Journal of Behavioral Addictions 7(4), pp. 892–896 (2018)
DOI: 10.1556/2006.7.2018.45
First published online June 7, 2018

Ontological addiction theory: Attachment to me, mine, and I

WILLIAM VAN GORDON[1]*, EDO SHONIN[2], SOFIANE DIOURI[2], JAVIER GARCIA-CAMPAYO[3], YASUHIRO KOTERA[1] and MARK D. GRIFFITHS[4]

[1]Centre for Psychological Research, University of Derby, Derby, UK
[2]Awake to Wisdom Centre for Meditation and Mindfulness Research, Ragusa, Italy
[3]Miguel Servet University Hospital, University of Zaragoza, Zaragoza, Spain
[4]Department of Psychology, Nottingham Trent University, Nottinghamshire, UK

(Received: November 5, 2017; revised manuscript received: April 13, 2018; accepted: April 14, 2018)

Background: Ontological addiction theory (OAT) is a novel metaphysical model of psychopathology and posits that human beings are prone to forming implausible beliefs concerning the way they think they exist, and that these beliefs can become addictive leading to functional impairments and mental illness. The theoretical underpinnings of OAT derive from the Buddhist philosophical perspective that all phenomena, including the self, do not manifest inherently or independently. *Aims and methods:* This paper outlines the theoretical foundations of OAT along with indicative supportive empirical evidence from studies evaluating meditation awareness training as well as studies investigating non-attachment, emptiness, compassion, and loving-kindness. *Results:* OAT provides a novel perspective on addiction, the factors that underlie mental illness, and how beliefs concerning selfhood are shaped and reified. *Conclusion:* In addition to continuing to test the underlying assumptions of OAT, future empirical research needs to determine how ontological addiction fits with extant theories of self, reality, and suffering, as well with more established models of addiction.

Keywords: ontological addiction, addiction, mental illness, emptiness, non-attachment, Buddhism, mindfulness

INTRODUCTION

According to the biopsychosocial model of mental illness, biological, psychological, and social factors, each plays a significant role in the onset of mental illness. The biopsychosocial model of mental illness offers a more rounded alternative to the biomedical model that, in addition to viewing mental illness as a deviation from normal, has been criticized as framing psychopathology in a reductionist manner (e.g., Ghaemi, 2009). However, although the biopsychosocial model arguably reflects a more encompassing perspective, it has recently been asserted that the model overlooks key psychopathology determinants. For example, it has been argued that a "biopsychophysis" model, which acknowledges the role of natural environmental factors, reflects a more balanced perspective (Van Gordon, Shonin, & Richardson, 2018).

Another factor posited as being overlooked in the biopsychosocial model relates to how an individual constructs and becomes attached to belief systems concerning their self-concept (Shonin, Van Gordon, & Griffiths, 2016). More specifically, ontological addiction theory (OAT; Shonin, Van Gordon, & Griffiths, 2013; Shonin et al., 2016) [OAT was conceived and first presented by Shonin et al. (2013) and a comprehensive discussion of the theoretical underpinnings was provided by Shonin et al. (2016).] is a novel metaphysical model of mental illness that asserts that human beings are prone to forming implausible beliefs concerning the manner in which they think they exist, and that these beliefs can become addictive leading to functional impairments and mental illness (Van Gordon, Shonin, & Griffiths, 2016a). The domain of metaphysics studies concepts and questions relating to existence, being, and self, with a central component comprising ontology relating to categories of being and what entities actually exist (i.e., the nature of being, becoming, and reality) (Chalmers, Manley, & Wasserman, 2009).

Ontological addiction is defined as "*the unwillingness to relinquish an erroneous and deep-rooted belief in an inherently existing 'self' or 'I' as well as the 'impaired functionality' that arises from such a belief*" (Shonin et al., 2013, p. 64). In line with the growing integration of Buddhist principles into Western treatment settings, aspects of the theoretical underpinnings of OAT derive from the Buddhist philosophical perspective that all phenomena, including the self, do not manifest inherently or independently (Shonin, Van Gordon, Singh, & Griffiths, 2015). The Buddhist teachings assert that human beings – and all phenomena they interact with – are marked by the property of

* Corresponding author: William Van Gordon; Centre for Psychological Research, University of Derby, Kedleston Road, Derby, Derbyshire DE22 1GB, UK; Phone: +44 1332 597826; E-mail: w.vangordon@derby.ac.uk

"emptiness" or "non-self" (Tsong-Kha-pa, 2004). Emptiness (Sanskrit: śūnyatā) does not mean that phenomena do not exist or are not perceptible to the human mind but implies that they exist in dependence on all other phenomena and that they manifest only in a relative sense (Thurman, 2005). Thus, it could also be said that "emptiness" somewhat paradoxically implies "fullness," because the attribute of interdependent existence that infers that a given phenomenon is empty of an independent self, means that by default, it signifies the existence of all other phenomena (Van Gordon et al., 2016a). For example, a tree exists in reliance upon (among other things) (a) water (i.e., that in turn relies upon rain, oceans, and rivers); (b) air with an appropriate composition of gaseous elements (i.e., that in turn relies upon respiration in other life forms); (c) nutrients and minerals (i.e., that in turn rely on the decay of organic matter); and (d) light of an appropriate composition, temperature, and intensity (i.e., that relies upon the sun and the filtering effect of the earth's atmosphere). If any one of these contributing phenomena were absent, then the tree would not exist. Similarly, the tree is integral to the existence of all other phenomena. The tree is "empty" of an inherently or independently existing self but is "full" of the universe.

OAT deviates from the ontological stance adopted in prominent Western psychological theories of human behavior that, to a greater or lesser extent, imply that the "self" exists as a discrete entity (Van Gordon et al., 2016a). For example, Rogers' (1959) humanistic schema of the self includes the dimensions of self-worth, self-image, and ideal-self that each plays a role in the formation of an individual's sense of self-concept. Similarly, social psychological theories are invariably constructed on the assumption that there exists a relational self (Smith & Mackie, 2007), and theories of human motivation, such as self-determination theory, assume that individuals have evolved a tendency to grow and master their environment as part of integrating new experiences into a coherent sense of self (Ryan & Deci, 2017). A further example is Jung's (1981) theory that is arguably situated closer to the Buddhist model (Van Gordon et al., 2016a), but nevertheless asserts that there exists a locus of self that cannot be definitively located.

ADDICTIVE PROCESS IN OAT

OAT asserts that by believing they exist both inherently and independently, individuals reify their sense of self to a point that they relate to themselves as the centerpiece in a world in which all other lifeforms, objects, and concepts are deemed to be peripheral (Shonin et al., 2016). Each time an individual relates to the world and its phenomena as peripheral to themselves, belief in selfhood is reaffirmed and this elicits rewards in the form of a more secure sense of self. In fact, according to OAT, reinforcing the self-concept (and the belief constructs that underlie it) occurs even when unpleasant sensations arise, because such negative experiences inevitably strengthen the view that there exists a self that can experience pleasure or pain depending upon the nature of its interaction with exterior objects, places, and people.

OAT proposes that belief in an intrinsically existing self has the potential to facilitate an addiction feedback loop due to the encoding of additional self-belief constructs each time the individual receives affirmative feedback that its efforts in the service of selfhood are necessary (Shonin et al., 2016). Efforts to preserve or further the interests of the self might include (but are not restricted to) striving to make money, amassing fame or reputation, staving off illness or hardship, and/or eliminating perceived threats (Lama & Berzin, 1997). While it could be argued that such endeavors are a requisite to living a normal and healthy life, OAT asserts that they become maladaptive if driven by the belief that the self exists either independently or intrinsically (Shonin et al., 2013). In other words, rather than simply eating in order to eat or working in order to work, and rather than regarding oneself as an integral yet inseparable part of a larger macrocosm, the individual suffering from ontological addiction pursues activities and goals with only a superficial and/or self-orientated regard for the other individuals and "peripheral" phenomena they interact with. The terms "superficial" and "self-orientated" are employed here because as part of a strategy to preserve selfhood, OAT acknowledges that while individuals suffering from ontological addiction may at times behave in ways that are seemingly considerate; such endeavors are ultimately driven by selfish intentions.

In terms of the association between ontological addiction and impaired functionality and/or the onset of mental illness, OAT asserts that by maintaining a false and implausible belief concerning the manner in which the self and reality exist, and that by continuously pursuing selfish strategies, individuals become attached to themselves as well as external objects, people, and experiences. OAT defines attachment as "*the over-allocation of cognitive and emotional resources towards a particular object, construct, or idea to the extent that the object is assigned an attractive quality that is unrealistic and that exceeds its intrinsic worth*" (Shonin, Van Gordon, & Griffiths, 2014a, p. 126). OAT further asserts that because the "self" is an imputed or made-up construct, no amount of exposure to desirable conditions will yield lasting happiness (Shonin et al., 2016). In other words, having finally acquired the sought-after commodity, person, or situation, OAT explicates that dissatisfaction will gradually reemerge and that new commodities or experiences will then become attractive, such that they substitute the former objects of attachment (Van Gordon et al., 2016a). According to OAT, attachment is a thirst that can never be quenched and it leads to psychopathology determinants, such as fatigue, sleep impairment, ruminative thinking, resentment, and stress (Shonin et al., 2016). A further explanation provided by OAT in terms of why a self-centered strategy is maladaptive is because all phenomena and situations are *impermanent* (Van Gordon et al., 2016a). Impermanence is a core Buddhist principle that refers to the fact that phenomena do not indefinitely endure and that they are in a constant state of flux (Van Gordon et al., 2016a).

Consequently, efforts to preserve or augment selfhood can, at best, only yield temporary happiness and will inevitably result in suffering because as explicated by the Buddhist teachings: (a) all that is gained must be lost (e.g., wealth), (b) that which comes together must come apart (e.g., relationships), (c) that which ascends to a high position must fall to a low position (e.g., fashions, regimes,

and dynasties), and (d) that which is created must be destroyed (e.g., the human body; Wallace, 2001). For example, it is inevitable that sooner or later, an individual who experiences wealth and fame will, whether through choice, turn of fortune, or illness or death, be separated from these circumstances. Furthermore, OAT argues that capacity for personal and interpersonal growth is impeded due to being deprived of the meta-cognitive and psychospiritual resources that arise from comprehending the true inseparable nature of the self and phenomena (Van Gordon, Shonin, Griffiths, & Singh, 2015).

FIT WITH CONVENTIONAL MODELS OF ADDICTION

According to Shonin et al. (2016), ontological addiction satisfies each of the six addiction criteria outlined in Griffiths' (2005) components model of addition. Griffiths' components model maps onto the fifth edition of *Diagnostic and Statistical Manual of Mental Disorders* criteria for addictive behavior (as outlined in detail by Griffiths, King, & Demetrovics, 2014) and asserts that addiction features components of (a) salience, (b) mood modification, (c) tolerance, (d) withdrawal, (e) conflict, and (f) relapse. Examples adapted from Shonin et al. (2016) of how ontological addiction satisfies Griffiths' criteria (and which overlap with the diagnostic features for ontological addiction) are as follows:

1. *Salience:* belief in a discrete "I" entity dominates thoughts, feelings, and behaviors, and becomes important to the extent that the individual with ontological addiction is unable to associate with the belief as being separate from themselves.
2. *Mood modification:* belief in an intrinsically existing "self" results in craving for objects, situations, and experiences that are understood to advance the interests of the self. Acquiring such objects, situations, or experiences elicits temporary feelings of happiness, satisfaction, and elation.
3. *Tolerance:* increasing levels of immersion in self-centered emotions, discursive thinking patterns, and worldly affairs are required in order to sustain and further augment the erroneous belief in inherent existence.
4. *Withdrawal symptoms:* any suggestion of transcending selfhood is regarded as a threat and thus repelled.
5. *Conflict:* belief in an intrinsically existing "self" results in craving for objects, situations, and experiences that are understood to advance the interests of the self. Not acquiring such objects, situations, or experiences elicits intrapersonal and intrapsychic conflict.
6. *Relapse:* ego-driven cognitive-behavioral processes quickly reestablish themselves following efforts to undermine addiction to selfhood.

Ontological addiction can occur either in isolation or with specific DSM-5 mental disorders [e.g., anxiety, depression, personality disorders, trauma- and stress-related disorders, dissociative disorders, obsessive–compulsive disorder (OCD), etc.] that can also be symptomatic of the condition (Shonin et al., 2016). However, neurodevelopmental disorders and disorders that are principally biological in nature (e.g., neurocognitive disorders, specific sexual dysfunctions, etc.) are not deemed to be diagnostically significant. Ontological addiction clearly includes an element of disordered thinking but given that elements of the cognitive and behavioral patterns that underlie ontological addiction might be considered functionally adaptive, extant clinical assessment tools for disordered thinking (e.g., as used when screening for OCD-spectrum disorders) are unlikely to be of adequate sensitivity. Furthermore, in the sense that it is contextualized in OAT, disordered thinking stems from an underlying addiction to selfhood and is more subtle in nature, because it relates to ignorance concerning the true mode in which reality exists.

In terms of onset, symptoms of ontological addiction are understood to arise progressively, with the first occurrence often manifesting following the development of a sense of selfhood during childhood (Shonin et al., 2016). For most individuals, the course is persistent with symptoms typically intensifying during adulthood unless treatment is initiated. According to OAT, direct functional consequences of ontological addiction involve the mind "turning-in" on itself such that addiction to selfhood restricts clarity of thought, perspective, and reasoning capacity. Furthermore, a disproportionate focus on "me," "mine," and "I" ultimately hinders the individuals' ability to perceive and remain aware of the present moment (Van Gordon et al., 2016a).

EMPIRICAL SUPPORT FOR ONTOLOGICAL ADDICTION

OAT posits that in addition to specifically targeting the aforementioned addiction components, treatment strategies should seek to undermine attachment or addiction to selfhood and thus help to remove the loci upon which emotional and conceptual "baggage" (i.e., determinants of psychopathology) can accumulate (Van Gordon et al., 2016a). This is in line with research demonstrating that reduced attachment to self is associated with (a) lower subjective perception of distress as well as superior physical and psychological health more generally (Pande & Naiku, 1992); (b) enhanced acceptance, non-reactivity, mindfulness, self-compassion, subjective well-being, and eudemonic well-being (Sahdra, Shaver, & Brown, 2010); (c) increases in prosocial behavior (Sahdra, Ciarrochi, Parker, Marshall, & Heaven, 2015); and (d) reduced psychological distress and chronic pain (Van Gordon, Shonin, Dunn, Garcia-Campayo, & Griffiths, 2017). The treatment model advocated in OAT is also consistent with findings from a mixed-method study of advanced meditation techniques in Buddhist meditators, which found that in addition to increasing levels of non-attachment, specific advanced meditation practices led to experiences of emptiness and non-self that helped participants "*harness the potential of their mind*" (Van Gordon, Shonin, Dunn, et al., 2018, p. 8).

Furthermore, a second-generation mindfulness-based intervention known as meditation awareness training (MAT) – which explicitly teaches emptiness meditation and accepts the key assumptions of ontological addiction – has been shown to be efficacious in the treatment of individuals suffering from work addiction (Shonin, Van Gordon, & Griffiths, 2014b; Van Gordon, Shonin, Dunn,

Garcia-Campayo, Demarzo, et al., 2017), sex addiction (Van Gordon, Shonin, & Griffiths, 2016b), gambling addiction (Shonin, Van Gordon, & Griffiths, 2014c), fibromyalgia (Van Gordon, Shonin, Dunn, Garcia-Campayo, & Griffiths, 2017), and stress, anxiety, and depression (Van Gordon, Shonin, Sumich, Sundin, & Griffiths, 2014). MAT has also been shown to improve work-related well-being and job performance in middle managers (Shonin, Van Gordon, Dunn, Singh, & Griffiths, 2014) as well as increase civic engagement in clinical samples (Van Gordon, Shonin, Dunn, Garcia-Campayo, & Griffiths, 2017). Qualitative studies evaluating MAT have demonstrated that participants associate engaging in emptiness techniques with improvements in psychological and spiritual well-being, as well as with the undermining of maladaptive egoistic constructs (Shonin & Van Gordon, 2015; Shonin, Van Gordon, & Griffiths, 2014d; Van Gordon, Shonin, & Griffiths, 2016c). Furthermore, in the aforementioned fibromyalgia study (a randomized controlled trial evaluating the treatment effectiveness of MAT), non-attachment to self was shown to fully mediate the relationship between meditation and reductions in both somatic and psychological fibromyalgia symptoms (Van Gordon, Shonin, Dunn, Garcia-Campayo, & Griffiths, 2017).

Further support for OAT is derived from the growing body of research into compassion and loving-kindness meditation that have been shown to improve (among other things) (a) schizophrenia symptomatology; (b) positive and negative affect; (c) depression, anxiety, and stress; (d) anger regulation; (e) personal coping resources; and (f) affective processing (for a comprehensive review, see Shonin, Van Gordon, Compare, Zangeneh, & Griffiths, 2015). From the Buddhist perspective, compassion and loving-kindness are deemed to foster psychospiritual well-being by cultivating other-centeredness (i.e., rather than self-centeredness), which facilities the undermining of self-focused beliefs and strategies (Shonin, Van Gordon, Compare, et al., 2015).

In terms of likely mechanisms of action, OAT asserts that cultivating an experiential understanding of emptiness, as well as competency in some of the aforementioned meditation techniques, helps to formulate a view of reality that is more accurate and thus more adaptive. A less-pronounced sense of self fosters clarity of perceptive and cognitive processes and allows the individual to construct a sense of self that is dynamic, inseparable from its environment, and that is "full" and complete due to experiencing that all things are "empty" (Van Gordon et al., 2016a). In other words, when the sense of selfhood – which is the locus upon which emotional and conceptual "baggage" can accumulate – becomes less pronounced, both psychological flexibility and psychological well-being begin to increase. This is consistent with the transtheoretical model of behavior change (Prochaska, Norcross, & DiClemente, 1995) in the sense that the meta-cognitive effects of emptiness and related forms of training appear to enable ease of movement in behavioral change.

CONCLUSIONS AND FUTURE DIRECTIONS

According to the Buddhist *three trainings* principle (Sanskrit: trishiksha), contemplative techniques can be grouped into those primarily concerned with (a) *ethical awareness* including compassion and loving-kindness, (b) *meditation* including mindfulness and other concentrative techniques, and (c) *wisdom* (in Buddhism, wisdom refers to insight into the true nature of self and reality) (Shonin et al., 2014a). Concepts such as "non-self," "non-attachment," and "emptiness" can be classified as wisdom principles and there currently appears to be a trend toward investigating them empirically as well as exploring their application in applied settings. Emerging findings show promise (Shonin et al., 2016), but there is clearly a need to develop this research area and continue to test the underlying theoretical assumptions and applied utility of OAT.

OAT provides a novel perspective not only in terms of the factors that underlie mental illness and human behavior more generally, but also in terms of how beliefs concerning selfhood are shaped and reified. Furthermore, OAT offers an alternative scientific viewpoint concerning the manner in which the self exists and challenges the plausibility of established scholarly opinions concerning the underlying nature of reality. It is hoped that this paper will be successful in fostering scientific discussion and stimulating research to identify areas of convergence and divergence between OAT and extant theories of self, reality, and suffering. A key future direction will be to determine where ontological addiction fits in relation to current models and classifications of more traditional and established models of addiction.

Funding sources: No financial support was received for this study.

Authors' contribution: All authors were involved in the conception and writing of the paper. Furthermore, we confirm that all authors are responsible for all contents of the article and had authority over manuscript preparation and the decision to submit the manuscript for publication.

Conflict of interest: The authors declare no conflict of interest.

REFERENCES

Chalmers, D., Manley, D., & Wasserman, R. (2009). *Metametaphysics: New essays on the foundations of ontology*. Oxford, UK: Oxford University Press.

Ghaemi, S. N. (2009). The rise and fall of the biopsychosocial model. *British Journal of Psychiatry, 195*(1), 3–4. doi:10.1192/bjp.bp.109.063859

Griffiths, M. D. (2005). A 'components' model of addiction within a biopsychosocial framework. *Journal of Substance Use, 10*(4), 191–197. doi:10.1080/14659890500114359

Griffiths, M. D., King, D. L., & Demetrovics, Z. (2014). DSM-5 Internet gaming disorder needs a unified approach to assessment. *Neuropsychiatry, 4*(1), 1–4. doi:10.2217/npy.13.82

Jung, C. G. (1981). *The archetypes and the collective unconscious* (Vol. 9, Part 1, 2nd ed.). Princeton, NJ: Bollingen.

Lama, D., & Berzin, A. (1997). *The Gelug/Kagyu tradition of mahamudra*. New York, NY: Snow Lion Publications.

Pande, N., & Naiku, R. K. (1992). Anasakti and health: A study of non-attachment. *Psychology and Developing Societies, 4*(1), 89–104. doi:10.1177/097133369200400106

Prochaska, J. O., Norcross, J. C., & DiClemente, C. C. (1995). *Changing for good: A revolutionary six-stage program for overcoming bad habits and moving your life positively forward*. New York, NY: Harper Paperbacks.

Rogers, C. (1959). A theory of therapy, personality and interpersonal relationships as developed in the client-centered framework. In S. Koch (Ed.), *Psychology: A study of a science. Vol. 3: Formulations of the person and the social context* (pp. 184–256). New York, NY: McGraw Hill.

Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. New York, NY: Guilford Publishing.

Sahdra, B. K., Ciarrochi, J., Parker, P. D., Marshall, S., & Heaven, P. (2015). Empathy and nonattachment independently predict peer nominations of prosocial behavior of adolescents. *Frontiers in Psychology, 6,* 263. doi:10.3389/fpsyg.2015.00263

Sahdra, B. K., Shaver, P. R., & Brown, K. W. (2010). A scale to measure non-attachment: A Buddhist complement to Western research on attachment and adaptive functioning. *Journal of Personality Assessment, 92*(2), 116–127. doi:10.1080/00223890903425960

Shonin, E., & Van Gordon, W. (2015). Managers' experiences of meditation awareness training. *Mindfulness, 6*(4), 899–909. doi:10.1007/s12671-014-0334-y

Shonin, E., Van Gordon, W., Compare, A., Zangeneh, M., & Griffiths, M. D. (2015). Buddhist-derived loving-kindness and compassion meditation for the treatment of psychopathology: A systematic review. *Mindfulness, 6*(5), 1161–1180. doi:10.1007/s12671-014-0368-1

Shonin, E., Van Gordon, W., Dunn, T., Singh, N., & Griffiths, M. D. (2014). Meditation awareness training for work-related wellbeing and job performance: A randomized controlled trial. *International Journal of Mental Health and Addiction, 12*(6), 806–823. doi:10.1007/s11469-014-9513-2

Shonin, E., Van Gordon, W., & Griffiths, M. D. (2013). Buddhist philosophy for the treatment of problem gambling. *Journal of Behavioral Addictions, 2*(2), 63–71. doi:10.1556/JBA.2.2013.001

Shonin, E., Van Gordon, W., & Griffiths, M. D. (2014a). The emerging role of Buddhism in clinical psychology: Toward effective integration. *Psychology of Religion and Spirituality, 6*(2), 123–137. doi:10.1037/a0035859

Shonin, E., Van Gordon, W., & Griffiths, M. D. (2014b). The treatment of workaholism with meditation awareness training: A case study. *Explore: The Journal of Science and Healing, 10*(3), 193–195. doi:10.1016/j.explore.2014.02.004

Shonin, E., Van Gordon, W., & Griffiths, M. D. (2014c). Cognitive behavioral therapy (CBT) and meditation awareness training (MAT) for the treatment of co-occurring schizophrenia with pathological gambling: A case study. *International Journal of Mental Health and Addiction, 12*(6), 806–823. doi:10.1007/s11469-014-9513-2

Shonin, E., Van Gordon, W., & Griffiths, M. D. (2014d). Meditation awareness training (MAT) for improved psychological wellbeing: A qualitative examination of participant experiences. *Journal of Religion and Health, 53*(3), 849–863. doi:10.1007/s10943-013-9679-0

Shonin, E., Van Gordon, W., & Griffiths, M. D. (2016). Ontological addiction: Classification, etiology, and treatment. *Mindfulness, 7*(3), 660–671. doi:10.1007/s12671-016-0501-4

Shonin, E., Van Gordon, W., Singh, N. N., & Griffiths, M. D. (2015). Mindfulness of emptiness and the emptiness of mindfulness. In E. Shonin, W. Van Gordon, & N. N. Singh (Eds.), *Buddhist foundations of mindfulness* (pp. 159–178). New York, NY: Springer.

Smith, E. R., & Mackie, D. M. (2007). *Social psychology* (3rd ed.). Philadelphia, PA: Psychology Press.

Thurman, R. (2005). *The infinite life: Seven virtues for living well*. New York, NY: Penguin.

Tsong-Kha-pa. (2004). *The great treatise on the stages of the path to enlightenment* (J. W. Cutler, G. Newland, Eds., & The Lamrim Chenmo Translation committee, Trans.) (Vol. 1). New York, NY: Snow Lion Publications.

Van Gordon, W., Shonin, E., Dunn, T., Garcia-Campayo, J., Demarzo, M., & Griffiths, M. D. (2017). Meditation awareness training for the treatment of workaholism: A non-randomised controlled trial. *Journal of Behavioral Addictions, 6*(2), 212–220. doi:10.1556/2006.6.2017.021

Van Gordon, W., Shonin, E., Dunn, T., Garcia-Campayo, J., & Griffiths, M. D. (2017). Meditation awareness training for the treatment of fibromyalgia: A randomised controlled trial. *British Journal of Health Psychology, 22*(1), 186–206. doi:10.1111/bjhp.12224

Van Gordon, W., Shonin, E., Dunn, T., Sheffield, D., Garcia-Campayo, J., & Griffiths, M. D. (2018). Meditation-induced near-death experiences: A three-year prospective study. *Mindfulness*. Advance online publication. doi:10.1007/s12671-018-0922-3

Van Gordon, W., Shonin, E., & Griffiths, M. D. (2016a). Buddhist emptiness theory: Implications for psychology. *Psychology of Religion and Spirituality, 9*(4), 309–318. doi:10.1037/rel0000079 10.1037/rel0000079

Van Gordon, W., Shonin, E., & Griffiths, M. D. (2016b). Meditation awareness training for the treatment of sex addiction: A case study. *Journal of Behavioral Addictions, 5*(2), 363–372. doi:10.1556/2006.5.2016.034

Van Gordon, W., Shonin, E., & Griffiths, M. D. (2016c). Meditation awareness training for individuals with fibromyalgia syndrome: An interpretative phenomenological analysis of participant's experiences. *Mindfulness, 7*(2), 409–419. doi:10.1007/s12671-015-0458-8

Van Gordon, W., Shonin, E., Griffiths, M. D., & Singh, N. N. (2015). There is only one mindfulness: Why science and Buddhism need to work together. *Mindfulness, 6*(1), 49–56. doi:10.1007/s12671-014-0379-y

Van Gordon, W., Shonin, E., & Richardson, M. (2018). Mindfulness and nature. *Mindfulness*. Advance online publication. doi:10.1007/s12671-018-0883-6

Van Gordon, W., Shonin, E., Sumich, A., Sundin, E., & Griffiths, M. D. (2014). Meditation awareness training (MAT) for psychological wellbeing in a sub-clinical sample of university students: A controlled pilot study. *Mindfulness, 5,* 381–391. doi:10.1007/s12671-012-0191-5

Wallace, B. A. (2001). *Buddhism with an attitude: The Tibetan seven-point mind training*. New York, NY: Snow Lion Publications.