Pilot project on patient profiles: a tool for sharing clinical experiences

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There is a large untapped potential for therapists to learn from each other. In interdisciplinary specialised treatment for substance abuse disorders (SUD treatment) and mental health care, there is little systematic comparison of experiences with a view to developing common clinical knowledge. We could utilise each other to a greater extent in order to expand our own and our collective experience-based knowledge. The ways in which organisations facilitate knowledge creation have become a central theme in organisational theory and research in recent decades (Bui & Baruch, 2010; Nonaka, 1994). The availability of effective tools for knowledge sharing and creation has been cited as one of the key factors in the sharing of experience-based knowledge in the health service (Tabrizi et al., 2013). Sharing experience-based knowledge in outpatient clinics often entails discussions about individual patients or general discussions about the field of specialisation. Discussing cases generates insight that therapists can use in their work with other patients, but assessing which experiences have a transfer value and for which patients tends to be left to the individual practitioner.

Categories for the grouping of patients represent a central tool for achieving a systematic comparison of experiences. Various mental disorders and substance use disorders are currently defined in diagnostic categories. Mental disorders are mainly defined by intercorrelated symptoms. Diagnoses do not correspond to separate underlying conditions with their own causal relationships and mechanisms, and the treatment implications are not well differentiated (Hyman, 2010; Kupfer et al., 2002). Diagnoses therefore have a fundamental limitation as a tool for comparing clinical experiences and assessments, and thus also for the development of common clinical knowledge.

Over the last 15 years, the desire for more clinically relevant categories has led to a surge in alternative approaches to diagnostic classification (Babor & Caetano, 2006; Hesselbrock & Hesselbrock, 2006; Insel et al., 2010; Insel, 2014; Koob & Volkow, 2016; Kwako et al., 2016; Wright et al., 2013). Clinical groups have developed several alternative diagnostic typologies rooted in therapeutic theories and clinical research. Transdiagnostic models have been developed within the cognitive behavioural tradition (Mansell et al., 2008) and the field of addiction (Kim & Hodgins, 2018), while the Psychodynamic Diagnostic Manual (PDM) has been developed by psychoanalytically oriented therapists (PDM task force, 2006). The common feature of these models is their attempt to identify underlying processes and factors that constitute central focus areas for therapists working within a given theoretical framework.

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Typologies developed from therapeutic theories are useful in the clinical setting and tend to be closely linked to recommended interventions and strategies. They are often tailored to a specific patient group. A typical SUD and mental health outpatient clinic admits a broad range of patients who cannot be placed within one specific treatment model. Additionally, practitioners in most outpatient clinics typically have diverse educational backgrounds and theoretical perspectives.

The absence of well-established tools for grouping patients with a view to sharing experiences has inspired us to seek other starting points for a useful typology. In a collegial community, we need a categorisation that groups together patients who may benefit from similar approaches and that serves as a common language spanning different clinical professions and therapeutic approaches. Experience-based categories that enable the articulation of tacit knowledge constitute an essential part of a knowledge creation process. Without a clear categorisation, it is difficult to make the leap from experiences with individual patients to the development of local knowledge about effective treatment for different types of patients.

The article presents a pilot project in which we have developed what we call *patient profiles*. We started by drawing on our experience of clinicians often having a clear, but not always articulated, sense that some patients have similarities in terms of how they are to be treated and what they need from the therapist. Klein (1998) demonstrates that experienced and competent practitioners develop a spontaneous situational understanding based on intuitive knowledge. We wanted to explore whether systematic articulation and comparison of therapists' intuitive knowledge could serve as a starting point for categorisation that promotes the sharing of experiences and the development of local clinical knowledge. To the best of our knowledge, such an approach has not been attempted before. Here we present the development of patient profiles and discuss the potential for and limitations of such a typology.

Method

Developing patient profiles

The patient profiles were developed at Lovisenberg Diaconal Hospital's SUD outpatient clinic, whose catchment area is the eastern central districts of Oslo. The catchment area is characterised by a concentration of young adults and a large variation in social functioning. All patients were eligible

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for treatment in the SUD outpatient clinic, typically indicating moderate to severe SUD and comorbid mental disorders excluding severe mental illness.

The approach we used in developing patient profiles shares some similarities with grounded theory (GT) (Glaser & Strauss, 1967), which is a qualitative method that describes how novel theoretical frameworks are developed through systematic comparison of different forms of empirical data. We developed the patient profiles by comparing patients we perceived as similar. GT provides useful methodological insights into such work, especially in relation to the consistent extraction of profile content from comparisons of specific patients. However, the purpose of our study was to gather specific characteristics into a rich, experience-near description of individual patients with a view to facilitating the sharing of experiences, whereas in a standard GT study, the aim would be to develop precise and general concepts to explain empirical data as part of a theory.

The patient profiles were developed in a four-step process that took place over a five-week period.

In step one, Sigurd Syrdal Aanderaa, Linn Bjerknes and Mette Nordbrønd Mikkelsen started by individually responding to an open instruction: ‘Divide your patient portfolio into five groups based on which patients you perceive to be similar.’ To obtain a tangible representation of the patients, we all wrote the initials of the individual patients on Post-it notes. We experimented by placing the notes in different groupings. During this process, we identified certain aspects that could lead to the perception of similarity. One of us noticed, for example, that all the patients placed at one side had no treatment plan.

In the next step, we *presented* the groups to each other. The preliminary groups in this phase were described using keywords characterised by obvious characteristics. For example, a category could be described in the following terms: *early extensive substance use, been involved with the child welfare authorities, home for adolescents, personality issues, has had or currently needs inpatient treatment, treatment fatigue, problems with relating to the therapist*. We identified a number of implicit dimensions that guided the grouping process, including the perception of: *difficult to work with, relational stability, level of functioning, degree of insight, common treatment project*. We noticed that some of the groups were similar. The groups with similarities served as inspiration for the development of patient profiles.

In the third step, we elaborated on the categories by *comparing* the descriptions of each patient with similarities. We then added specific patient experiences that we felt resonated with the

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description. In shaping the profiles, we jointly reviewed the proposed categories in several rounds in order to anchor them in patient experiences. Our discussions led to three profile outlines that we wanted to work on further. The three-profile limit was related to the timeframe of the project. In the process of identifying and shaping the profiles, we wanted to alternate between individual reflection and group work in order to access our own intuitive understanding without interference.

In the fourth step, we chose to organise the patient profiles in a prototype format (Westen, 2012), where each of us drafted a coherent description of the three profiles. We wanted to include a wide range of clinically significant factors and opted to base them on information typically gathered in an initial session: about substance use and history, psychological symptoms and mental disorders, level of functioning, childhood, adolescence and education, social networks and labour market attachment. We subsequently synthesised the three drafts of each of the profiles into a unified description.

We then tested the extent to which we felt the patients in our own patient portfolio matched the three patient profiles. Using a scale developed by Westen (2012) for prototype-based classification, we scored each patient based on how well they matched each of the three profiles according to the therapist's perception of similarity between the profile and the overall impression of each individual patient. The scale ranges from 1 to 5, where 5 indicates that the profile describes the relevant patient to a very large extent, 3 to a significant extent and 1 not at all. Then, as a group, we made a more in-depth comparison, where we explored the rationale behind the scores each of us had given.

We also tested out the use of patient profiles for sharing experiences with our group of colleagues. Fourteen therapists at the SUD outpatient clinic scored their own patients in relation to the patient profiles. For each profile, we shared experiences regarding typical challenges and useful strategies in our clinical practice.

Three patient profiles

We arrived at three patient profiles, which we have labelled A, B and C (see separate descriptions). Patient profile A describes a patient with whom the therapist can feel a sense of chaos and frustration, and where the patient challenges the treatment framework. The patient has a low level of functioning, externalising personality traits, early onset of substance use and often extensive current use involving

multiple substances. Profile B describes a patient with substantial pressure of suffering but who manages to retain a higher level of functioning and good reflective capacity. The patient has previously been admitted to a mental health facility and often has a mood disorder or internalising pathology in addition to extensive ongoing or recently terminated substance use, primarily alcohol. Profile C describes a patient who is perceived as undefinable, and for whom it is difficult to identify a common treatment project. Social and psychological functioning are characterised by withdrawal and passivity. The patient sees little correlation between their own ongoing substance use and current difficulties and has used cannabis daily for several years.

Patient profile A

Clinical observations: In meetings with the patient, the therapist is left with a sense of the patient being overwhelmed and in a state of chaos. The patient's way of life bears signs of unstable finances and living circumstances, which often remain central factors throughout their ongoing treatment process. It can take time to establish a good rapport with the patient. The patient can alternate between closing down and not answering questions, to being more open and reachable. During these moments, the patient is more receptive to feedback and setting boundaries etc. without feeling provoked, and takes more responsibility for their problems. Initiating constructive treatment processes and developing a treatment plan with the patient can be challenging.

Current situation: Extensive ongoing substance use at the start. May be regularly using multiple substances, such as amphetamines, cocaine, MDMA, cannabis and alcohol.
The patient has a low level of functioning in relation to employment and employment support measures. Struggles to meet the obligations and demands of adult life. Instability in close relationships. The patient has a troubled social network, characterised by crime, violence and substance use. Can perpetrate violence and have difficulty controlling themselves. May fear harming others and will isolate themselves to prevent this. The patient often struggles with trauma symptoms. Exhibits a high level of activation and describes persistent difficulties with restlessness and racing thoughts. Tends to tire of the surrounding environment over time, and can be troubled by depressive symptoms.

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Medical history: Early onset of substance use. Often started drinking alcohol and using cannabis at the age of 12–13, eventually leading to regular use of various substances, such as amphetamines, cocaine, MDMA, cannabis and alcohol. Periods with better control of substance use, but often prolonged and extensive use. The patient has often been exposed to traumas such as abuse and violence, and may have been an early perpetrator of violence. They describe extensive behavioural problems in childhood/adolescence, difficulties with concentration and attention. The patient has usually received inpatient and outpatient treatment, but dropped out or was discharged early.

Childhood, adolescence and education: Stressful conditions during childhood/ adolescence, insecurity and conflicts at home. Possible involvement with child welfare services at some point, with possible follow-up by the Educational and Psychological Counselling Service (PPT) and the Child and Adolescent Psychiatric Clinic (BUP). Typically drops out of school, often during or immediately after lower secondary school. Involvement at an early age in environments with illegal substances, violence and crime. Possibly never been able to hold down a job, often experiencing multiple setbacks in attempts to pursue an education and undertake practical training.

Diagnoses: Typically meets the criteria for several dependency diagnoses, often diagnoses such as recurrent depression, PTSD, emotionally unstable personality disorder or unspecified personality disorder. Often meets the criteria for antisocial personality disorder in SCID but not in ICD-10, as the patient exhibits some capacity for social contact, empathy and guilt, and is not characterised by emotional coldness or indifference towards others.

Patient profile B

Clinical observations: In meetings with the patient, the therapist considers the patient to have a substantial pressure of suffering, whilst also possessing capacity for reflection and to see themselves from an outside perspective. It is relatively easy to create a treatment plan because the patient is often aware that they struggle with substance use and a mental disorder and expresses a desire for change. The patient does not tend to blame others, and

may instead have an unlimited sense of responsibility and a bad conscience. The patient feels shame about their substance use and mental disorder, and the extent of their problems is hidden from their social network. May feel uncomfortable discussing substance use in the sessions, especially at the start.

Relevant information: When starting treatment, the patient has extensive current or recent substance use, primarily alcohol. They may also use amphetamines, cocaine, cannabis and/or benzodiazepines to a limited extent. The patient also suffers from pronounced depressive symptoms such as self-loathing, hopelessness, meaninglessness, brooding and often severe anxiety. The patient may have a surprisingly high level of functioning, with a steady job or studies, and a network of friends who do not have substance use problems.

Medical history: The patient may report extensive depressive symptoms, self-harm, eating disorders in childhood/adolescence, which started before the substance use. They have often experienced severe suicidal thoughts and previously been admitted to a mental health facility. Substance use does not appear to be the primary problem, but the patient seems to feel unable to manage difficult thoughts and feelings other than through substance use, which threatens their ability to maintain their level of functioning.

Childhood, adolescence and education: The patient often has a higher education. The parents are resourceful, and the patient has frequent contact with them. However, as a child, the patient experienced stressors in the form of perfectionist demands and/or frequent arguments and conflicts. One of the parents may themselves have significant mental health problems or substance use issues.

Diagnoses: Meets criteria for an alcohol dependency diagnosis and possibly harmful use of other substances. They may have dysthymia, recurrent depression, bipolar disorder or also a cluster C personality disorder (dependent, avoidant or obsessive-compulsive).

Patient profile C

Clinical observations: In meetings with the patient, it can be difficult to grasp the emotional significance of what the patient conveys, and challenging to structure the conversation. Clarification of treatment goals and wishes for change often become part of

the treatment process rather than being established at the outset. The patient also tends not to externalise their difficulties. They typically present with an expressed need to be listened to and are sensitive to rejection, e.g. it may be difficult to end the session.

Relevant information: Upon entering treatment, the patient has been using cannabis daily for several years. They may use other substances, such as hallucinogens, cocaine and alcohol more for partying, but do not typically have a dependence on anything other than cannabis. The patient considers it problematic that they are now in a rut. Is often on the brink of dropping out of studies or employment. The patient suffers from depressive symptoms such as low mood, isolation, lack of initiative, and has problems with sleep and structure in daily life. The depression is typically associated with the feeling of not coping. The patient often experiences social anxiety and typically describes how they 'need' to smoke cannabis in order to sleep, calm their thoughts and regulate their anger. Many see the link between problems and substance use, but they often do not realise the impact of cannabis on symptoms and level of functioning. Some may give other explanations for this, such as ADHD, which they want help with, but many also express a wish to receive help to stop using cannabis. The patient's social network usually consists of people who also smoke cannabis, and for many, cannabis use is an important part of their identity. Fear of change and abstinence can be related to the feeling of losing a core part of oneself and being left without a social network.

Medical history: The patient may have exhibited behavioural problems and experienced anger issues in childhood/adolescence, often feeling a sense of alienation and being different within their family and school environment. Typically started using alcohol and cannabis at the age of 14–15.

Childhood, adolescence and education: The patient often describes a childhood/ adolescence marked by insecurity, with caregivers who were emotionally unavailable, while also holding down a job and having their finances and housing in order. The patient's level of functioning fluctuated throughout their schooling.

Diagnoses: Diagnostically, the patient may have an anxiety disorder or depressive disorder in addition to cannabis dependence, or also anxious (avoidant) personality disorder.

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We assessed the profiles using the scoring tool developed by Westen (2012), and they were shown to describe our individual patients relatively well (70 % of the patients scored 3 or more, while around 30 % could not be categorised in any of the profiles). When three clinicians then jointly reviewed the scores for each patient, there was mostly a general consensus on which patients matched with the different categories, but we also identified two discrepancies between our scores.

Stereotypical C profile

The first, and most comprehensive finding concerned patient profile C. We all had a perception of a group of patients who were similar to each other in that they smoked cannabis. These were often young men who had little insight into how their cannabis use was preventing them from progressing in life. It transpired that several patients with cannabis as their primary substance had received high C scores, despite the overall clinical picture for some being more similar to profile B, with good social functioning and greater insight into their own substance problem. It also emerged that patients whose overall pattern matched profile C, with social and psychological functioning characterised by withdrawal and passivity, but did not have cannabis as their primary substance, were not identified as a C profile. The review highlighted how patient profile C was influenced by our preconceptions of a 'typical cannabis patient', and that characteristics of the profile were taken directly from these preconceptions. These preconceptions, where we linked a pattern in psychological and social functioning to the use of a specific substance, i.e. cannabis, influenced the development of patient profile C. By comparing profile C with the experience of specific patients, it became apparent to us that our perception of the typical cannabis patient was a stereotype. We found patients with cannabis as their primary substance who were not characterised by lack of insight and passivity, as well as patients with alcohol as their primary substance but who otherwise closely matched the profile.

Negative weighting in the A profile

The second main finding related to us identifying fewer of our own patients as a match for the A profile than the patients of the other two clinicians. In other words, when discussing each other's patients, we were more likely to consider the other clinicians' patients to be a better match with the description than our own. We became aware that the profile had an unintended negative weighting. We all found the profile description to be more unequivocally negative than our perception of our own patients. The profile lacks more unequivocally positive qualities, such as the ability to show vulnerability and be direct in relationships. We tend to like and sympathise with our own A-profile patients. In retrospect, we have considered that this represents a 'split' in the perception of patients.

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When therapists encounter patients who fit the description of profile A, they often have difficulty reconciling the different experiences they have with those patients into a cohesive understanding.

Discussion

Patient profiles versus case discussions

Discussing cases is invaluable both for providing input and for collective learning within a collegial community. However, the discussions can be quite time-consuming, which means that priority is given to patient cases that present particular challenges. This leads to a bias in relation to which patient cases are discussed, consequently reducing the opportunities to share our experiences with effective treatment in typical, less dramatic patient cases. The patient profiles were generated based on a comparison of all the patients on the lists of the three clinicians, and the resulting descriptions are representative of different segments of the patient population. We consider the three profiles we developed (A, B and C) to be very distinct from each other, thus enabling us to discuss a broader range of patient cases.

Presenting challenging patient cases for discussion can be emotionally taxing, and it is important for colleagues to adapt their input according to the capacity of the clinician who ‘owns’ the case. This sensitivity can limit the sharing of experiences by colleagues, for example success stories with similar cases to the one being discussed. We found that sharing experiences in the collegial community based on the patient profiles led to a more open and explicit comparison of experiences, and we found that we all had different ideas about what types of patients were most difficult to work with. During the discussion process, it became evident which strategies the clinicians perceived as useful for profiles A, B and C, and there was some disagreement about therapeutic strategies that we were not aware of. In contrast to case analysis, where the focus is to help provide a solution to a specific clinical problem, the profiles provide an opportunity for a more overarching systematic exchange of experiences.

Patient profiles versus diagnoses

A common feature of diagnoses and profiles is that they both represent categorisations that facilitate the development of explicit knowledge. Diagnoses can sometimes help the clinician to identify useful therapeutic approaches, not least because treatment research often uses diagnostic categories. For example, both a withdrawn middle-aged man receiving disability benefits and a young student who

has recently lost control of their substance use can be diagnosed with alcohol dependence. In such cases, comparing treatment experiences based on diagnosis makes little sense. As part of the work on modern diagnostic systems, diagnoses have been developed by collecting data on intercorrelated symptoms (Blashfield et al., 2014). The aim was to arrive at diagnoses that corresponded to underlying syndromes, but this has not proven to be successful (Hyman, 2010; Kupfer et al., 2002). In contrast to diagnoses, the patient profiles presented here are based on the therapist's intuitive and local knowledge of which patients appear to have similarities in terms of potential treatment. Through articulation and systematic comparison of intuitive knowledge, our aim was to group together patients who could benefit from similar approaches. The collegial community found that each profile had its own typical challenges, and that a consensus could be reached on a common set of useful strategies for each profile.

We cannot automatically assume that the apparent similarities of patients represent valid intuitive knowledge. Klein (1998) understands experts' spontaneous and efficient perceptions as an expression of intuitive knowledge. Experts are quick to identify relevant goals and measures, as well as which aspects of the situation are important to monitor, without being able to explain how they arrived at their understanding of the situation. However, valid intuitive expertise in a field requires sufficient experience with regularities over time (Kahneman & Klein, 2009). Whether clinical psychologists experience enough observable regularities to develop valid intuitive knowledge has been the subject of debate (Dawes, 1994; Kahneman, 2011). Kahneman (2011) argues that psychotherapists may possess valid intuitive knowledge about, for example, regulating anger or building trust, as they have ample opportunity to observe immediate reactions to regulating interventions. We assume that therapists can have valid intuitive knowledge about what types of goals can be achieved in a conversation with a patient and what can contribute to this, such as the patient's ability to understand the correlations in their own life or the patient's need for emotional validation. When experienced clinicians group patients according to similarities in terms of potential treatment, this will activate intuitive knowledge about how different patients need to be approached. Conversely, diagnoses used in actuarial assessments (Dawes, 1994) will be better suited for prognostic considerations over a longer period of time.

Generalisability of patient profiles

Patient profiles are explicitly a local categorisation, in contrast to diagnoses, which are part of a universal classification system. One of the characteristics of intuitive knowledge is its context

specificity; it is valid within the specific context in which it is developed (1998). Differences in catchment areas and admission criteria make for distinct patient populations, and the objectives and frameworks that play a role in determining treatment pathways will vary across the different types of units. The profiles of patients in a detoxification unit will also look quite different, even if some of these patients are the same. The patient profiles we develop at an SUD outpatient clinic in Oslo's Inner East will not necessarily be representative of patients at such a clinic elsewhere in Norway. The method of developing typical patient profiles can be useful for a wide range of clinical units; however, the strength of scientifically applicable diagnostic categories is that they can be used as a basis for research into treatment methods for different groups of patients in a variety of settings. Patient profiles serve as a supplement to diagnostic categories, and they can help clinicians integrate evidence-based knowledge and enable them to share experiences in tailoring evidence-based interventions to different types of patients.

Patient profiles as a process tool

A key point in the method for developing typical patient profiles is that it can be carried out in a normal clinical context. We have used our own recollections and understandings of our patients as a form of 'empirical data' in the comparison. Glaser and Strauss (1967) discuss the use of personal recollections and also acknowledge this as a possible sub-strategy in GT. Time-consuming methods, such as semi-structured interviews and their subsequent transcription, are unrealistic if the patient profiles are to be developed by therapists in normal clinical settings. However, our use of 'empirical data' limits the opportunities for others to check or evaluate the comparisons on which the profiles are based. Nevertheless, the aim of the project is not to create universally valid categories but to describe steps in a method that can be used in different local contexts. The method has enabled us to correct our own stereotypes and misconceptions and to share experiences with a view to increasing the body of clinical knowledge in our clinic.

We observed with both profile C and profile A that the methodical development of patient profiles was useful for alerting us to and challenging our own perceptions of patient groups. In the project, we understood the importance of identifying the characteristics of the profiles through systematic comparison of specific patients, jointly reviewing the proposed categories in several rounds, and checking how well the patient profiles matched specific patient experiences. If the profiles are not sufficiently anchored in specific patient experiences, there is a risk that they will be based on stereotypes.

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The method of grouping patients enables the articulation of tacit knowledge, leading to an awareness of implicit categories. One benefit of articulating intuitive groupings or categorisations is that it facilitates nuanced reflection on stereotypes, prejudices and biases that are inherent in any treatment culture. After developing and documenting our local patient profiles, we noticed that the patient descriptions lacked information about somatic diseases and conditions. Those of us working on the project are psychologists, and our SUD outpatient clinic has been dominated by psychologists and social work therapists, with a historically low proportion of doctors and nurses. The process of developing the patient profiles revealed the underrepresentation of the medical perspective, thus facilitating the identification of tacit assumptions in the treatment culture. This imbalance in representation also highlighted the importance of obtaining perspectives from the wide range of practitioners in shaping the profiles.

Further development of the method

In the project, we devised a method for developing a typology that can facilitate the systematic sharing of experiences among clinicians in a collegial community, thereby fostering the development of local knowledge about effective treatment for different types of patients. We have not systematically investigated whether the patient profiles facilitate the sharing of experiences, but we have used the profiles in discussions between ourselves. Our observation to date indicates that, compared to case discussions, the profiles stimulate more systematic treatment discussions. Going forward, the categorisation method and patient profiles should be further developed and evaluated. We envisage more direct investigations into whether patient profiles facilitate the comparison of treatment experiences. It will also be important to develop patient profiles in other clinical units in order to gain experience with the method and the range of different local patient profiles in practice.

Referanser

Babor, T.F., & Caetano, R. (2006). Subtypes of substance dependence and abuse: implications for diagnostic classification and empirical research. *Addiction, 101*(Suppl. 1), 104–110. https://doi.org/10.1111/j.1360-0443.2006.01595.x

Blashfield, R.K., Keeley, J.W., Flanagan, E.H., & Miles, S.R. (2014). The cycle of classification: DSM-I through DSM-5. *Annual Review of Clinical Psychology, 10(1)***, 25–51. https://doi.org/10.1146/annurev-clinpsy-032813-153639

Bui, H. & Baruch, Y. (2010). Creating learning organizations: A systems perspective. *The Learning Organization, 17*(3), 208–227.

Dawes, R.M. (1994). *House of Cards: Psychology and psychotherapy built on myth*. The Free Press.

Glaser, B.G., & Strauss, A.L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Aldine Transaction.

Hesselbrock, V.M., & Hesselbrock, M.N. (2006). Are there empirically supported and clinically useful subtypes of alcohol dependence? [Review]. *Addiction, 101*(Suppl. 1), 97–103. https://doi.org/http://dx.doi.org/10.1111/j.1360-0443.2006.01596.x

Hyman, S.E. (2010). The diagnosis of mental disorders: the problem of reification. *Annual Review of Clinical Psychology, 6*, 155–179. https://doi.org/10.1146/annurev.clinpsy.3.022806.091532

Insel, T.R. (2014). The NIMH Research Domain Criteria (RDoC) Project: precision medicine for psychiatry. *American Journal of Psychiatry, 171*(4), 395–397. https://doi.org/10.1176/appi.ajp.2014.14020138

Insel, T., Cuthbert, B., Garvey, M., Heinssen, R., Pine, D.S., Quinn, K., Sanislow, C., & Wang, P. (2010). Research domain criteria (RDoC): toward a new classification framework for research on mental disorders. *American Journal of Psychiatry, 167*(7), 748–751. https://doi.org/10.1176/appi.ajp.2010.09091379

Kahneman, D. (2011). *Thinking, Fast and Slow*. Penguin Books.

Kahneman, D., & Klein, G. (2009). Conditions for intuitive expertise: a failure to disagree. *American Psychologist, 64*(6), 515–526. https://doi.org/10.1037/a0016755

Kim, H.S., & Hodgins, D.C. (2018). Component Model of Addiction Treatment: A Pragmatic Transdiagnostic Treatment Model of Behavioral and Substance Addictions. *Frontiers in Psychiatry, 9*, 406. https://doi.org/10.3389/fpsyt.2018.00406

Klein, G. (1998). *Sources of power: How people make decisions*. MIT Press.

Koob, G.F., & Volkow, N.D. (2016). Neurobiology of addiction: a neurocircuitry analysis. *Lancet Psychiatry, 3*(8), 760–773. https://doi.org/10.1016/s2215-0366(16)00104-8

Kupfer, D.J., First, M.B., & Regier, D.A. (2002). *A research agenda for DSM-V.* American Psychiatric Association.

Kwako, L.E., Momenan, R., Litten, R.Z., Koob, G.F., & Goldman, D. (2016). Addictions Neuroclinical Assessment: A Neuroscience-Based Framework for Addictive Disorders. *Biological Psychiatry, 80*(3), 179–189. https://doi.org/10.1016/j.biopsych.2015.10.024

Mansell, W., Harvey, A., Watkins, E.R., & Shafran, R. (2008). Cognitive behavioral processes across psychological disorders: A review of the utility and validity of the transdiagnostic

approach. *International Journal of Cognitive Therapy, 1*(3), 181–191. https://doi.org/10.1680/ijct.2008.1.3.181

Nonaka, I. (1994). A Dynamic Theory of Organizational Knowledge Creation. *Organization Science, 5*(1), 14–37. https://doi.org/10.1287/orsc.5.1.14

PDM task force. (2006). *Psychodynamic diagnostic manual (PDM)*. Guilford Press.

Tabrizi, N., Monazam, M., & Morgan, S.L. (2013). Models for Describing Knowledge Sharing Practices in the Healthcare Industry: Example of Experience Knowledge Sharing. *The International Journal of Management, 1*, 48–67. https://doi.org/10.18646/2056.12.14-004

Westen, D. (2012). Prototype diagnosis of psychiatric syndromes. *World psychiatry: official journal of the World Psychiatric Association (WPA), 11*(1), 16–21. https://doi.org/10.1016/j.wpsyc.2012.01.004

Wright, A.G., Krueger, R.F., Hobbs, M.J., Markon, K.E., Eaton, N.R., & Slade, T. (2013). The structure of psychopathology: toward an expanded quantitative empirical model. *Journal of Abnormal Psychology, 122(*1), 281–294. https://doi.org/10.1037/a0030133