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Abstract

Despite the fact that there is increasing integration of Buddhist principles and practices into Western mental health and applied psychological disciplines, there appears to be limited understanding in Western psychology of the assumptions that underlie a Buddhist model of mental illness. The concept of *ontological addiction* was introduced and formulated in order to narrow some of the disconnect between Buddhist and Western models of mental illness, and to foster effective assimilation of Buddhist practices and principles into mental health research and practice. Ontological addiction refers to the maladaptive condition whereby an individual is addicted to the belief that they inherently exist. The purposes of the present paper are to: (i) classify ontological addiction in terms of its definition, symptoms, prevalence, and functional consequences, (ii) examine the etiology of the condition, and (iii) appraise both the traditional Buddhist and contemporary empirical literature in order to outline effective treatment strategies. An assessment of the extent to which ontological addiction meets the clinical criteria for addiction suggests that ontological addiction is a chronic and valid – albeit functionally distinct (i.e., when compared to chemical and behavioral addictions) – form of addiction. However, despite the protracted and pervasive nature of the condition, recent empirical findings add support to ancient Buddhist teachings and suggest that addiction to selfhood can be overcome by a treatment process involving phases of: (i) becoming aware of the imputed self, (ii) deconstructing the imputed self, and (iii) reconstructing a dynamic and non-dual self.

Introduction

The biopsychosocial model of mental illness asserts that biological, psychological, and social factors each play a role in the onset of mental illness (Engel, 1978). It was formulated as an alternative to the medical model, which from the late 1970s onwards, was increasingly regarded by the scientific community as a form of biomedical reductionism (Ghaemi, 2009). However, despite the more inclusive approach of the biopsychosocial model, it is not necessarily compatible with emerging thought and empirical findings regarding the etiology and treatment of psychopathology. More specifically, there is growing assimilation in the clinical literature of ancient Buddhist principles concerning the determinants of mental illness, as well as interventional techniques constructed upon these principles (Kelly, 2015). Consequently, a somewhat paradoxical trend appears to be emerging where mental illnesses that are increasingly conceptualized and diagnosed according to a Western biopsychosocial framework, are being treated (or recommended for treatment) utilizing Buddhist-derived interventions that reject the assumption that mental illness can be solely attributed to a combination of biological, psychological, and social influences.

Consistent with the principles of evidence-based medicine and a 'what works' approach to treating mental illness, it could be argued that utilizing interventions constructed upon assumptions that are incongruous with a Western understanding of psychopathology does not present a problem in and of itself. However, although this is true up to a point, a problem begins to emerge when: (i) many researchers and clinicians are seemingly unaware that the assumptions underlying the techniques they are researching and/or administering run tangential to mainstream Western scientific and medical opinion concerning the determinants of psychopathology, and (ii) there is limited understanding in the clinical and scientific literature of the mechanisms posited by 2500-year-old Buddhist meditational theory that underlie therapeutic change (Shonin, Van Gordon, & Griffiths, 2014a).

In an attempt to foster effective assimilation of Buddhist practices and principles into mental health research and practice, and in an attempt to narrow some of the disconnect between Buddhist and Western models of mental illness, the concept of *ontological addiction* was recently introduced and formulated by Shonin, Van Gordon, and Griffiths (2013). Consistent with traditional Buddhist thought concerning the origins and nature of psychopathology (and suffering more generally), ontological addiction refers to the maladaptive condition whereby an individual is addicted to the belief that they inherently exist (i.e., as an independent and autonomous entity). The purpose of the present paper is to build upon earlier theoretical and empirical works by undertaking an in-depth assessment of the various attributes of ontological addiction. By so doing, the present authors hope to elucidate a Buddhist construction of mental illness that is more palatable to a Western medical and scientific audience. The paper begins by classifying ontological addiction in terms of its definition, symptoms, prevalence, and functional consequences, and continues by examining the etiology of the condition. The final part of the paper appraises both the traditional Buddhist and current empirical literature in order to propose effective treatment strategies.

Classification

Definition

Ontological addiction has been 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). The intended meaning of each of the key terms employed in this definition is explicated below in more detail.

Deep-rooted belief

The words *deep-rooted belief* are intended to emphasize the persistent and consuming nature of the belief in an inherently existing self. In many respects, this term is similar to the notion of core beliefs in cognitive behavioral therapy (CBT). Core beliefs are deep-seated beliefs that often go unrecognized but significantly influence the way individuals interpret and react with people and the world around them (Wells, 1997). However, over and above their meaning within CBT contexts, the words *deep-rooted belief* are employed in the definition of ontological addiction in order to depict a much more persistent and primitive form of core belief. According to Buddhist theory, in the period following death the innermost aspect of a person's mind or consciousness is reborn within another physical (or non-physical) form (Sogyal, 1998).[1] Buddhism asserts[2] that the particular rebirth an individual is attracted to is governed by whichever cognitive and behavioral response patterns become dominant during their lifetime (and during previous lifetimes). The Buddhist teachings explain that embedded patterns of thinking and behavior leave an 'imprint' on the mind-stream and that following death, these tend to propel the innermost aspect of consciousness towards (or away from) a particular rebirth (Sogyal, 1998). A detailed explication of Buddhist transmigration theory is beyond the scope of this paper but the salient point is that according to Buddhist philosophy,

[1] It could be construed that there is a contradiction between the statement that there is an innermost aspect of consciousness that survives death, and the assertion in the subsequent section that sentient beings are of the nature of 'non-self'. However, these assertions are compatible because the innermost aspect of consciousness is also of the nature of non-self (Shonin & Van Gordon, 2014a).

[2] Some scholars assert that there are many 'Buddhisms'. In terms of the external form that Buddhism takes within a particular culture, time, and geographic region, this assertion is acceptable. However, all authentic Buddhist lineages teach methods that ultimately lead to the same result. Furthermore, most of these methods are intended to foster insight into core Buddhist principles such as suffering, impermanence, and non-self. Suffering is suffering whether you approach it from a *Theravada*, *Mahayana*, or *Vajrayana* perspective (see Shonin et al. [2014a] for an overview of major Buddhist schools, and the differences between them). The same applies to impermanence and non-self. Thus, the different Buddhist 'vehicles' (a translation of the Sanskrit word *yana*) and their respective traditions all work with the same principles, which they reconstitute and teach in different ways. The most profound *Vajrayana* practices are implicit within the simplest of Buddhist teachings, such as the discourse on the four noble truths (Van Gordon, Shonin, Griffiths, & Singh, 2015b). Therefore, within Buddhism, there are different interpretations of how to effectively practice spiritual development, but in essence, they represent variations on the same theme.

beings are born with a latent tendency to clutch at a 'self' and to believe that they inherently exist (Dalai Lama & Berzin, 1997).

Inherently existing 'self' or 'I'

Models of 'the self' in Western psychology range from those that posit a 'concrete self', to those that assume a more fluid self-schema. An example of the former would be Rogers' (1959) humanistic formation in which dimensions of *self-worth*, *self-image*, and *ideal-self* are collectively understood to comprise an individual's *self-concept*. Examples of the latter would be certain social psychological constructions in which a more relational self is proposed (Smith & Mackie, 2007), and Jungian theory (1981) where it is asserted that the self cannot be confined to a given location in time or space. While some postmodern and poststructuralist philosophical and psychological perspectives have begun to question the validity of the self-concept (e.g., Gergen, 2009), it remains the case that most established models of self in Western psychology are locus-orientated, and thus implicitly or explicitly accept that there is a 'self' or an 'I' that intrinsically exists (Chan, 2008; Shonin, Van Gordon, Singh, & Griffiths, 2015a).

Despite the tendency of most people to derive reassurance from the belief that they exist as a definite 'I' entity, the existence of such an entity is logically and scientifically implausible. Without exception, phenomena – including human beings – do not manifest as discrete standalone entities but manifest only in reliance upon numerous (or innumerable) causes and conditions (Dalai Lama, 2001). For example, the human body relies for its existence on the air that it breathes, animals and plants that it eats, rain that it drinks, and so forth. If a single one of these conditions is not present, the human body ceases to manifest (Nhat Hanh, 1992). The fact that phenomena are fundamentally interconnected (i.e., boundless) means that they are of the nature of 'non-self'. Phenomena do not possess a self

that exists independently. However, for the same reasons that it can asserted that animate and inanimate objects are empty of an intrinsically existing self, it can also be asserted that they are 'full' of everything that exists. Therefore, the one implies the whole, and the whole implies the one. Consequently, the notion of an inherently existing 'self' or 'I' is referred to as *erroneous* in the above definition of ontological addiction because a self that exists independently and of its own accord is untenable (for a detailed explication of the notions of 'non-self' and 'emptiness', see Shonin et al., [2015a]).

Unwillingness to relinquish and *impaired functionality*

The terms *unwillingness to relinquish* and *impaired functionality* refer to the 'addictive' properties of ontological addiction, and the fact that it is a maladaptive condition. According to Griffiths' (2005) component model of addiction, for a condition to be considered as an addiction, the following six components must be present: (i) *salience*, (ii) *mood modification*, (iii) *tolerance*, (iv) *withdrawal*, (v) *conflict*, and (iv) *relapse*. The following draws upon both the traditional Buddhist and contemporary psychological (theoretical and empirical) literature in order to examine the extent to which ontological addiction meets the conventional criterial for classification as an addiction:

1. *Salience* occurs when the activity becomes the single most important undertaking in the person's life and dominates their thinking, feelings, and behavior (Griffiths, 2005). Conventional chemical and behavioral forms of addiction involve the ingestion of a psychoactive substance (e.g., alcohol, nicotine, cocaine, etc.) and/or engagement in an activity (e.g., gambling, internet use, sex). The substance or activity in question becomes a (or the) focal point in the individual's life, and they invariably have some

awareness of their involvement with the activity or substance in question (Griffiths, 2005).

A key difference between ontological addiction and conventional forms of addiction is that in the case of the former, the individual is not necessarily aware that they are in some way 'involved' with the object of their addiction (i.e., they are not consciously engaged in the act of believing that they inherently exist). However, this does not detract from the fact that their belief in a discrete 'I' entity dominates their thoughts, feelings, and behaviors. According to Buddhist psychology, attachment or addiction to self governs each and every choice made by an individual afflicted with ontological addiction (Chan, 2008). In other words, the belief in an inherently existing self is understood to become so important to the individual that they are unable to associate with it as being separate from themselves (i.e., it has become a characteristic that defines their being rather than an activity that they routinely engage in). Thus, the criterion of salience is certainly met by ontological addiction, but it takes on a slightly different aspect compared to the meaning of this term in conventional addiction contexts.

2. *Mood modification* refers to the subjective experiences that people report as a consequence of engaging in the addictive activity, and can be seen as a coping strategy (i.e., experiencing an arousing 'buzz' or a 'high' or paradoxically, a tranquilizing feeling of 'escape' or 'numbing') (Griffiths, 2005). According to Buddhist psychology and what is known as the *chain of dependent origination* (Nanamoli & Bodhi, 2009), the underlying cause of all feelings (positive or negative) is ignorance as to the manner in which the self exists. Because most individuals have a deep rooted belief in an intrinsically existing 'self', they crave objects, situations, and experiences that they deem will advance the interests of the self. Acquiring such

objects, situations, or experiences brings temporary happiness, such as feelings of comfort, relief, elation, pleasure, joy, or pride. However, the process of desiring and acquiring 'favorable' circumstances reifies the individual's belief in a self, and an addiction feedback loop arises (see section on *Etiology* for a fuller description of addiction feedback loops in the context of the ontological addiction condition).

The strategy of the individual suffering from ontological addiction is flawed because demand (i.e., desire) for favorable conditions always outweighs supply. Indeed, when an individual acquires a certain level of psychological and/or material comfort, Buddhism asserts that their expectations raise accordingly (Shonin et al., 2014a). Therefore, ontological addiction gives rise to 'trait' experiences of mood modification (e.g., elation, satisfaction) that arise out of a 'state' experience of suffering which is born from constantly craving such trait experiences.

3. *Tolerance* is the process whereby increasing amounts of the activity are required to achieve the former mood modifying effects (Griffiths, 2005). Compared to the other components of Griffiths' model of addiction, the rationale for including tolerance as a feature of ontological addiction requires greater explanation. From the Buddhist perspective and as discussed above, people are born with a propensity to become addicted to themselves. Depending upon which cognitive-behavioral response patterns become dominant during their life, Buddhism asserts that they either augment or weaken their belief in selfhood (Gampopa, 1998). However, during this current time period, it is understood (within Buddhism) that most individuals are inclined towards compounding their belief in selfhood. In Buddhist terms, this is the same as asserting that although most individuals are aware of a spiritual aspect to their being, they invariably choose not to nourish or develop it.

One explanation for the tendency of people to repel themselves from authentic spiritual practice (which does not necessarily equate to religious practice) is that they do not wish to confront and/or make efforts towards dismantling the 'selfhood' that they have worked so hard to construct (Trungpa, 2002). Consequently, according to this line of Buddhist thought, individuals effectively 'run' from themselves and require ever increasing levels of immersion in emotions, discursive thinking patterns, and worldly pursuits in order to sustain and further augment the deluded belief that they inherently exist. From this perspective, it can be argued that tolerance is a component feature of ontological addiction.

4. *Withdrawal symptoms* are the unpleasant feeling states and/or physical effects (e.g., moodiness, irritability, etc.) that occur when the person is unable to engage in the addictive activity (Griffiths, 2005). As noted above, in the current era (known in Buddhism as *pashchimadharma* [Sanskrit] or *mappō* [Japanese]), people might go through the motions of engaging in spiritual practice, but according to Buddhist theory, the majority of people are repelled by the idea of wholeheartedly committing themselves to spiritual development (Marra, 1988). Consequently, Buddhism asserts that individuals invariably repel – sometimes with extreme anger or venom – attempts to ease them off their addiction to a 'me', a 'mine', and an 'I'. One well-known historic example of this might be the crucifixion of Jesus Christ. Through the use of selfless acts of kindness and what were deemed to be miracles, Christ is reported to have provided people with undeniable 'evidence' that the 'Kingdom of God' was a place or state they could access after transcending selfish thoughts and behaviors. However, having been shown, beyond reasonable doubt, that it was possible (i.e., via engaging in authentic spiritual practice) to completely transcend selfishness and thus experience 'God', historical records (e.g., the Gospel according to St. Luke, Chapter

23) report that the ‘people’ became angry and killed (i.e., crucified) Christ. Thus, if Buddhism is correct in asserting that individuals are generally repelled by the idea of transcending selfhood, then it can be argued that withdrawal symptoms are a component of ontological addiction.

5. *Conflict* refers to the conflicts between the person and those around them (interpersonal conflict), conflicts with other activities (e.g., work, social life, hobbies, and interests) or from within the individual (e.g., intra-psychic conflict and/or subjective feelings of loss of control) that are concerned with spending too much time engaging in the addictive activity (Griffiths, 2005). As highlighted in more detail below (see Etiology section), Buddhism attributes all forms of intrapersonal and intra-psychic conflict to an individual’s belief in, and addiction to, selfhood (Gampopa, 1998). Even attempts to avoid intra-psychic conflict by engaging in experiential avoidance (defined by Hayes et al. [2006] as unwillingness to remain in contact with particular private experiences) would be considered in Buddhism to be an expression of ontological addiction because if the individual was not afflicted by a belief in selfhood, they would not be inclined to reject experiences or sensations that they deem are constituents of the ‘self’.

Recent empirical findings support the Buddhist position regarding the underlying source of conflict and indicate that non-attachment to self and experience plays an important role in the regulation of maladaptive and distressing psychological states. Based on participant responses to the (Buddhist-compatible) *Non-Attachment Scale* (Sahdra, Shaver, & Brown, 2010), non-attachment to self and experience has been shown to predict: (i) greater levels of acceptance, non-reactivity, mindfulness, self-compassion, subjective wellbeing, pro-social behavior, and eudemonic wellbeing, and (ii) lower levels of fatalistic outlook, intimacy avoidance, dissociation, and

alexithymia (i.e., an impaired capacity to identify or describe feelings) (Sahdra et al., 2010; Sahdra, Ciarrochi, Parker, Marshall, & Heaven, 2015). Based on these empirical findings and the Buddhist construction of suffering more generally, it appears that conflict is a core feature of ontological addiction.

6. *Relapse* is the tendency for repeated reversions to earlier patterns of excessive engagement in the activity to recur, and for even the most extreme patterns typical of the height of excessive engagement in the addictive activity to be quickly restored after periods of control (Griffiths, 2005). According to some Buddhist teachers, it is not uncommon for individuals to undertake spiritual practice and begin making inroads into weakening their addiction to self but to subsequently lose enthusiasm and allow ego-driven cognitive-behavioral processes to re-establish themselves (Shonin & Van Gordon, 2015a). From this point of view, it appears that relapse is a component feature of ontological addiction.

Symptoms

If it is accepted that a 'psychopathology' reflects an aberration from a statistical norm of suffering or functionality, then it is questionable whether ontological addiction can be defined as such. However, if the term 'psychopathology' is understood to mean a condition that severely and chronically impairs functionality, then ontological addiction can be considered an 'illness'. Either way, the merits of developing and validating a diagnostic test for ontological addiction need to be carefully considered because if the assumptions elucidated throughout this paper are correct, then it can be expected that a substantial proportion of the world's population would satisfy the diagnostic criteria. This is not to say that a clinical cut-off and severity ratings could not be established because, consistent with Buddhist thought, it is reasonable to assume that there would be variation amongst individuals in the intensity of

their belief in an inherently existing self. Nevertheless, the primary purpose for elucidating below the primary symptoms of ontological addiction – that have been sourced from a synthesis of the canonical Buddhist literature – is to help foster understanding of the Buddhist model of mental illness rather than provide a definitive set of diagnostic criteria *per se*:

1. Presence of a DSM-5 mental disorder (e.g., anxiety, depression, personality disorders, trauma and stressor-related disorders, obsessive-compulsive disorders, dissociative disorders, etc.) excluding neurodevelopmental disorders and other disorders that are principally biological in nature (e.g., neurocognitive disorders, specific sexual dysfunctions, etc.).
2. Blindly focused on advancing wealth, material possessions, or status (including at the expense of others' wellbeing).
3. General disregard for the fact that death is a certainty and that its' timing is uncertain (i.e., a lack of death awareness).
4. Embroiled in schemes, plans, and/or quarrels with limited capacity to step back and approach such activities with clarity and perspective.
5. Easily offended and responds with anger/irritation on occasions when the ego or selfhood is challenged or questioned.
6. Gloats and responds with pride when praised or on occasions when the ego or selfhood is reinforced.
7. Dislike or hatred of individuals and scenarios that are deemed to threaten the interests of the self.
8. Strong attachment towards individuals and scenarios that are deemed to advance the interests of the self.
9. Superiority or inferiority complex.

10. Limited interest in matters of a spiritual nature or in undertaking spiritual practice.
11. Blind belief in a set of religious dogma including the belief in a ruling or divine entity that is in some way responsible for life occurrences.
12. Belief that there intrinsically exists a: (i) self or other, (ii) this or that, (iii) here or there, (iv) past, (v) future, or (vi) present moment[3].

Prevalence

Given the very recent formulation of the ontological addiction concept, no studies have been published that specifically estimate the prevalence of the condition. However, there exist prevalence estimates for some of the abovementioned symptoms of ontological addiction and thus, it is possible to indirectly approximate a minimum level of global prevalence for the condition. Notable examples are: (i) global prevalence estimates for the existence of mental illness (symptom 1 above) which are in the range of 20-33% (National Institute of Mental Health, 2012; WHO International Consortium in Psychiatric Epidemiology, 2000), and (ii) prevalence estimates for a belief in God (symptom 11 above) which for the US, are in the order of 78-92% of the population (Gallup, 2013; Maugans & Wadland, 1991; Harris Poll, 2009).

Clearly, the reliability of such figures is questionable because (for example) there are criteria whereby a belief in an external God would not necessarily equate to the occurrence of ontological addiction. For instance, the word 'God' means different things to different people and whilst, from the Buddhist perspective, a belief in a divine and/or ruling being requires that there is a 'self' that likewise believes it exists, the belief that 'God' corresponds more to

[3] From the Buddhist perspective, being 'without intrinsic existence' is a property that applies to all things, including the present moment. In other words, 'non-self' and 'emptiness' (which in essence are the same thing) are not selective. Briefly, because time never stands still, logic dictates that there is never a point when a present moment crystallizes into existence. For a fuller explication of why the present moment doesn't intrinsically exist, see Shonin & Van Gordon (2014b).

a principle, pervasive and unifying energy, or state that awaits those that can transcend selfhood reflects a much less dualistic (i.e., self-other) interpretation. Nevertheless, given the broad range of symptoms that relate to ontological addiction – of which some (e.g., anger, hatred, pride, desire for wealth, etc.) might be deemed to be core traits of human behavior – global prevalence rates for at least a mild-to-moderate level of ontological addiction could be expected to exceed 99%.

Development and Course

As discussed above, ontological addiction is considered to be latent at birth. However, symptoms first begin to manifest as an individual develops a sense of selfhood during childhood. Consequently, and in practice, there is a progressive onset with symptoms first manifesting during childhood and gradually progressing into adulthood. For most individuals, the course is persistent and stable, unless treatment is initiated (Tsong-kha-pa, 2004).

Risk and Prognostic Factors

Risk and prognostic factors for ontological addiction are principally environmental (i.e., rather than genetic or physiological). A lack of exposure to, or uptake of, spiritual values and principles is likely to increase severity and/or result in earlier onset. Exposure to conditions that foster desire for wealth, pleasure, and reputation can likewise increase severity (Gampopa, 1998).

Functional Consequences

The unyielding belief in a ‘me’, ‘mine’, and ‘I’ results in interpersonal and inter-psychic conflict as discussed above. However, perhaps more importantly, ontological addiction effectively causes the mind to limit and ‘turn in’ on itself. Due to being absorbed in selfhood,

perspective and clarity of thought diminishes and the belief in inherent existence acts a filter that impedes the ability to directly perceive and remain aware of the present moment (Norbu & Clemente, 1997). Self-addiction drives cyclic existence (i.e., the unending cycle of birth, death, and rebirth) and fosters ignorance as to the ultimate and deeply interconnected nature of phenomena (Dalai Lama, 2001).

Etiology

Earlier in the paper, reference was made to the lack of compatibility between the Buddhist and biopsychosocial models of mental illness. Buddhism does not deny that biological, psychological, and social factors play a role in the onset of mental illness, but it considers them to be secondary determinants. From the Buddhist perspective, a primary limitation of the biopsychosocial model is that it places minimal emphasis on the role of spiritual factors. This conceptualization also appears to be carried over to the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5; American Psychiatric Association, 2013), where discussion specifically relating to problems that are spiritual or religious in nature is limited to a total of four lines of text.

In the DSM-5, religious or spiritual problems are categorized as *Problems Related to Other Psychosocial, Personal, and Environmental Circumstances* within the section on *Other Conditions that May Be a Focus of Clinical Attention*. In respect of religious or spiritual problems (DSM-5 code V62.89), the DSM-5 gives examples of: (i) distressing experiences that involve loss or questioning of faith, (ii) problems associated with conversion to a new faith, and (iii) questioning of spiritual values that may not necessarily be related to an organized church or religious institution (American Psychological Association, 2013). Thus, the DSM-5 considers problems that are spiritual or religious in nature to be features that can accompany, but are distinct from, mental illness (Yang & Lukoff, 2006). Rejecting the

possibility of spiritual issues manifesting as mental illness arguably reduces the clinical significance of such issues. This is consistent with what the present authors would argue is a relative lack of emphasis placed by clinical psychology on the role that spiritual factors play in the etiology of diagnosable mental illnesses.

In comparison, Buddhism adopts a different perspective and asserts that spiritual factors: (i) are the foremost determinants of mental illness, and (ii) can be variants of mental illness in and of themselves (e.g., ontological addiction) (Shonin et al., 2013). From the Buddhist perspective, the term 'spiritual' could be interpreted as meaning 'that which helps to transcend selfhood'. Consequently, character traits such as generosity, patience, compassion, loving kindness, and death awareness are highly regarded in Buddhism because to differing extents, their cultivation requires the individual to be 'other' centered as opposed to 'self' centered (Khyentse, 2007). Consistent with this mode of thought, actions and behaviors that are self-centered are generally looked upon unfavorably in Buddhism because they are understood to reify an individual's belief in inherent existence (Dalai Lama, 2001). Transcending selfhood in the context of it being a spiritual pursuit should not be confused with losing one's self-identity as part of a group. From the Buddhist perspective, individuals generally join groups or causes because the ego-self wants to belong to, or believe in, something (Shonin et al., 2014a). In other words, for most people, joining causes and groups actually reifies their sense of a 'me', 'mine' or 'I' (e.g. 'I belong to this', 'I believe in that', 'my view', 'my rights', etc.).

Due to being ignorant of their absolute nature and as previously discussed, Buddhism explicates that individuals are attracted to circumstances that they deem will promote their selfhood and interests (Chah, 2011). This process is known as *attachment* and is defined 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 et al., 2014a, p. 126). Buddhism teaches that because sentient beings believe that they inherently exist, they view the world in dualistic terms and allocate unrealistic levels of value to (what they deem to be) desirable external objects and situations.

However, because the 'self' is an imputed (i.e., made up) construct, Buddhism asserts that no amount of exposure to desirable objects and circumstances will result in lasting happiness (Gampopa, 1999). In other words, having finally gained possession of the commodity, person, or position that was previously the object of desire, Buddhism teaches that dissatisfaction will once again manifest in the mind, and that new commodities and situations will avail themselves as the object of the self's attachment (Chah, 2011). Furthermore, because sentient beings and the conditions in which they find themselves are constantly changing (i.e., they are impermanent), favorable circumstances can, at best, be enjoyed for only a limited period of time. Therefore, a component attribute of ontological addiction is the incessant desire to have something else, be somebody else, and/or be somewhere else.

Thus, Buddhism asserts that desirous and self-centered thoughts and behaviors are both product and cause of ontological addiction (Shonin et al., 2014a). The belief in an inherently existing self is understood to augment each time an individual views the world in self-other (i.e., dualistic) terms, and this augmented belief, in turn, increases the intensity and frequency of self-centered thoughts and behaviors. In many respects, this process is similar to current clinical understanding regarding the acquisition of addictive behavior and the development of addiction feedback loops. According to conventional addiction theory, particular behaviors induce positive or negative affective states, as well as memories that correspond to the mood-modification associated with these behaviors (Baker, Piper, McCarthy, Majeskie, & Fiore, 2004). Stimuli subsequently trigger these memories that result in cravings to either re-

experience (i.e., if it was positive), or avoid (i.e., if it was negative), the affective response. The cravings prompt behaviors that are subsequently rewarded or punished by the resulting modification of mood, thus encoding additional associative memories and fueling an addiction feedback loop (Houlihan & Brewer, 2015).

According to the Buddhist model, the process of acting selfishly and thus amplifying the belief in selfhood results in a negative feedback loop (Dalai Lama, 2001). As referred to previously, the intensification of selfish beliefs and behavioral patterns is understood in Buddhism to culminate in spiritual undernourishment. Without the protective influence of suitably developed spiritual competencies (e.g., compassion, loving-kindness, generosity, metacognitive insight, etc.), high levels of self-absorption eventually render individuals susceptible to mental illness including (but not limited to) episodes of anxiety, depression, trauma, and psychosis (Shonin et al., 2013). In summary, from the Buddhist perspective, suffering (including ontological addiction and derivative forms of mental illness) is the consequence of the mind: (i) viewing and interacting with the world through the lens of selfhood, and (ii) attempting to force reality to function in a manner that is scientifically and logically implausible.

Treatment

Assessment of an individual's suitability to receive treatment, and determining the duration and specific content of individual treatment phases, should be undertaken by a highly experienced meditator who, consistent which Buddhist guidelines, has cultivated a serene and disciplined mind (Van Gordon, Shonin, Griffiths, & Singh, 2015a; a detailed appraisal of the qualities of a suitable 'ontological addiction therapist' is beyond the scope of this paper). However, for the purposes of outlining a generic course of treatment for ontological addiction, the following phases of treatment are recommended: (i) becoming aware of the

imputed self, (ii) deconstructing the imputed self, and (iii) reconstructing a dynamic and non-dual self.

Phase One: Becoming Aware of the Imputed Self

The treatment of ontological addiction is concerned with uprooting an individual's deep-rooted belief that they inherently exist. However, before the process of deconstructing the self can begin in earnest, it is first necessary for the individual to become aware of: (i) the fact that they have constructed a self, and (ii) the various attributes of the imputed self. Consequently, the first phase of treatment focuses on enhancing self-awareness and on helping individuals come to terms with the fact that there are actually no credible grounds upon which it can be said that they intrinsically exist as a discrete 'I' entity. For most individuals and consistent with qualitative research findings, the implausibility of selfhood is likely to be a difficult notion to digest (Shonin & Van Gordon, 2015b; Van Gordon, Shonin, & Griffiths, 2015b). Therefore, an element of psycho-education – focusing on the logic and principles of non-self and emptiness – is normally administered at the onset of treatment.

Another principal aspect of the first treatment phase is gaining proficiency in meditative awareness. Meditative techniques introduced during this phase of treatment tend to be more concentration-based (i.e., as opposed to insight-based). Concentrative meditation (Pāli: *samatha*) is understood to facilitate an individual's development of self-awareness, including awareness of the movements of both body and mind (Dalai Lama & Berzin, 1997; Singh et al., 2013). Mindfulness plays an important role here and serves the purpose of regulating concentration and ensuring that it remains meditative in aspect (Van Gordon et al., 2015a). A primary goal of the first phase of treatment is for the individual to develop the ability to sustain a degree of meditative awareness outside of formal seated meditation sessions (i.e., as they go about their daily activates). A detailed explication of the principles

of concentrative meditation and mindfulness is beyond the scope of this paper but some important considerations are as follows:

1. The focus should be on introducing meditative awareness into daily life, and seated meditation sessions of excessive duration should be discouraged.
2. The individual's breathing can be used as an attentional referent (i.e., to anchor concentration in the present moment) (Singh et al., 2007).
3. Whilst maintaining awareness of breathing, meditative attention should be directed, in successive order, towards the body, feelings, and mental processes (e.g., thoughts, perceptions, self-centered beliefs and cognitive-behavioral responses, attachments, etc.).
4. The primary objective is to observe phenomena (e.g., sights, sounds, feelings, thoughts, etc.) as they enter the attentional sphere. Phenomena should be permitted to endure as objects of awareness until such time as they naturally exit the attentional sphere.
5. Over exertion (including forced breathing) should be discouraged.
6. The overall objective of concentrative meditation is to introduce tranquility into the body, and 'breathing space' into the mind. Feelings of meditative tranquility should be encouraged but dependency on them should be discouraged. If meditative tranquility arises, it should be treated as an observable phenomenon and – as with all other psychosomatic experiences – adopted as an object of meditative awareness.

Although the primary purpose for utilizing concentrative meditation is to induce psychological and somatic calming, findings from fMRI studies suggest that the process of simply observing and placing concentration upon observable sensory, psychological, and

environmental phenomena begins to undermine the intensity of self-addiction. More specifically, activation of the default mode network (DMN) is correlated with the state of 'mind wandering' (i.e., discursive thinking) and self-referential processing (Buckner, Andrews-Hanna, & Schacter, 2008; Whitfield-Gabrieli & Ford, 2012). Mindfulness practice has been shown to reduce activation of the DMN, including in the posterior cingulate cortex (a primary DMN node) (Houlihan & Brewer, 2015). Given that posterior cingulate cortex activation is positively correlated with severity of nicotine- and alcohol-related addictive cravings (Claus, Ewing, Filbey, Sabbineni, & Hutchison, 2011), there is tentative evidence suggesting that concentrative meditation may help to regulate the activation of brain areas associated with self-addiction and derivative self-referential processes (Houlihan & Brewer, 2015).

Phase Two: Deconstructing the Imputed Self

Phase One of the treatment process helps to foster familiarity with the various attributes of the imputed self and to create the appropriate conditions for uprooting maladaptive ego-centered core beliefs. This procedure of uprooting or 'deconstructing' the imputed self is the focus of Phase Two, and it unfolds via the use of both *indirect* and *direct* psycho-spiritual techniques.

Indirect techniques

During Phase Two of the treatment, the individual is taught to cultivate and practice a range of spiritual competencies including compassion, generosity, patience, loving-kindness, and death awareness. The intention behind training in such aptitudes is to indirectly undermine ego-centricity, and thus complement the action of meditative techniques that are intended to directly target addiction to selfhood (see *Direct techniques* sub-section below).

These spiritual aptitudes, that can be easily practised outside of formal seated meditation, have in recent years been subject to differing degrees of empirical enquiry, and are each understood to play an important role in fostering psychological wellbeing and/or treating psychopathology. For example, compassion and loving kindness-meditation have been shown to increase activity in brain areas associated with the regulation of neural emotional circuitry (e.g., anterior insula, post-central gyrus, inferior parietal lobule, amygdala, and right temporal-parietal junction) (Keysers, 2011; Lutz, Brefczynski-Lewis, Johnstone, & Davidson, 2008). Increased regulation of neural emotional circuitry helps to modulate descending brain-to-spinal cord noxious neural inputs (Melzack, 1991), and may explain why some individuals experience reductions in pain intensity and pain tolerance during and following engagement in compassion and loving-kindness meditation (Shonin, Van Gordon, Compare, Zangeneh, & Griffiths, 2015b). Loving-kindness and compassion meditation have also been shown to increase implicit and explicit affection towards known and unknown others, and to thus improve social-connectedness and prosocial behavior (Hutcherson, Seppala, & Gross; 2008; Leiberg, Olga, & Tania, 2011). In turn, greater social-connectedness exerts a protective influence over life-stressors as well as feelings of loneliness, isolation, and low sense of purpose (Shonin et al., 2015b).

Direct techniques

Breath awareness and the meditative tranquility referred to in the above explication of Phase One of the treatment has been shown to slow down autonomic and psychological arousal (Van Gordon, Shonin, & Griffiths, 2015c). This, in turn, allows thoughts, feelings and sensory processes to be recognized and meditatively investigated on an individual basis. This meditative investigation of phenomena is a key component of Phase Two of the treatment, and the technique taught to individuals in order to directly investigate ‘selfhood’ is known as

vipassanā (Pāli) or insight meditation. The type of *vipassanā* meditation being referred to here is fundamentally different from the general use (or misuse) of this term in the psychological literature. For example, *vipassanā*, which actually translates as 'superior seeing', is often incorrectly referred to in the scientific (and popular Buddhist literature) as having the same meaning as the term mindfulness (Van Gordon et al., 2014a).

In the manner that *vipassanā* meditation is taught and conceptualized in the treatment of ontological addiction (and in the traditional Buddhist literature), the practice involves capturing and refining the attentional focus cultivated during mindfulness and concentrative meditation practice in order to direct it in a very deliberate and specific manner (Gampopa, 1999). Consequently, insight meditation is best practised following a prior period of concentrative meditation (Tsong-Kha-Pa, 2004). The reason for this is because the tranquilization of body and mind that occurs during concentrative meditation helps to introduce focus and perceptive clarity into the mind (Chah, 2011). During *vipassanā* meditation, this attentional focus is then directed in order to try to identify the causes, intrinsic properties, and absolute nature of a given phenomenon. More specifically, the technique involves attempting to locate the 'selfness' of the object of meditation and of the meditator more generally. When *vipassanā* meditation is practised correctly, the individual begins to realize that it is impossible to identify an intrinsically existing self within either themselves or an external object (Van Gordon, Shonin, Singh, & Griffiths, 2015d). Consequently, the deep-rooted core beliefs that sustain ontological addiction begin to be undermined.

Phase Three: Reconstructing a Dynamic and Non-Dual Self

Although Buddhism considers that the notion of an intrinsically existing self is implausible (Dalai Lama & Berzin, 1997), the objective during the process of treating ontological

addiction is not to eliminate any form of identification with a self. In other words, there is a difference between ‘non-self’ and ‘not caring for self’. Non-self is a tool used to undermine attachment to self. However, non-self is a concept used to describe an experience or state of realization, but it can never fully embody that state or experience. The notion of non-self is a construct of subject-object (i.e., self-other) conceptualization. As such, it is an expression (albeit at a low level of intensity) of ontological addiction, and it must ultimately be relinquished. When the concepts of self and non-self are abandoned, an individual can abide as ‘true self’. True self encompasses both the individual and the whole. A person who has realized true self cares for the individual because they care for the whole, and vice versa. Thus, it is important to clarify that the ‘deconstruction of the self’ is not related to a deep dissociative experience (e.g., depersonalization/derealization disorder), which would likely incur harmful consequences.

For individuals to function in an adaptive manner, they must be aware that society considers them to be a distinct entity, and that certain roles and conforming behaviors are expected of them. However, the self that the individual reconstructs during Phase Three of the treatment is one that, having realized it is empty of intrinsic existence, is comfortable with assuming a self-identity for the purposes of effectively functioning in the world. In comparison with the self that was present at the onset of treatment, this ‘newly constructed self’ is a much more fluid and dynamic entity.

As demonstrated by the experiences of an individual that received the *Meditation Awareness Training* intervention (a Buddhist-derived intervention that adheres to the phasic treatment model outlined here), the newly constructed ‘self’ regards itself as a deeply interconnected entity that is inseparable from the conditions, people, and phenomena around it:

> Everything makes more sense. You start to see the bigger picture and you start to see just how petty people at work can be – at work it's all about the self, the whole self, and nothing but the self. But when you take the self out of the equation … you kind of find yourself in the company's shoes, your own shoes, and the customer's shoes all at once (Shonin & Van Gordon, 2015b)

This increased connectivity to, and awareness of, prevailing psychological and environmental conditions gives rise to what in research settings has been termed the *phenomena feedback effect* (PFE) (Shonin & Van Gordon, 2015b). PFE refers to the ability to reciprocally transact and communicate with the unfolding events of the present moment, and is reported to give rise to an increased ability to anticipate how a particular situation might unfold. According to Shonin and Van Gordon (2015b), PFE is the outcome of individuals knowing that they, and the situations in which they find themselves, are inseparable and continuously changing. Perceiving the self and phenomena as transient and unfixed entities is understood to allow individuals to work with, and stay abreast of, the present moment.

Individuals report that the dynamic and non-dual self that is cultivated during this phase of treatment has greater perceptive clarity (Shonin & Van Gordon, 2015b). In not being attached to the idea that they intrinsically exist, individuals can minimize the amount of 'I' that they allocated to work and life engagements. Consequently, they are better able to 'see the big picture', and are less likely to be preoccupied with their own agenda and entitlements (Shonin & Van Gordon, 2015b). Furthermore, by reducing ego-centric beliefs and behaviors, there no longer exists a substantial 'self' that can be (for example) offended, let down, cheated, or traumatized. In other words, there is no longer a fixed locus upon which maladaptive cognitive-affective states can assemble, and the newly constructed and dynamic

'self' thus liberates itself from the various functional impairments associated with ontological addiction.

Conclusions

Despite the fact that there is increasing integration of Buddhist principles and practices into Western mental health and applied psychological disciplines, there appears to be limited understanding in Western psychology of the assumptions that underlie a Buddhist model of mental illness. The ontological addiction formulation is a means of addressing this problem, and explicates a Buddhist model of psychopathology that is sympathetic to Western conventions concerning the classification, etiology, and treatment of mental illness.

An assessment of the extent to which ontological addiction meets the clinical criteria for addiction (utilizing Griffiths' [2005] components model of addiction) suggests that ontological addiction is a valid – albeit operationally and functionally distinct (i.e., when compared to chemical and behavioral addictions) – form of addiction. Consistent with 2,500-year-old Buddhist teachings, recent empirical findings suggest that addiction to the belief in an inherently existing self is associated with maladaptive psychosocial functioning (e.g., Sahdra et al., 2010). More specifically, there is rationale to suggest that ego-centric beliefs and behavioral-response patterns cause the mind to 'contract' and limit an individual's psycho-spiritual development.

In terms of etiology, ontological addiction is understood to be self-sustaining (i.e., self-centered thoughts and behaviors reify an individual's belief in selfhood and this, in turn, fosters further ego-centric responses). However, despite the chronic and pervasive nature of the condition, the addiction to selfhood can be overcome by a phasic treatment process that involves (in sequential order): (i) becoming aware of the imputed self, (ii) deconstructing the self, and (iii) reconstructing a dynamic and non-dual self. The first of these three phases

makes use of concentrative meditation techniques in order to enhance awareness of the various attributes of selfhood. In conjunction with the tranquility associated with concentrative meditation, this increased awareness of self is a prerequisite to employing insight meditation techniques (utilized in Phase Two of the treatment) in order to undermine attachment to the belief in an intrinsically existing 'I' entity (Van Gordon et al., 2015e). Phase Three of the treatment is concerned with cultivating a dynamic and non-dual self that is deemed (and has been empirically shown) to be better able to communicate with, and adapt to, the changing conditions of the present moment (Shonin, Van Gordon, Dunn, Singh, & Griffiths, 2014b).

Clearly, additional theoretical and empirical endeavors are required in order to assess the utility of ontological addiction and its' validly as: (i) a comprehensive model of mental illness and, (ii) a diagnosable form of psychopathology in and of itself. Likewise, therapeutic (and spiritual) discernment is clearly required in order to assess the suitability of a particular individual to receive, and progress through, the various (generic) treatment phases outlined in this paper. Nevertheless, it is the view of the present authors that the ontological addiction formulation constitutes an accurate portrayal of a Buddhist conceptualization of mental illness that is palatable to a Western clinical and scientific audience. Perhaps more importantly, ontological addiction appears to challenge a number of established Western medical and scientific assumptions concerning the determinants of mental illness and the notion of selfhood more generally. Consequently, further theoretical and empirical investigation is warranted.

Compliance with Ethical Standards

Conflict of Interest: The authors declare that they have no conflict of interest.

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