



## Perspectives: Positive Psychology and the Field of Addiction - A Proposal for a Culturally Relevant Framework

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**Abstract:** Positive psychology is an evidence based approach to wellbeing that has been applied in clinical, health and educational settings. There is growing evidence that positive psychology interventions (PPIs) significantly impact depression, anxiety and other mental health symptoms. PPIs can be self-initiated or done online increasing access to psychological support for populations who may not rely on traditional therapy. To date, there has been little systematic application of PPIs to the area of addiction treatment or prevention; yet, many lines of evidence suggest that positive psychology aligns with known factors that support recovery from substance use. In the United Arab Emirates (UAE), an Islamic society with a diverse population of expatriate residents, substance abuse is recognized as a public health issue and the government provides rehabilitation centers alongside anti-drug campaigns in academic institutions. Despite such efforts, there is a cultural stigma not only against substance use, but discussion of mental health issues in general and psychological help-seeking. This paper reviews the evidence for PPIs in clinical and addiction settings, provides an overview of substance use and addiction services in the region, and argues that PPIs may offer an effective framework for addiction treatment and prevention strategies.

**ملخص البحث:** علم النفس الإيجابي هو نهج قائم على الأدلة تم تطبيقه في العديد من السياقات بما في ذلك علم النفس الكلينيكي والصحي و التربوي. هناك أدلة متزايدة على أن "التدخل النفسي الإيجابي" يؤثر بشكل كبير على الاكتئاب والقلق وغير ذلك من أعراض الصحة العقلية. يمكن أن يكون هذا التدخل ذاتيًا أو عبر الإنترنت زيادة في توفير الدعم النفسي للأفراد الذين قد لا يعتمدون على العلاج التقليدي. حتى الآن تشير العديد من الأدلة إلى أن علم النفس الإيجابي لا يتم تطبيقه بطريقة منهجية في مجال علاج الإدمان أو الوقاية منه ومع ذلك هناك دلائل أنه من العوامل التي تدعم التعافي من تعاطي المخدرات. في دولة الإمارات العربية المتحدة ، وهو مجتمع إسلامي مع مجموعة متنوعة من السكان المغتربين ، يتم الاعتراف بإساءة استخدام المواد المخدرة كمشكلة صحية عامة ، وتوفر الحكومة مراكز تأهيل متخصصة إلى جانب حملات مكافحة المخدرات في المدارس والجامعات. على الرغم من هذه الجهود ، هناك وصمة عار ثقافية ليس فقط ضد تعاطي المخدرات ، ولكن أيضا ضد مناقشة قضايا الصحة العقلية بشكل عام أو الاحتياج الى المساعدة النفسية. تستعرض هذه الورقة الأدلة الخاصة بالتدخل النفسي الإيجابي في الحالات الإكلينيكية والإدمانية ، وتقدم نظرة عامة على المعلومات المتاحة عن خدمات مكافحة المخدرات و الإدمان وتجادل بأن التدخل النفسي الإيجابي قد يوفر إطارًا واستراتيجيات فعالة للعلاج والوقاية في الإمارات والدول المجاورة.

**Keywords:** positive psychology intervention, addiction; Arab; culture; Islam; stigma; 12-step

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**Positive Psychology (PP)** was conceived as a new avenue for psychology, shifting the field away from investigating psychological illness to a framework for enhancing wellbeing and optimal functioning in the general population (Seligman & Csikszentmihalyi, 2000). One model for understanding wellbeing is the PERMA model (Seligman, 2011). This model defines five core pathways thought to bring about greater wellbeing and happiness, namely, Pleasure (P), Engagement (E), Relationships (R), Meaning (M) and Accomplishment (A). Models like PERMA have been helpful in developing specific activities known as Positive Psychology Interventions (PPIs), which aim to increase positive emotions, cognition and behaviors (Parks & Biswas-Diener, 2014; Sin & Lyubomirsky, 2009). Various PPIs have been described for enhancing gratitude (Seligman, Steen, Park, & Peterson, 2005; Wood, Froh, & Geraghty, 2010), optimism (Shapira & Mongrain, 2010), positive social interactions and empathy for others, (e.g. acts of kindness: Otake, Shimai, Tanaka-Matsumi, Otsui, & Fredrickson, 2006), charity, donations and volunteerism (Dunn, Ashton-James, Hanson, & Aknin, 2010), a sense of purpose (Diener, Fujita, Tay, & Biswas-Diener, 2012), self-compassion (Gilbert, 2010; Shapira & Mongrain, 2010), engagement and flow (Jackson & Csikszentmihalyi, 1999), as well as character strengths (Peterson, Ruch, Beermann, Park, & Seligman, 2007) among others (for more PPIs, see Table 1).

A significant body of evidence has grown around the impact these activities have on wellbeing, functioning and performance. Seligman et al.'s (2005) early progress report showed significant effects of a series of PPIs on the happiness of student populations – these included the well-known ‘gratitude’ and ‘3 good things’ daily practices alongside individualized strengths activities. In two further meta-analyses, Sin and Lyubomirsky (2009; 51 studies) and Bolier et al. (2013; 39 studies) reported a significant, though small, effect for PPIs on measures of wellbeing. Positive effects were also found for interventions associated with the PERMA-relevant constructs on happiness and depressive symptoms in large sample, placebo-controlled trials (Gander, Proyer, & Ruch, 2016). It should be noted that the proliferation of research falling under the PP umbrella is not without criticism, pointing to differences in how PPIs are defined as well as weak methodologies that may reduce the strength of the supporting evidence (see Hendriks et al., 2018). Despite this, PP has revolutionized how theories and interventions are framed not only within psychological science but in the applied fields of education, workplace and government policy and increasingly so in the GCC (Gulf Cooperation Council) region (Lambert & Pasha-Zaidi, in press).

Consequently, this review paper calls for positive psychology researchers in the region to consider addiction as an important direction for future research and policy. Addiction is an increasingly recognised problem in the GCC nations and relevant authorities are involved in developing prevention and treatment strategies. With further investigation, positive psychology could provide an important way forward in this area given the cultural climate of stigma against the discussion of substance use and mental health problems.



Table 1

*Common PPI activities (examples from [greatergood.berkeley.edu](http://greatergood.berkeley.edu))*

Theme	Activity name	Brief description
Gratitude	3 Good Things (Seligman et al., 2005)	Daily practice: Describe in detail three positive things that happened at the end of each day.
	Savoring (Bryant & Veroff, 2007)	Weekly practice: Spend 20 minutes walking and noticing the positive sensations in the environment.
	Gratitude Letter/Visit (Seligman et al., 2005)	Occasional practice: Choose someone in your life who helped you in some way, write them a letter explaining what they did and how it helped you, how you feel now about it; where possible. Deliver this letter in person and talk them through it.
Forgiveness	Forgiveness/Empathy (Davis, Worthington, & Hook, 2013)	Make a list of people and actions who have hurt you; then make a conscious decision to forgive; consider what the offender may have been going through leading to their action; consider doing something positive for them to show mercy; consider the meaning for you that comes from this action.
Optimism	Best Possible Self (Burton & King, 2009)	Spend 10 minutes writing about your best possible future, who you would be, and what you would have achieved. Reflect on this list and consider how you can become that person.
Character Strengths	Use Strengths (Peterson et al., 2005; Seligman et al., 2005)	Take a PP strengths inventory to identify your top five strengths; use one of these in a different way once a week; or consciously use each more during the week.

### **PPI Efficacy and Applications**

Given the efficacy of PPIs on general measures of wellbeing, their use has been further explored in a variety of physical and mental health related contexts. For example, PPI use has shown improvements to general health in breast cancer survivors (Casellas-Grau, Font, & Vives, 2014) and heart disease patients (Nikrahan et al., 2016). They were also observed to enhance life satisfaction, gratitude and hope in prison populations (Huynh, Hall, Hurst, & Bikos, 2015) and promote flourishing in individuals experiencing psychosis (Jansen et al., 2016). In fact, this line of



research indicating that psychological variables may interact with physical health (see Park et al., 2014 for review) led Seligman (2008) and Seligman et al. (2010) to propose a new sub-discipline of 'positive health' which aims to investigate the role of psychological and physical health assets.

There is a growing interest around incorporating PPIs into the traditional fields of clinical psychology and mental health as parallel activities to aid traditional counseling therapies (Lambert D'Raven & Pasha-Zaidi, 2014; Linley, 2006) and for creating new avenues in clinical psychology (Seligman, Rashid, & Parks, 2006; Wood & Tarrier, 2010). PPIs in this context provide a novel approach as they do not attempt to directly challenge symptoms of illness or dysfunction but instead focus on building positive resources (Lambert, D'Raven & Pasha-Zaidi, 2014), an approach which appears to have significant effects on symptomology. For example, meta-analyses by Sin and Lyubomirsky (2009) and Bolier et al. (2013) noted a small to moderate but significant impact of PPIs on depression and subjective wellbeing in patient and non-patient populations. The role of positive interventions in clinical psychology was previously summarized by Rashid (2009), Seligman et al. (2006), Harris, Thoresen and Lopez (2007), as well as Wood and Tarrier (2010), all of whom discussed ways in which PPIs can be integrated with traditional therapies to provide a comprehensive treatment for the recovery of wellbeing and not simply a reduction of symptoms.

Recent research has continued to show the impact of PP in clinical contexts. For example, Kwok, Gul and Kit (2016) found a positive impact on depression symptoms in a randomised controlled trial (RCT) of hope and gratitude interventions on school aged children, while Proyer, Gander, Wellenzohn and Ruch (2014) found the same in an older adult population. Chaves, Lopez-Gomez, Hervas and Vasquez (2017) showed that a battery of PPI interventions was as good as traditional CBT treatment in reducing clinical symptoms of depression, while Woodworth, O'Brien-Malone, Diamond and Schulz (2017) found an overall positive effect of PPIs on measures of happiness and depression in a web-based study. Of relevance to the field of addiction, Khazaei, Khazaei, and Ghanbari (2017) found a decrease in problematic Internet use in students following an eight session intervention focusing on positive emotion and social engagement. In review papers published this year, Chakhssi, Kraiss, Sommers-Spijkerman and Bohlmeijer (2018) as well as Rashid and Al-Haj Baddar (in press) suggest that the effect of PPIs on psychiatric symptoms may remain significant at follow-up and be particularly useful as cross-culturally valid interventions. While the published literature has provided an optimistic picture, critics have noted that the field still lacks a strong methodological and theoretical base and at times, sidelines negative human emotion and experiences (Hendriks et al., 2018; Wong & Roy, 2018). Even so, rather than suggest it has no future, Wong and Roy (2018) call for further research and revisions to existing PP models to strengthen and move the field forward.

PPIs also have potential in the mental health arena as they are an economical and effective way to widen access to psychological support. Simple to understand and requiring little specialist training, they can be utilized by a range of professionals offering greater options for help seekers. They are often developed as self-help activities and lend themselves well to after-care support (see follow up data in Chakhssi et al., 2018) and relapse prevention (see Bolier et al., 2013). To illustrate, Woodworth et al. (2017) conducted a placebo control study of three web-based PPIs (re-examining the data reported by Seligman et al., 2005). Though there was no discernible difference



between the PPI and placebo groups as both showed a significant reduction in depression symptoms, the authors noted that this was still evidence for the utility of PPIs as an affordable, effective support service within the mental health arena. This is further supported by the significant effects, compared to placebo control, found by Proyer et al. (2014) who implemented a similar online PPI study. In populations who may have more time and engagement with the recovery process, or who are geographically or socially isolated, an online self-help format could become an important treatment option.

Thus, PPI models may offer a framework for developing population-level addiction prevention and treatment, particularly in countries such as the UAE where the current provision for addiction treatment is limited. Below, the evidence for PPIs in addiction treatment is reviewed, as well as substance abuse itself in the UAE, with final arguments for PPIs as a culturally relevant framework for developing addiction services in the UAE being presented. As the literature on addiction in the region is limited, the paper will focus on substance addiction (illicit drug and alcohol use) as opposed to psychological addictions and behavioral compulsions such as gambling, though this could be a promising avenue to explore for future research.

### **PPIs and the Context of Addiction**

Although PPIs have only been applied to addiction treatment within the last few years, there are various lines of evidence that point to their potential. In particular, the role of spirituality in recovery from alcohol addiction has been extensively discussed both as part of treatment clinics and as the foundation for the Alcoholics Anonymous (AA), Narcotics Anonymous (NA) and other 12-step models currently used in many parts of the world. For example, spirituality or formal religious practice is a protective factor for substance use in both the general and addiction and recovery populations. Studies show a link between increasing spiritual practices and the maintenance of abstinence (Bliss, 2007; Witkiewitz, McCallion, & Kirouac, 2016). This is also evidence from the continued popularity and spread of AA and NA programs which are themselves founded in religio-spiritual practices, and encourage prayer and meditation through an explicit reference to a higher power (defined by the individual) and spiritual awakening (Kelly, Stout, Magill, Tonigan, & Pagano 2010). Strobbe, Harris and Robinson (2017) further found a reduction in drinking associated with higher daily spirituality practices, irrespective of religion, and greater self-forgiveness, though it is not clear if this is a cause of or precursor to abstinence.

Similar links have been made with forgiveness as a psychological component of spirituality with Webb, Hirsch and Toussaint (2015) noting that 90% of the studies showed a role for forgiveness in the recovery process. Specifically, Lin, Mack, Enright, Krahn and Baskin (2004) utilized a forgiveness therapy designed to reduce anger as an adjunct to standard therapy for a small group of inpatients at an alcohol unit. Results showed a significantly reduced vulnerability to substance use score in those who received forgiveness therapy over standard treatment. Lyons, Deane and Kelly (2010) also discussed the role of forgiveness in reducing anger, which may mediate the enhancement of spirituality and purpose of life seen in addiction recovery and relapse prevention. Similarly, Randles and Tracey (2013) showed that non-verbal displays of shame about past drinking behavior (which could be interpreted as a lack of self-forgiveness) also predicted



relapse tendency. From this, Scherer, Worthington, Hook and Campana (2011) conducted a study using a four-hour forgiveness intervention in addition to the standard treatment and found a positive impact on self-forgiveness, shame and guilt as well as drink refusal efficacy in outpatients. Finally, Charsynska (2015) found that treatment for addiction led to a positive change in both forgiveness and gratitude as elements of spiritual coping in women; however, this did not extend to men. PPI activities (i.e., strengths, acts of kindness and three good things) were also included in a smoking cessation study (19 participants; Kahler et al., 2014), where positive engagement with the programme and higher than expected abstinence at six month follow-up were noted. However, no control group was included so the results must be taken as preliminary at best.

These discussions, though relevant, do not yet constitute a systematic investigation of the application of standard PPIs to the addiction context. In Krentzman's (2013) review (2005-2010), only nine relevant citations for the use of PPIs in addiction treatment were found. These comprised a mix of papers including theoretical discussions and the role of PP constructs in predicting substance misuse and relapse from recovery. They found only one study where the effect of PPIs was tested specifically on measures of addiction itself (Akhtar & Boniwell, 2010); a pilot study on adolescents (n=20) in a rehabilitation unit participated in an 8-week wait-list control study, experiencing significant increases in positive emotion and optimism in the experimental group. Yet, the drinking measure did not show a significant difference between the groups, although Krentzman (2013) noted this was a single item measure analyzed non-parametrically so the role of PPIs in drinking behavior cannot be discounted. Krentzman (2017) further reported on a pilot study looking at the effect of a gratitude intervention on alcohol treatment using a standard RCT approach, but measured the impact on mood rather than substance use. Results showed that gratitude practices had a significant effect on reducing negative mood, but not increasing positive mood. Thompson (2016) also conducted a mixed methods study on 11 male addiction inpatients using 'meaning-centered therapy' to enhance self-awareness of strengths and values and increase forgiveness, gratitude, and positive emotion. Statistical analyses were not reported, but patients who actively pursued the meaning activities showed greater abstinence at six and nine months.

These findings may suggest that the psychological constructs falling within the framework of positive psychology are also those which underlie the psychology of substance abuse; it is possible that PPIs could play a significant role in the prevention of initial substance abuse and relapse.

### **Was AA a PPI, before Positive Psychology?**

Alcoholics Anonymous (AA) began in 1935 with one man's experience of acute alcohol abuse and subsequent spiritual awakening and recovery. He used this experience to form a self-help group which met regularly to support one another through the steps of self-awareness, change and spiritual recovery. The movement has become a fellowship of more than 2 million members in over 180 countries ([www.aa.org](http://www.aa.org)). The pathway of treatment within AA is the 12-step model; the tenets of which are listed in Table 2. Since, this 12-step, mutual support framework has been extended to groups such as NA, food addiction (Overeaters Anonymous), and in the support of families of substance abusers (Al-Anon). The text has been modified to be applicable across religions and in non-sectarian contexts. These 12-step communities form a wider approach to



treatment collectively known as the recovery movement. Despite continued debate about the measures of success with such groups (Branscum, 2010), there is evidence suggesting these programs have a significant impact in helping people maintain abstinence over time, even compared to standard evidence-based therapies founded in psychological theory (Kelly, 2016).

Table 2

*Descriptors for '12 step' model (taken from <https://www.alcoholics-anonymous.org.uk>)*

Step	Descriptor
1	We admitted we were powerless over alcohol, that our lives had become unmanageable.
2	Came to believe that a Power greater than ourselves could restore us to sanity.
3	Made a decision to turn our will and our lives over to the care of God, as we understood Him.
4	Made a searching and fearless moral inventory of ourselves.
5	Admitted to God, to ourselves and to another human being the exact nature of our wrongs.
6	Were entirely ready to have God remove all these defects of character.
7	Humbly asked Him to remove our shortcomings.
8	Made a list of all persons we had harmed, and became willing to make amends to them all.
9	Made direct amends to such people wherever possible, except when to do so would injure them or others.
10	Continued to take personal inventory and when we were wrong promptly admitted it.
11	Sought through prayer and meditation to improve our conscious contact with God, as we understood Him, praying only for knowledge of His will for us and the power to carry that out.
12	Having had a spiritual awakening as the result of these steps, we tried to carry this message to alcoholics and to practice these principles in all our affairs.

Although AA traditionally focuses on the role of spiritual awakening in guiding abstinence, Kelly's (2016) analysis of the literature suggests the causal mechanisms are cognitive and social in nature. That is, the potent element is not one's relationship with a higher power (steps 2 and 3), but the relationships built with other members. This was also reflected in a study of Al-Anon by Timko, Halvorson and Moos (2015), which found social relationships to be the causal mechanism for these group's positive effects. This overlaps with evidence in the psychological literature on the effectiveness of group therapies as well (Burlingame, Fuhriman, & Mosier, 2003; Yalom & Leszcz, 2005). Given this more psychological analysis of AA, there may be strong theoretical overlap between the recovery movement and the science of PP.



For example, Selvam (2015) noted that many of the character strengths discussed within PP are also identifiable within the 12 steps models (see Table 3 for a review of the character strengths). Kindness and citizenship are reflected in the AA tenets of helping one another (steps 8 and 12), as well as listening and providing sponsorship (mentorship) to new members. The strength of humility is also embodied in step 1: admitting one is powerless over alcohol. Indeed, Galanter (2007) notes that PP may provide an empirical basis for explaining the mechanisms of 12-step recovery programs. As Krentzman (2013) notes, the shift in addiction treatment to a focus on recovery and maintaining abstinence mirrors the original call for psychology to focus on flourishing and wellbeing over disease models (Seligman & Csikszentmihalyi, 2000). Given these links at a construct level, it could be said that the AA movement, borne out of one man's personal experience, was a PPI long before the development and growth of PP itself.

Table 3

*Character strengths framework (Peterson & Seligman, 2004)*

Category Virtue	Specific Strengths	Selected Definitions
Wisdom and knowledge	Creativity, curiosity, open-mindedness, love of learning, perspective	Creativity: producing novel, adaptive, functional ideas and behaviors
		Curiosity: intrinsic interest in ongoing experience
		Open-mindedness: thinking critically about a range of factors and viewpoints
		Perspective: taking holistic stock of life, making sense of collective experience
Courage	Bravery, persistence, integrity, vitality	Bravery: doing what needs to be done despite fear
		Integrity: being genuine, taking responsibility for actions
		Vitality: having energy, motivation and enthusiasm
Justice	Citizenship, leadership, fairness	Citizenship: obligation to common good
		Leadership: ability to inspire and motivate others
Humanity	Love, kindness, social intelligence	Love: having reciprocal close relationships




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		Social intelligence: understanding emotional signals in self and others
Temperance	Forgiveness, humility, prudence, self-control	<p>Forgiveness: letting 'bygones be bygones', accepting and moving past</p> <p>Prudence: considering long- term goals and consequences against short- term gains</p>
Transcendence	Appreciation of beauty and excellence, gratitude, hope, humor, spirituality	<p>Appreciation of beauty: experience of awe, wonder, elevation from people/nature</p> <p>Humor: ability to laugh and make others laugh</p>

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### Substance Use in the GCC and UAE

Drug and alcohol misuse continues to grow as a health issue adding significantly to the global burden of disease. In 2010, the World Health Organisation (WHO) data reported the global burden of illicit drug use as 10.9% and alcohol use 9.6% (Whiteford et al., 2013). The most recent WHO world drug report estimates global drug use at 255 million people and problematic drug use at 29.5 million with nearly 200,000 deaths per year attributed to drugs and 3.3 million attributed to alcohol (UNODC, 2017).

The UAE, a country of 9.7 million people, about one million of which are UAE nationals, is also comprised of expatriate residents from 200 different nations with south Asians forming the largest group but a significant proportion also coming from western countries such as the UK, USA, and Europe. While the national identity is founded in Islamic faith and traditions, the society reflects a broad range of diversity in its values and behaviors. Both drug and alcohol use are against Islamic values and prohibited by the Qur'an. Consequently, drug use in the UAE is strictly prohibited by law, and both dealing and possessing drugs such as cocaine, cannabis and heroin carry heavy criminal penalties. There are also restrictions on alcohol use and Muslim residents may not drink or purchase alcohol. However, given the diversity among UAE residents and the strength of the tourism industry, alcohol consumption is allowed for non-Muslims in licensed venues and retailers, and promoted at entertainment events with beverage promotions.

Despite regulations against drug use, reports of substance misuse were found among the UAE national population as early as the 1980's (Sarhan, 1995). Since, substance abuse has become a publicly recognized issue with media coverage and police campaigns providing anti-drug use lectures in schools and universities. Awareness has also grown around the need for both treatment and prevention strategies. The UAE Ministry of Health established the National Rehabilitation Center (NRC) in 2002 ([www.nrc.ae](http://www.nrc.ae)) to provide inpatient treatment, training as well as education programs as a response (Al Ghaferi, Ali, Gawad, & Wanigaratne, 2017). A second treatment facility was opened in Dubai in 2017 (Erada Centre, [www.erada.ae](http://www.erada.ae)) and various agencies have begun to develop anti-drug programs for schools and focused addiction conferences for knowledge



sharing among professionals. Although patients at both centers are Emirati National males (Erada also has a female ward), both centers also support expatriate clients. Alongside these government initiatives, a number of private clinicians provide therapy for addiction and there are links with a number of overseas private treatment facilities who market services to clients from the UAE.

Although attempts are being made to educate the public about the dangers of substance abuse, there is a lack of consistent data collection. The WHO reports cannabis use in the UAE at 5.35% and opiates at 0.02% (UNODC, 2017); yet, these figures are from data collected in 2006 and 2004 respectively. No data is reported for other drugs. These gaps are mirrored in other GCC countries, where estimates for Saudi Arabia and Kuwait also end in 2006. Even for alcohol, where there is data available from industry sales, there is inconsistency. For example, Ghandour et al.'s (2016) literature review (ranging from 1993-2014) found only four studies on alcohol use in the UAE population, the most recent of which was from 2001. Of these, three were general health interviews with male prisoners (Ghubash & El Rufaie, 1997) and factory workers of Indian descent (Abou-Taleb, Musaiger, & Abdelmoneim, 1996), with the last being a review of psychiatric inpatient records (Younis & Saad, 1995). The most relevant was the Abu Saleh, Ghibash and Daradkeh (2001) household survey of psychiatric diagnoses and symptoms conducted in the city of Al Ain in which 5.2% of 1,394 households reported drug and alcohol issues.

With respect to alcohol, the WHO (2014, data reported from 2010) reports approximately 2.8 liters per capita consumption and alcohol dependence at 0.3%. Yet, industry sales suggest otherwise. Alcohol consumption in the UAE may be double the global average of liters per year (Thomas, 2014). Reports indicate that while there may be fewer overall alcohol consumers particularly among the UAE national population, the drinking patterns among the wider population (expats and UAE nationals combined) of those who do consume alcohol may be heavier than thought. Notwithstanding these inconsistencies, Doran (2016) estimated that all substance addiction (illicit drugs, alcohol and tobacco) potentially costs the UAE \$5.47 billion US dollars in health, lost productivity and criminal behavior.

Recently, the majority of published data comes from the NRC whose UAE national male sample show poly-substance abuse (i.e., opioids and alcohol) to be common (AlBlooshi et al., 2016; Amir, 2001), with the misuse of prescription drugs such as Tramadol and Pregabalin making up the majority of this abuse (Al Ghaferi et al., 2017). Anecdotal media reports also suggest the abuse of prescription medications such as Tramadol and Pregabalin are a major issue, especially among young people (Ali Zain, 2012) and that the use of Crystal Methamphetamine is growing (Al Ramahi, 2018). Some data also comes from sporadic short papers. For example, Al-Marri and Oei (2009) found alcohol, heroin and cannabis use among Arab nationals, while the investigation by Alhyas et al. (2015) of drug and alcohol awareness in adolescents suggested some alcohol and tobacco use but little knowledge of other illegal drugs. No published data has systematically studied patterns of alcohol consumption among the majority expatriate population in the UAE.

Studies (Alhyas et al., 2015; El Arabi, Al Hamed, Salas, & Wanigaratne, 2013; Robins, 2014) have discussed factors which may underlie the growth of alcohol and drug use among UAE populations. Aside from known risk factors, the UAE may have its own unique risks. For example, it is a country with a rapidly growing level of wealth and a geographic location near drug production



and trafficking routes in Afghanistan and Asia. This means there is a high level of disposable wealth and a pathway to making drugs available locally. Further, greater wealth and diversification of society may be leading to an increase in known risk factors for substance abuse such as disengagement with family and religious communities (Abu-Ras, Ahmed, & Arfken, 2010; Al-Darmaki, 2003; Hodge, Cardenas, & Montoya, 2001), a loss of identity and values, and higher than normal socio-economic status within the community (Humensky, 2010) particularly within a more capitalist, westernized lifestyle (see Eckersley, 2005; Stone, Becker, Huber, & Catalano, 2012, for reviews of risk and protective factors in substance use).

Despite the ongoing efforts of government agencies to develop treatment and prevention strategies, there is still a difficult balance to be found between tackling such problems and being sensitive to local taboos against the discussion of substance use. A significant challenge is the cultural stigma towards the discussion of psychological problems, which is perceived to lead to a loss of face and consequent shame for the individual and their family (Heath, Vogel, & Al-Darmaki, 2016), with a negative attitude towards help-seeking particularly from psychotherapy and counseling services in general (Al-Darmaki, 2003, 2011). Accordingly, health providers outside the two rehabilitation centers may not offer support such as medical detoxification or drug counseling.

The situation in other GCC countries is similar where rehabilitation centers are being developed in national hospitals and specialist inpatient facilities but these are neither advertised nor easily identified in web searches. For example, a Google search for drug rehabilitation centers in Qatar lists a private 'wellness' clinic (Naufar) and a 'social rehabilitation center' neither of which are clearly labeled for substance abuse support. In Bahrain, the only support is from inpatient units within government hospitals and in Saudi Arabia, there are many centers but all cater exclusively to men. In Kuwait, where drug overdose was reported to be the third leading cause of accidental death (AlKandary & Al Waheeb, 2015), the situation seems to be better with drug and alcohol centers being more easily found online and providing inpatient and aftercare programs for male and female citizens and expatriate residents. Other than formal treatment programs, the main source of support comes from the self-help and peer support communities such as AA and NA. Both organizations have chapters across the GCC region with regular meetings held in English and Arabic (mercaa.com; namec.org). Although no data are collected on the membership composition in these groups, the fact that the meetings are being held and openly so, suggests a need and uptake by populations in those areas.

The UAE and GCC region are at a point where problematic substance use is recognized and governments are investing in specialist support for addictions. Yet, support remains sporadic, unpublicized, and widely unacknowledged, with women and adolescents not often included in government services. While the UAE government has initiated anti-drug campaigns in schools, these focus on the harms of drugs - similar to the 'just say no' slogans of the 1980's in the USA and known to show little efficacy (James, 2013; Warren, 2016) - and do not provide clear fact-based information about where and how to seek help, nor how much of a problem such issues are in society, and who is affected.



### **PPIs as a treatment framework for addiction in UAE**

In light of the challenges to developing a comprehensive addiction support framework within a landscape of taboo against the discussion of substance use as well as changing social values among Emirati and expatriate youth, the use of PPIs may provide an accessible, evidence-based population-level prevention and treatment strategy. In fact, a meta-analysis by Hendriks et al. (2018) suggests there may be reason to believe that PPIs are more effective and culturally relevant in populations where there is a focus on interdependence and collective relationships as is the case in the region. Further, UAE leadership has shown a significant investment and engagement with the frameworks of positive psychology to focus on wellbeing and flourishing in the population. The UAE government appointed a federal Minister of Happiness and Wellbeing in 2016 and declared a national agenda for happiness and positivity (<https://government.ae/en/about-the-uae/the-uae-government/government-of-future/happiness>). As part of this, government offices have been tasked with developing wellbeing initiatives for employees and customers. The government further invested in monitoring and understanding happiness and wellbeing in the population with the establishment of the Emirates Center for Happiness Research at the largest national university (UAEU) (<https://www.uaeu.ac.ae/en/dvcrgs/research/centers/happinesscenter/>). PPIs may provide the basis for an appropriate framework for addiction support within the UAE context as they fit the current government interest in positive psychology and wellbeing promotion, and help spur the introduction of PPIs in the prevention and treatment of addiction.

Further, the introduction of evidence-based strategies such as harm reduction, replacement therapies, and the conventional disease model approach (see Table 4), though all available in the UAE, will likely take time to become fully accepted, including by more traditional medical practitioners and religious healers. Yet, these same practitioners are likely to be the first point of call for help seekers. In the short term, while attitudes are shifting, the use of PPIs may provide a better fit with underlying social and religious values of the region. Importantly, as PPIs and positive clinical psychology approaches do not seek to discuss or investigate negative symptoms of distress or problems directly, a focus on building positive resources and emotions may be better placed to overcome stigma and any potential loss of face known to impact help seeking and discussion of psychological illness in the Arab culture (Al-Darmaki, 2011; Lambert, Pasha-Zaidi, Passmore, & York Al-Karam, 2015). As PPIs focus on strengthening values, purpose and subjective wellbeing, they facilitate health promotion and illness prevention and dovetail with the field of positive health (Seligman, 2008; Seligman et al., 2010).

PPIs could also provide a more cost-effective and accessible outpatient care and relapse prevention model beyond what currently exists. For clients not requiring full medical withdrawal and rehabilitation, or who cannot afford other private psychological support services, PPIs can be promoted as self-help measures which may be a source of support and prevention within the wider community. The self-help movement is already established in the region and as there is already an uptake of non-medical, self-help support for alcohol and substance abuse, broadening treatment options to include PPIs may be a welcome step. This inclusion could be more widely developed, acknowledged and incorporated into government strategies that promote treatment options as well.



Table 4

*Conventional approaches to addictions*

Strategy	Brief Description
Harm Reduction	Focuses on reducing the medical and practical risks to drug users such as shared needles rather than addressing drug taking per se. Examples might include safe injection drug sites.
Replacement Therapies	Providing safe, legitimate clinical doses of a similar substance in order to medically control symptoms of addiction gradually reduce levels of drug use and, remove the need for illegal drug use.
Disease Model Approach	Treating addiction as a chronic medical disease, helping to reduce stigma and boost help-seeking, rather than a moral individual choice.

PPIs may also be a culturally appropriate foundation for the development of school based prevention strategies. Drug prevention programs for young people take different approaches and are often tailored to developmental stages (Onrust, Otten, Lammers, & Smit, 2016; Sussman, 2013). In general, there has been a shift from simple fear-based ‘just say no’ messages to providing correct factual education and open discussion on drugs and alcohol alongside social and personal skills development (James, 2013). Yet, providing factual information on who, what and why drugs are being used in the region may be difficult not only because of cultural sensitivity against discussions on substance use, but also because there is a lack of publicly available data around which to build such discussions. In contrast, anti-drug interventions based on PPIs would focus on enhancing wellbeing and known protective factors such as engagement, spirituality, and purpose in life as an alternative to discussing drug use per se. In the UAE, there is already a policy to engage schools in positive education development, a subset of positive psychology which aims to incorporate PPIs and character strength models into school settings to promote student wellbeing and individual development alongside academic learning (Norrish, Williams, O’Connor, & Robinson, 2013). The philosophical foundation and overlap is already laid for such cross-over.

Finally, it is suggested that web-based and self-help format interventions lead to lack of adherence and high dropout rates (see Christensen, Griffiths, Groves, & Korten, 2006; Christensen, Griffiths, & Farrer, 2009 for CBT, depression and anxiety interventions). In fact, Schueller and Parks (2014) note that most PPI applications are hardly used. This may be due to lack of time or engagement in daily practice (Christensen et al., 2009). Yet, although speculative, it



may be that populations with Islamic traditions and rituals of daily prayer and fasting such as within the UAE and other GCC nations, may be more familiar with the notion of regimented adherence and prepared to spend time on habitual activities, seeing the benefit and importance of a daily practice in enhancing wellbeing.

In sum, this paper calls for positive psychology researchers in the region to turn their attention to addiction treatment and prevention. Using PPIs in addiction treatment has yet to be considered within the GCC region although there is a growing body of evidence for their use. There is a growing need for more addiction treatment and prevention options in UAE, in particular ones that can overcome the cultural, social and financial barriers to accessing treatment. In parallel, there is a general interest in PP and enhancing wellbeing by UAE government agencies. PPIs may therefore form a useful framework to provide accessible, culturally appropriate, evidence-based support for people suffering from problematic substance use either in conjunction with inpatient medical care, as follow up to formal treatment, or as a self-help measure and prevention tool.

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