The Struggle over DSM-5 in Psychiatry

An STS Research Paper

presented to the faculty of the

School of Engineering and Applied Science

University of Virginia

by

Vlad Tarashansky

April 23, 2024

On my honor as a University student, I have neither given nor received unauthorized aid on this assignment as defined by the Honor Guidelines for Thesis-Related Assignments.

Vlad Tarashansky

STS advisor: Peter Norton

1

Like other professions, psychiatry requires standards. The American Psychiatric Association (APA) regards the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), published in 2013, as an "authoritative volume that defines and classifies mental disorders to improve diagnoses, treatment, and research" (APA, n.d.-a). The DSM guides clinicians and researchers, but patients, insurance companies, pharmaceutical companies also have much at stake in its standards (Singh & Armstrong, 2015). DSM-5 is controversial and the validity of many of its newer diagnoses is disputed.

There are two main types of critics of the DSM-5: practical and theoretical. The practical groups criticize the economic motives, inclusivity, and applications of the manual. The theoretical groups criticize the theory which allows the DSM to classify and the research that follows. While practical critics want to improve the DSM and apply it better, theoretical critics want to part from it. Practical critics demand that APA's DSM committee introduce new standards in a new version of the DSM. Theoretical critics fault the approach that the DSM represents and call for new kinds of diagnostic standards.

Review of Research

In a study of how mental health professionals use the DSM, First et al. (2018) found that coding systems such as the International Classification of Diseases (ICD) are most useful for administrative billing, communicating with other health professionals, and teaching students, but least useful for prescribing treatment. The researchers pointed at the "long-identified weaknesses of descriptive categorical classification systems, namely the diagnostic heterogeneity of the categories and the lack of a one-to-one relationship between diagnostic categories and treatment options." Reed at al. (2011) found that the two most important purposes of a diagnostic manual in mental health are for "communication among clinicians" and to "inform treatment and

management decisions." These two studies outline reasons for clinicians' need to improve the diagnostic standard. This research will review the different approaches at inciting change.

Surís et al(2016) conducted research on the evolution of psychiatric diagnosis. Their work regarding the historic need for new classification systems and controversies surrounding new ideologies is important to understanding the current DSM-5 situation. Surís et al(2016) discuss the importance of using the established diagnostic system, even if it is flawed, to facilitate advancements in psychiatry. They also studied the evolution of diagnostic manuals in response to US census, insurance, billing, and consistent diagnostic needs. The historic role of a diagnostic manual cannot be forgotten when choosing what steps to take next after the DSM-5.

Nemeroff et al.(2013) compiled views from many psychiatrists with expertise in specific disorders. They argued that while the DSM-5 is an improvement, it is a smaller step than psychiatrists expected. Concerns expressed in Nemeroff et al.'s collection are elaborated upon in this research from a less disorder specific approach. Wakefield(2015) found similarly that the DSM-5 was a missed opportunity by failing to address previously high rates of false positive diagnosis.

Practical Concerns

Practical critics contend that pharmaceutical companies' material interests influence decisions in the DSM. Cosgrove and Krimsky (2012) reported that over 69% of DSM-5 task force members had ties to pharmaceutical companies. In defense David Kupfer, the head of the DSM-5 planning committee, said strict rules are in place that force members to annual income of less \$100,000 from industry and limit shares in pharmaceutical companies to less than \$50,000 (Gornall, 2013). These are "more stringent than requirements for staff at the National Institutes of Health, members of advisory committees for the Food and Drug Administration, and most

academic departments" according to Kupfer. Researchers are still pressing for a stricter policy. Cosgrove and Krimsky (2012) are demanding that DSM task members have zero financial conflicts of interests (FCOIs), have never spoken on behalf of pharmaceutical companies, and if an expert with FCOIs is required they can only consult DSM panels. Despite Cosgrove and Krimsky's demands, the trend of DSM panel members with pharmaceutical ties has continued on the DSM-5 revision panel. Davis et al.(2024), a group studying under Cosgrove, found that 60% of DSM-5-TR panel members who were physicians based in the US received payments from the industry totalling over \$14 million between 2016-19. One day after this study was published, Appelbaum and First(2024), the chair and co-chair of the DSM Steering Committee, responded. Their goal was "to correct the erroneous statements and misimpressions in the article by Davis, et al. about the possible conflicts of interest (COI) in the production of the American Psychiatric Association's DSM-5-TR." They defended their process by writing that "participants in the process had to disclose all sources of income, which were reviewed by the APA's COI Committee" and "if there was even the possibility of an impact, the proposed change was not implemented." Appelbaum and First also contended that "as DSM is a diagnostic and not a treatment manual, the revision eschewed any mention of management and treatment recommendations, focusing exclusively on diagnostic issues, thus excluding the kinds of information most likely to be of potential benefit to industry." Four days later, Cosgrove(2024) responded to Appelbaum and First's defense. Cosgrove called for greater transparency about the COI checking process. Cosgrove states that if the DSM publicly disclosed industry ties and the amount each member received, she would have no reason to conduct her studies. Before developing the study with Davis et al. Cosgrove corresponded with Dr. First requesting information on panel members and the COI policy. First was unable to release panel information

and did not reply to the email about COI policy. Cosgrove also shut down Appelbaum and First's claim that diagnostic issues will not benefit industry by quoting the chair of the DSM-IV, Dr. Allen Frances. Frances stated: "...any individual from any professional association that has an intense interest in any given diagnosis will always be on the side of expanding that diagnosis and expanding the treatment for it" (Cosgrove, 2024). Lastly, Cosgrove states "industry has benefited greatly from the expansion of diagnostic boundaries (and number of diagnostic categories) since DSM-III was published. This diagnostic expansion is what has enabled the extraordinary increase in the use of psychiatric drugs over the past 40 years."

Gary Greenberg, a psychotherapist in Connecticut, argues even further about pharmaceutical ties in psychiatry. He argues that there is no conspiracy. He says that DSM is created by committees "made up of experts in the field, who tend to be people who are valued and pursued by drug companies to do their research." This means pharmaceutical companies don't directly influence DSM panel members, but they create "an entire profession that intellectually is already predisposed to seeing mental problems as problems that should be treated with drugs" (Gornall, 2013). Frances proposes a new approach involving primary care doctors in the decision of what diagnoses or treatments to include or exclude in the DSM. This might decrease industry bias in psychiatric experts. He said, "80% of psychiatric meds are prescribed by primary care doctors, not psychiatrists ... So, when you're making a suggestion for a change in psychiatry, you're making that suggestion primarily for primary care doctor and have to be thinking about, *How will this change play in primary care*, which the experts never do"(Burton, 2024).

Others are concerned with the motives of individual DSM committee members. The APA required members to sign confidentiality agreements to protect revenue, and this damaged transparency and accepted methods of peer review within the DSM (Pearce, 2014). Confidentiality in conjunction with the DSM's classification strategy gives board members more power. The DSM uses a strategy where clusters of symptoms are grouped and named. This leads to theoretical criticism that will be discussed later, but the practical concern is that board members can have "pet" illnesses. Peter Tyrer, a professor of community psychiatry at Imperial College London, explains it as, "A lot of clever people sit around a table and say, 'I've done work on this and I want to have narcissistic personality disorder included,' 'I want to have dissocial personality disorder' 'I want to have avoidant personality disorder'" (Gornall, 2013). Including new diseases this way is unscientific and deters from the validity of the DSM. Dr. Frances "believes that professionals' 'intellectual and emotional conflicts' are much harder to overcome" (Burton, 2024) than their financial conflicts. His proposed solution of including primary doctors on the board would allow biased experts to work on their respective guidelines and a neutral board to finalize the manual. The board would decide which guidelines to include in the final version.

Another concern with DSM is that it is a system created by and biased to work for Americans and their specific portrayal of symptoms (Murphy, 2015). The DSM was worked on by primarily US-based clinicians (Pearce, 2014) and they stated societal impact as motivating factors in their decisions for changes in the DSM (Blumenthal-Barby, 2014). Murphy(2015) contends that the DSM has two main approaches at dealing with cultural variation, "the idea that cultural variation is either the distinctive cultural shaping of a universal condition or the idea that culture-bound syndromes are peculiar local forms of distress with no claims to generality." These

approaches outline an important theoretical concern that will be touched upon later. Murphy criticizes the execution of these approaches for being western centric. Disorders are misclassified as universal or culture-bound according to a western bias leading to a western redescription of people's lives. He writes that the DSM "has not fully broken free of the idea that Western psychiatric categories represent normal deviance, and non-Western ones represent deviant deviance." This bias hinders psychiatry's mission of curing or mitigating disorders. Imposing western visions of disorders on the rest of the world is "speeding up the arrival of Westernised modernity." Murphy goes further to say that if "culture-bound syndromes are not not mental illnesses at all, just local forms of life, then trying to medicalize them and treat them as problems to be cured looks like cultural imperialism of the worst sort."

Overreliance and Theoretical Concerns

The selling point of the DSM is reliable diagnosis. It gives clinicians, students, and patients a sense of certainty in psychiatry. This certainty has led to the widespread adoption of DSM. It is used like a textbook; "many undergraduate psychology students view the DSM-5 as the ultimate authority in diagnosis within the field of mental health" (Bender, Stokes, & Gaspaire, 2018). This future reliance on DSM-5 is where practical concerns meet theoretical concerns. Critics question DSM-5's top-down checklist approach at classification and diagnosis. The categories are based on clusters of symptoms rather than causes of symptoms. This approach places a false certainty in diagnostic decisions that are not based on research (Pearce, 2014). In earlier days, psychiatrists were aware that diagnosis was chaotic and weak, but now with the certainty that the DSM displays the chaos is hidden (Ghaemi, 2018). Practically, there must be a manual to diagnose illness so that insurance can pay, clinicians can diagnose and treat, patients have certainty, and research has a point of reference. Theoretical critics claim the DSM-5's

unscientific classification should not be the reference for future nosology and research. H. van Praag, an early critic of DSM, wrote in 1993, "There is nothing wrong in basing the first draft of an operationalized taxonomy on expert opinion ... One should abstain, however, from proceeding further on that route" (Ghaemi, 2018). Van Praag understood the connection between practicality and theoretical correctness.

The overmedicalization of patients is a large fear for critics of the DSM.. Robert Spitzer, chair of the task force that created DSM-III, is now a large critic of the system he helped establish. He told a BBC documentary in 2007, "We made estimates of the prevalence of medical disorders totally descriptively without considering that many of these conditions might be normal reactions which are not really disorders" (Gornall, 2013). The chair of DSM-IV, Frances, criticizes the new DSM-5 further for introducing "several high-prevalence diagnoses at the fuzzy boundary with normality" (Harrison, 2013). One such new diagnosis is somatic symptom disorder for patients worried about having a medical illness. Another is labeling forgetfulness of old age as mild neurocognitive disorder. Children with temper tantrums can have mood dysregulation disorder. Dr. Frances says that the "real danger in diagnostic inflation is overdiagnosis and overtreatment of patients who are essentially well" (Harrison, 2013). Previous DSM chairs are not the only ones concerned with overmedicalization. The British Psychological Society (2011) wrote a letter voicing concerns that because of the DSM, "The general public are negatively affected by their continued and continuous medicalisation of their natural and normal responses to their experiences." They concluded that an alternative framework exists and should be pursued, and they closed their letter with, "The Society would be happy to help in such an exercise."

The true problem is what defines a mental illness. The APA(n.d.-b) defines mental illness as "referring to all diagnosable mental disorders-health conditions involving significant changes in thinking, emotion and/or behavior." and/or "Distress and/or problems functioning in social, work or family activities." With this definition, the panels defining "diagnosable mental disorders" have all the power. They get to decide what constitutes "distress and/or problems functioning in social, work, and family activities." Murphy(2015) writes, "all psychiatric conditions involve a judgement about whether someone's life is going badly." The DSM panel makes that judgment. But social, family, and work activities are heavily reliant on cultural context, and they will vary greatly. According to Murphy, most diagnoses are developed by asylum based psychiatry that began in the late nineteenth-century Europe. This approach formulates disorders in a clinical population then sends predictive instruments, usually questionnaires, into the community to validate the disorders. This method works when clinical and community populations are culturally similar. Even if all biases in the DSM were corrected, this method of constructing categories and disorders would not be universally applicable because of cultural context. One difference is that illness behavior differs culturally even if the disease is the same. For example, Arthur Kleinman, medical anthropologist and psychiatrist, found that depression presents as physical aches and pains in Chinese subjects. This raises yet another concern with the DSM's focus. Should it focus on illness behavior or the underlying disease? Regarding his findings Kleinman stated, "Depression experienced entirely as low back pain and depression experienced entirely as guilt ridden existential despair are such substantially different forms of illness behavior with different symptoms, patterns of help-seeking, course and treatment responses that though the disease in each instance may be the same, the illness rather than the disease is the determinant factor" (Murphy, 2015). Kleinman is more concerned with the

culturally localized expression rather than the underlying cause of symptoms. Murphy contends that proceeding with a culturally localized investigation is a reasonable approach. Murphy also comes to the conclusion that people are diverse, but they are not diverse enough to give up on a universalising project of mental illness. He writes that it is a "matter of finding the right grain at which to construct a family of models of human psychology and biology" and being "open to the idea of genuine culture-bound syndromes." It all comes down to which approach leads to better treatment, but, according to Murphy, this is an empirical issue.

Alternative Approaches

The National Institute of Mental Health (NIMH) has ceased funding DSM categorical research and is pushing the Research Domain Criteria (RDoC) (Ghaemi, 2018). This research framework will begin with brain-based concepts rather than with mental illness definitions.

NIMH Director in 2013, Thomas R Insel, wrote that the cause for this change was that, "The DSM diagnoses are based on a consensus about clusters of clinical symptoms, not any objective laboratory measure. In the rest of medicine, this would be equivalent to creating diagnostic systems based on the nature of chest pain or the quality of fever" (Pickersgill, 2014). RDoC is taking a strictly biological root cause approach, the opposite of the DSM's approach. Kupfer agreed that more research is necessary and stated that "RDoC is a complementary endeavour to move us forward, and its results may someday culminate in the genetic and neuroscience breakthroughs that will revolutionize our field. In the meantime...we are dealing with impairment or tangible suffering and we must respond. Our patients deserve no less" (Brauser, 2013). RDoC is a first step to more precise medicine, but it is far from supplanting the DSM. NIMH(n.d.) officially states that "RDoC is not meant to serve as a diagnostic guide, nor is it intended to

replace current diagnostic systems." The framework's goal is "to foster new research approaches that will lead to better diagnosis, prevention, intervention, and cures."

Researchers still criticize saying, "Both extremes are questionable: the DSM approach is clinical but unscientific; the NIMH approach is scientific but not clinical. The profession still awaits a scientific approach to clinical research on diagnosis" (Ghaemi, 2018). The Hierarchical Taxonomy of Psychopathology (HiTOP) consortium is attempting to bridge the clinical and scientific divide. They are researching and designing a classification method that places mental health on a spectrum and focuses on identifying traits rather than conditions (Ruggero et al, 2018). "The HiTOP aims to address limitations of traditional nosologies, such as the DSM-5 and ICD-10, including arbitrary boundaries between psychopathology and normality, often unclear boundaries between disorders, frequent disorder co-occurrence, heterogeneity within disorders, and diagnostic instability" (HiTOP, n.d.). HiTOP has over 150 participants listed on their site and the consortium is "not a closed group and new participants are most welcome." This contrasts from the secretive practices of the DSM process. Similarly to RDoC research findings, HiTOP is not ready to supplant the DSM. The HiTOP page states, "several domains of the HiTOP are ready for clinical and research applications", but it ends with "the system is a work in progress"(HiTOP, n.d.).

Conclusion

Psychiatry is still far from fully understanding the mind and mental illness. A diagnostic manual is crucial for having a united body of knowledge, research, and clinical practices. The DSM-5 is currently operating in that role, but it is anything but perfect. Moving forward both critical positions will need to be addressed. Practically, the DSM-5 will continue to serve as the leading manual and will need improvements regarding transparency, consistency, and disorder

classification. While the DSM is in use and being improved, research should be conducted on new ideologies. The current system cannot be fully replaced until the new system is reliable.

Most importantly, new psychiatrists and the public must be educated on the pitfalls of the current diagnostic and classification approaches. Why would people change a system that seems to work?

References

- APA (n.d.-a). American Psychiatric Association. About DSM-5. www.psychiatry.org/psychiatrists/practice/dsm/about-dsm
- APA (n.d.-b). American Psychiatric Association. What is Mental Illness? www.psychiatry.org/patients-families/what-is-mental-illness
- Appelbaum, P. and First, M. (2024, Jan). Classification of DSM-5-TR COI review process and corrections of erroneous analysis in Davis et al *BMJ: British Medical Journal* 384e076902 Rapid Responses www.bmj.com/content/384/bmj-2023-076902/rr
- Bender, S., Stokes, A., and Gaspaire, S. (2018, Nov.). Implications of the coverage of the DSM-5 in textbooks on learning and teaching of psychology within higher education. Psychology Teaching Review 24(1). /files.eric.ed.gov/fulltext/EJ1180347.pdf
- Blumenthal-Barby, J. S. (2014, Aug.). Psychiatry's new manual (DSM-5): ethical and conceptual dimensions. *Journal of Medical Ethics* 40(8), 531–536. JSTOR
- BPS (2011, June). The British Psychological Society. Response to the American Psychiatric Association: DSM-5 Development. web.archive.org/web/20160417085743/http://apps.bps.org.uk/_publicationfiles/consultation-responses/DSM-5%202011%20-%20BPS%20response.pdf
- Brauser, D.(2013, May). NIMH, APA Clash Over Upcoming DSM-5 *Medscape* www.medscape.com/viewarticle/803752
- Burton, K. (2024, Jan). DSM-5-TR Panel Members Received \$14M in Undisclosed Industry Funding *Medscape* www.medscape.com/viewarticle/dsm-5-panel-members-received-14m-undisclosed-indust ry-2024a10000pa

- Cosgrove, L. (2024, Jan). Re: Undisclosed financial conflicts of interest in DSM-5-TR: cross sectional analysis *BMJ: British Medical Journal 384e076902 Rapid Responses* www.bmj.com/content/384/bmj-2023-076902/rr-1
- Cosgrove, L., and Krimsky, S. (2012, March). A Comparison of DSM-IV and DSM-5 Panel Members' Financial Associations with Industry: A Pernicious Problem Persists. *PLoS medicine* 9(3). doi.org/10.1371/journal.pmed.1001190
- Davis et al (2024, Jan). Undisclosed financial conflicts of interest in DSM-5-TR: cross sectional analysis *BMJ: British Medical Journal 384e076902* doi.org/10.1136/bmj-2023-076902
- First et al (2018, June). Do mental health professionals use diagnostic classifications the way we think they do? A global survey. *World psychiatry : official journal of the World Psychiatric Association (WPA) 17(2)*, 187–195. doi.org/10.1002/wps.20525
- Ghaemi S. N. (2018, Sep.). After the failure of DSM: clinical research on psychiatric diagnosis. *World Psychiatry 17(3)*, 301–302. doi.org/10.1002/wps.20563
- Gornall, J. (2013, May). DSM-5: a fatal diagnosis? *BMJ: British Medical Journal 346(7909)*, 18–20. JSTOR
- Harrison, P. (2013, May). Use DSM-5 'Cautiously, If at all,' DSM-IV Chair Advises *Medscape* www.medscape.com/viewarticle/804378
- HiTOP(n.d.). The Hierarchical Taxonomy of Psychopathology. About HiTOP. renaissance.stonybrookmedicine.edu/HITOP/AboutHiTOP
- Murphy, D. (2015). "Deviant Deviance": Cultural Diversity in DSM-5. web.archive.org/web/20161220212518/https://web.ics.purdue.edu/~drkelly/MurphyDeviantDevianceCulturalDiversityDSMV2015.pdf
- Nemeroff et al. (2013, July) DSM-5: a collection of psychiatrist views on the changes, controversies, and future directions. *BMC Med 11*, 202. https://doi.org/10.1186/1741-7015-11-202
- NIMH (n.d.). The National Institute of Mental Health. About RDoC. www.nimh.nih.gov/research/research-funded-by-nimh/rdoc/about-rdoc
- Pearce, S. (2014, Aug.). DSM-5 and the rise of the diagnostic checklist. *Journal of Medical Ethics* 40(8), 515–516. JSTOR
- Pickersgill, M. D. (2014, Aug.). Debating DSM-5: diagnosis and the sociology of critique. *Journal of Medical Ethics* 40(8), 521–525. JSTOR
- Reed et al (2011, June). The WPA-WHO Global Survey of Psychiatrists' Attitudes Towards Mental Disorders Classification. *World psychiatry : official journal of the World*

- *Psychiatric Association (WPA) 10(2)*, 118–131. doi.org/10.1002/j.2051-5545.2011.tb00034.x
- Ruggero et al (2018). Integrating HiTOP into Clinical Practice. hitop.unt.edu/sites/hitop.unt.edu/files/Ruggero et al 2018 nw.pdf
- Singh, D., & Sinnott-Armstrong, W. (2015, Jan.). The DSM-5 Definition of Mental Disorder. *Public Affairs Quarterly* 29(1), 5–31. JSTOR
- Surís et al. (2016, March). The Evolution of the Classification of Psychiatric Disorders. *Behavioral sciences (Basel, Switzerland) 6(1)*, 5. doi.org/10.3390/bs6010005
- Wakefield J. C. (2015, Jun). DSM-5, psychiatric epidemiology and the false positives problem. *Epidemiology and psychiatric sciences 24(3)*, 188–196. doi.org/10.1017/S2045796015000116