-seeking behaviour. Indeed, it is necessary to invite closer inspection of the psychological functions OHR serves within cyberchondria, while allowing space for wider considerations of the evolving landscape of internet use, particularly in the context of cultural norms (Myles, 2025).

Cyberchondria/maladaptive OHR may serve to maintain anxiety in several ways (Salkovskis et al., 2003), distinguishing it from adaptive OHR. Indeed, many safety-seeking behaviours pertinent to health anxiety may be meaningfully mapped onto cyberchondria, illustrating how OHR may fulfil similar psychological functions. Examples of safety-seeking behaviours and potential corresponding psychological functions, inspired by Salkovskis et al.'s (2003) conceptualisation of safety-seeking behaviours pertinent to health anxiety, are detailed in Table 1. At present, there is limited data regarding the role of these psychological processes in the aetiology of cyberchondria (Schenkel et al., 2021) and it will be the role of future research to elucidate whether these mechanisms underpin the onset or maintenance of cyberchondria.

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	Definition	Example
Mental Preparation	Seeking out content that provokes fear or worry, often based on compulsion or positive beliefs about doing so, due to the perceived need to be "mentally prepared" for worst-case scenarios.	Entering "headache cancer" into a search engine or generative AI and/or directing undue attention to "when to seek medical attention" sections of information sites, to explore and prepare for worst possible outcomes.
Hypervigilance	Heightened attention towards health-related cues, to ascertain whether one is at risk of ill-health.	Regularly searching medical websites, symptom checkers or generative AI for new information about illnesses that could explain vague or shifting symptoms.
Reassurance-Seeking	Repeatedly searching for information to reduce uncertainty regarding the malignance of symptoms.	Entering "headache causes" into a search engine or generative AI and selectively attending to information disconfirming catastrophic interpretations.
Symptom Checking or Monitoring	Engaging in repeated and specific symptom searches to monitor health status or identify illness.	Searching "left-side abdominal pain causes" multiple times a day and clicking multiple different links, in an endeavour to find a benign explanation.
Avoidance	Using OHR as a substitute for direct engagement with healthcare appointments or tests, to prevent confirmation of catastrophic beliefs.	Choosing to search symptoms online rather than booking a hospital appointment, due to anxiety about being diagnosed with something serious.
Mental Rumination	Repetitive and obsessive thinking about potential health concerns triggered by OHR, in the pursuit of planning for catastrophic outcomes.	Searching for catastrophic outcomes associated with medical symptoms and repeatedly planning actions for these outcomes.
Imagery	Using internet resources to construct vivid mental images of catastrophic health scenarios, either intentionally or automatically, maintaining distress and/or catastrophic beliefs.	Reading detailed illness narratives or viewing graphic medical images/videos to visualise what the appearance of a condition.

Table 1. Safety-Seeking Behaviours and Corresponding Examples

As a perhaps obvious, yet important, caveat, we do not make the claim that this operationalised definition of cyberchondria is atheoretical. On the contrary, we recognise that the above definition of cyberchondria is laden with cognitive-behavioural theory regarding the facets contributing to and maintaining mental health difficulties (Kennerley et al., 2016). Mediated interventions on this basis represent a serious advance. Ultimately, cyberchondria is not necessarily a distinct syndrome that is truly

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present in nature, free from social construction (Scull, 2021). Instead, it is entirely possible, even likely, that it represents a theoretical construct, intimately related to social discourses (Foucault, 2019).

Nevertheless, this does not undermine the importance of operationalising the construct for both empirical research and clinical intervention, as doing so allows for systematic investigation, measurement, and targeted therapeutic approaches that address relevant cognitive and behavioural processes.

The varied and often overlapping functions that OHR may serve in health anxiety highlight the importance of functionally driven assessments of cyberchondria, as OHR rarely serves a single psychological function. Instead, it may simultaneously meet needs related to each of the safety-seeking behaviours described in Table 1. Moreover, the structure of the internet may inadvertently escalate or shift the function of the behaviour in real time, such as through suggested searches links to other sites that gain the user's attention, among other distractions from the original function of the OHR.

Unfortunately, owing to the complexity and fluidity of the behaviour, specifying between the intended functions and unintended consequences of OHR is difficult. Indeed, clinicians often report that patients find it difficult to articulate the specific function of their OHR (Lee et al., 2015), instead describing complex sequalae of emotional and behavioural responses before, during and after engaging in OHR (Hill & Watts, 2024). Given what has emerged, a classification of systematic causes of Cyberchondria represents an advance.

6. Systemic Causes of Cyberchondria

Rather than viewing maladaptive OHR/cyberchondria solely through the lens of individual behaviour, (i.e., the specific behaviour of searching and interpreting results), it may be beneficial to incorporate broader systemic and environmental conditions of the internet into explanatory frameworks for cyberchondria. Ecological models of human development (Bronfenbrenner, 1994) suggest that multiple levels of influence beyond the individual may shape cyberchondria. For example, societal norms and trends around self-monitoring and health behaviours, such as those reinforced by health influencers (Powell & Pring, 2024), may reflect a macro-level influence on cyberchondria, whereas individual website preferences and algorithmic content delivery represent more proximal, micro-level or mesosystem influences within one's digital environment.

As one example, coordinated management of meaning (CMM; Pearce, 2005) emphasises that meaning is not fixed, but continually constructed through ongoing interaction. In the context of internet use, the specific content individuals encounter, and how it is algorithmically delivered, is influenced both by their own prior behaviours and the wider engagement patterns of millions of other internet users (Rachmad, 2024). From this perspective, it may be helpful to consider cyberchondria/maladaptive OHR not as a series of isolated safety-seeking behaviours, but as part of an ongoing, dynamic "conversation"

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between the individual and their own tailored digital ecosystem. Of course, this example does not represent the only, or even the most important, systemic framework through which to understand cyberchondria, and is intended only as an illustration. Integrating these perspectives would produce a multidisciplinary point of view on the phenomenon, useful to guide rehabilitation interventions.

7. Clinical Implications and Directions for Future Research

Whilst OHR may be a normative process and is not inherently maladaptive, it may serve to maintain cyberchondria, often via one or more of the aforementioned safety-seeking behaviours. Indeed, it has been argued here that incorporating patients' beliefs concerning OHR and the systemic and environmental factors relevant to their OHR would aid the development of a clinically useful definition of cyberchondria that remains adaptable to evolving internet trends.

Future research should examine whether the proposed mechanisms of cyberchondria are substantiated by empirical research in order to develop tailored interventions. Should these predictions be supported, clinicians may wish to consider adaptations to include cyberchondria within therapy protocols for health anxiety. This might include addressing reassurance-seeking via symptom googling, providing psychoeducation on online uncertainty and using behavioural tools, such as exposure and response prevention. It is worth noting, however, that our hesitancy contrasts recent calls for more urgent development of specific National Institute for Health and Care Excellence (NICE) guidelines for health anxiety that incorporate cyberchondria, owing to the sharp increase in health anxiety prevalence that appears to mirror the rise of internet use (Bailey, 2024).

8. Concluding Comments

To conclude, cyberchondria represents a psychological difficulty of both growing concern and recognition. Whilst semantically distinct from health anxiety, the extent to which cyberchondria and health anxiety are underpinned by similar psychological mechanisms remains unclear. This ambiguity is, in part, attributable to the definition of cyberchondria by its behavioural consequences. Distinguishing cyberchondria from otherwise adaptive OHR may require understanding of its functional basis. Whilst we have posited a potential role for several cognitive, behavioural and systemic mechanisms in cyberchondria, future research is necessary to elucidate whether these mechanisms entail a role in the aetiology of cyberchondria. Given the complexity of the phenomenon and its origin closely linked to the use of new technologies, strict definitions and in-depth study of aetiopathogenesis are necessary. The formal recognition of this phenomenon represents a considerable advance both in terms of diagnosis and interventions aimed at reducing its impact. Therefore, this contribution represents a stimulus to the continuation of studies and the development of specific treatments.

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References

Bailey, R. (2024). Why health anxiety needs NICE clinical guidelines. *Lancet Psychiatry*, *11*(3), 164-165. https://doi.org/10.1016/S2215-0366(23)00404-2

Blakey, S. M., & Abramowitz, J. S. (2016). The effects of safety behaviors during exposure therapy for anxiety: Critical analysis from an inhibitory learning perspective. *Clinical Psychology Review*, *49*, 1-15. https://doi.org/10.1016/j.cpr.2016.07.002

Bronfenbrenner, U. (1994). Ecological models of human development. *International encyclopedia of education*, *3*(2), 37-43.

Brown, R. J., Skelly, N., & Chew‐Graham, C. A. (2020). Online health research and health anxiety: A systematic review and conceptual integration. *Clinical psychology: Science and practice*, *27*(2), e12299. https://doi.org/10.1111/cpsp.12299

Caputo, A., Vicario, C. M., Cazzato, V., & Martino, G. (2022). Psychological Factors as Determinants of Medical Conditions, Volume II. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.865235

Casula, A., Massimino S., Sgandurra, M. L., Lucifora, C., Travaglino G., Craparo, G., Martino, G., Nitsche, M. A., Vicario, C. M. (2025) Moral predictors of antivaccination attitude in the Italian

ISSN: 3035-062X
2025, 2(2)
Preliminary Reports and Negative Results in Life Science and Humanities

COVID-19 post pandemic era. *Preliminary Reports and Negative Results in Life Science and Humanities 2*(1). https://doi.org/10.13129/3035-062X/prnr-4981

Di Giuseppe, M. (2024). Transtheoretical, transdiagnostic, and empirical-based understanding of defense mechanisms. *Mediterranean Journal of Clinical Psychology*, *12*(1). https://doi.org/10.13129/2282-1619/mjcp-4036

Foucault, M. (2019). *Power: the essential works of Michel Foucault 1954-1984*. Penguin UK.

Hill, S., & Watts, D. (2024). Googling and health anxiety in older age—A case study of CBT incorporating a single case experimental design. *Clinical Case Reports*, *12*(8), e9316. https://doi.org/10.1002/ccr3.9316

Jamalamadaka, T., Griffith, E., Steer, H., & Salkovskis, P. (2020). Fear of illness recurrence and mental health anxiety in people recovering from psychosis and common mental health problems. *British journal of clinical psychology*, *59*(3), 403-423. https://doi.org/10.1111/bjc.12253

Jiakponna, E. C., Agbomola, J. O., Ipede, O., Karakitie, L., Ogunsina, A. J., Adebayo, K. T., & Tinuoye, M. O. (2024). Psychosocial factors in chronic disease management: Implications for health psychology. *International Journal of Science and Research Archive*, *12*(02), 117-128. https://doi.org/10.30574/ijsra.2024.12.2.1219

Jokić-Begić, N., Mikac, U., Čuržik, D., & Sangster Jokić, C. (2019). The development and validation of the short cyberchondria scale (SCS). *Journal of Psychopathology and Behavioral Assessment*, *41*, 662-676. https://doi.org/10.1007/s10862-019-09744-z

Kellerman, H., & Burry, A. (2007). Reality Testing and Cognitive Functioning: Personality Disorders and Neuroses. In *Handbook of Psychodiagnostic Testing: Analysis of Personality in the Psychological Report* (pp. 43-52). Springer. https://doi.org/10.1007/978-0-387-71370-0_5

Kennerley, H., Kirk, J., & Westbrook, D. (2016). *An Introduction to Cognitive Behaviour Therapy: Skills and Applications*. SAGE.

Kim, N. S., & Lee, K. E. (2017). Comparison of health anxiety and health information seeking behavior on the internet depending upon personality traits. *Journal of Health Informatics and Statistics*, *42*(3), 259-268. https://doi.org/10.21032/jhis.2017.42.3.259

Kosic, A., Lindholm, P., Järvholm, K., Hedman-Lagerlöf, E., & Axelsson, E. (2020). Three decades of increase in health anxiety: Systematic review and meta-analysis of birth cohort changes in university student samples from 1985 to 2017. *Journal of anxiety disorders*, *71*, 102208. https://doi.org/10.1016/j.janxdis.2020.102208

Lagoe, C., & Atkin, D. (2015). Health anxiety in the digital age: An exploration of psychological determinants of online health information seeking. *Computers in Human Behavior*, *52*, 484-491. https://doi.org/10.1016/j.chb.2015.06.003

ISSN: 3035-062X
2025, 2(2)
Preliminary Reports and Negative Results in Life Science and Humanities

Lebel, S., Mutsaers, B., Tomei, C., Leclair, C. S., Jones, G., Petricone-Westwood, D., Rutkowski, N., Ta, V., Trudel, G., Laflamme, S. Z., Lavigne, A. A., & Dinkel, A. (2020). Health anxiety and illness-related fears across diverse chronic illnesses: A systematic review on conceptualization, measurement, prevalence, course, and correlates. *Plos one*, *15*(7), e0234124. https://doi.org/10.1371/journal.pone.0234124

Lee, K., Hoti, K., Hughes, J. D., & Emmerton, L. M. (2015). Consumer use of "Dr Google": a survey on health information-seeking behaviors and navigational needs. *Journal of medical Internet research*, *17*(12), e288. https://doi.org/10.2196/jmir.4345

Maloney-Krichmar, D., & Preece, J. (2005). A multilevel analysis of sociability, usability, and community dynamics in an online health community. *ACM Transactions on Computer-Human Interaction (TOCHI)*, *12*(2), 201-232. https://doi.org/10.1145/1067860.1067864

McCormack, M., Tierney, K., Brennan, D., Lawlor, E., & Clarke, M. (2014). Lack of insight in psychosis: theoretical concepts and clinical aspects. *Behavioural and cognitive psychotherapy*, *42*(3), 327-338. https://doi.org/10.1017/S1352465813000155

McElroy, E., & Shevlin, M. (2014). The development and initial validation of the cyberchondria severity scale (CSS). *Journal of anxiety disorders*, *28*(2), 259-265. https://doi.org/10.1016/j.janxdis.2013.12.007

McMullan, R. D., Berle, D., Arnáez, S., & Starcevic, V. (2019). The relationships between health anxiety, online health information seeking, and cyberchondria: Systematic review and meta-analysis. *Journal of Affective Disorders*, *245*, 270-278. https://doi.org/10.1016/j.jad.2018.11.037

Menon, V., Kar, S. K., Tripathi, A., Nebhinani, N., & Varadharajan, N. (2020). Cyberchondria: conceptual relation with health anxiety, assessment, management and prevention. *Asian Journal of Psychiatry*, *53*, 102225. https://doi.org/10.1016/j.ajp.2020.102225

Mograbi, D. C., & Morris, R. G. (2018). Anosognosia. *Cortex*, *103*, 385-386. https://doi.org/10.1016/j.cortex.2018.04.001

Morahan-Martin, J. M. (2004). How internet users find, evaluate, and use online health information: a cross-cultural review. *CyberPsychology & Behavior*, *7*(5), 497-510. https://doi.org/10.1089/cpb.2004.7.497

Myles, L. A. M. (2021). Opinion article: The emerging role of computational psychopathology in clinical psychology. *Mediterranean Journal of Clinical Psychology*, *9*(1). https://doi.org/10.6092/2282-1619/mjcp-2895

Myles, L. A. M. (2025). An evaluation of the 'social graces' in systemic thinking and practice. *Context*, *197*. https://www.aft.org.uk/page/Context

Myles, L. A. M., & Johnson, P. G. B. (2023). Parsimony: A Forgotten Principle in Clinical Psychology and Classics. *Mediterranean Journal of Clinical Psychology*, *11*(1). https://doi.org/10.13129/2282-1619/mjcp-3715

ISSN: 3035-062X
2025, 2(2)
Preliminary Reports and Negative Results in Life Science and Humanities

Pearce, W. B. (2005). The coordinated management of meaning (CMM). *Theorizing about intercultural communication*, 35-54.

Rachmad, Y. E. (2024). From Emotional Triggers To Social Media Algorithms. In: Yoesoep Edhie Rachmad Publication.

Rimvall, M. K., Jespersen, C. P., Clemmensen, L., Munkholm, A., Skovgaard, A. M., Verhulst, F., ... & Jeppesen, P. (2019). Psychotic experiences are associated with health anxiety and functional somatic symptoms in preadolescence. *Journal of Child Psychology and Psychiatry*, *60*(5), 524-532. https://doi.org/10.1111/jcpp.12986

Salkovskis, P. M., Thorpe, S. J., Wahl, K., Wroe, A. L., & Forrester, E. (2003). Neutralizing increases discomfort associated with obsessional thoughts: An experimental study with obsessional patients. *Journal of Abnormal Psychology*, *112*(4), 709. https://doi.org/10.1037/0021-843X.112.4.709

Scull, A. (2021). American psychiatry in the new millennium: a critical appraisal. *Psychological medicine*, *51*(16), 2762-2770. https://doi.org/10.1017/S0033291721001975

Shafiq, M. N. (2024). Does Cultural Communication Strategy in Metaverse affect International Students' Mental Health? Moderating effects of Cyberchondria and Healthcare Disparity. *iRASD Journal of Management*, *6*(1), 21-40. https://doi.org/10.52131/jom.2024.0601.0120

Skjernov, M., Bach, B., Fink, P., Fallon, B., Soegaard, U., & Simonsen, E. (2020). DSM-5 personality disorders and traits in patients with severe health anxiety. *The Journal of Nervous and Mental Disease*, *208*(2), 108-117. https://doi.org/10.1097/NMD.0000000000001108

Starcevic, V., & Berle, D. (2013). Cyberchondria: towards a better understanding of excessive health-related Internet use. *Expert review of neurotherapeutics*, *13*(2), 205-213. https://doi.org/10.1586/ern.12.162

Starcevic, V., Berle, D., & Arnáez, S. (2020). Recent insights into cyberchondria. *Current Psychiatry Reports*, *22*(11), 56. https://doi.org/10.1007/s11920-020-01179-8

Starcevic, V., Berle, D., Arnáez, S., Vismara, M., & Fineberg, N. A. (2020). The assessment of cyberchondria: instruments for assessing problematic online health-related research. *Current Addiction Reports*, *7*, 149-165. https://doi.org/10.1007/s40429-020-00308-w

Warwick, H. M., & Salkovskis, P. M. (1990). Hypochondriasis. *Behaviour Research and Therapy, 28*(2), 105-117. https://doi.org/10.1016/0005-7967(90)90023-c

Zheng, H., Sin, S.-C. J., Kim, H. K., & Theng, Y.-L. (2021). Cyberchondria: a systematic review. *Internet Research*, *31*(2), 677-698. https://doi.org/10.1108/INTR-03-2020-0148