SPECIAL ARTICLE

The science of well-being: an integrated approach to mental health and its disorders

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Psychiatry has failed to improve the average levels of happiness and well-being in the general population, despite vast expenditures on psychotropic drugs and psychotherapy manuals. The practical failure of psychiatry to improve well-being is the result of an excessive focus on stigmatizing aspects of mental disorders and the neglect of methods to enhance positive emotions, character development, life satisfaction, and spirituality. In this paper, a simple and practical approach to well-being is described by integrating biological, psychological, social, and spiritual methods for enhancing mental health. Evidence is presented showing that people can be helped to develop their character and happiness by a catalytic sequence of practical clinical methods. People can learn to flourish and to be more self-directed by becoming more calm, accepting their limitations, and letting go of their fears and conflicts. People can learn to be more cooperative by increasing in mindfulness and working in the service of others. In addition, people can learn to be more self-transcendent by growing in self-awareness of the perspectives that lead to beliefs and assumptions about life which produce negative emotions and limit the experience of positive emotions. The personality traits of self-directedness, cooperativeness, and self-transcendence are each essential for well-being. They can be reliably measured using the Temperament and Character Inventory. A psychoeducational program for well-being has been developed, called "The happy life: voyages to well-being". It is a multi-stage universal-style intervention by which anyone who wants to be happier and healthier can do so through self-help and/or professional therapy.

Key words: Well-being, character development, spirituality, happiness, psychobiology

Despite vast expenditures on psychotropic drugs and extensive efforts to manualize psychotherapy methods, there has been as yet no substantial improvement in average levels of happiness and well-being in general populations, as well documented in Western societies like the USA (1,2).

The practical failure of psychiatry to improve well-being is not surprising for several reasons. First, the focus of psychiatry has been on mental disorders, not on the understanding or development of positive mental health. Morbidity and mortality are more strongly related to the absence of positive emotions than to the presence of negative emotions (3). It is possible to cultivate the development of positive emotions, as shown by recent randomized controlled trials (4).

Second, a focus on discrete categories of disease provides an easy way to label patients with disorders, but the validity of the categorical separation is doubtful (5). In addition to being of doubtful validity, categorical distinctions are inherently stigmatizing: some people are suggested to be defective, whereas others are normal. As a result, many people are ashamed of being mentally ill and avoid treatment. A focus on universal interventions to cultivate mental health for everyone can be destigmatizing, by recognizing that all people share much in common with one another.

Third, psychiatric methods of assessment and treatment often require prolonged training with complex jargon for psychotherapy or expensive medications and equipment for biological therapies. These cost and distribution characteristics limit the availability of effective treatments around the world. Integrative psychobiological treatments can be highly effective and inexpensive, harnessing the spontaneous resilience of human beings in a therapeutic milieu that can be provided by a wide range of mental health workers with varying levels of professional expertise.

Fourth, treatments that focus on the body and/or mind have usually been anti-spiritual in their orientation. This anti-spiritual bias in psychiatry has many roots, including questionable assumptions of Freudian psychoanalysis, behaviorism, and the overly simplistic reductionism of materialists. Yet, human beings are spiritual beings who spend more time in prayer or meditation than they do having sex (6). Cultivation of spirituality provides an inexpensive and powerful way to enhance well-being, as shown by recent randomized controlled trials of spiritual treatment methods that are reviewed later in this article.

These considerations have led me to develop a simple approach to helping people to be happy that can be made available to everyone. My approach is integrative, combining biological, psychological, social, and spiritual approaches to mental health. The scientific basis for this science of well-being has been summarized in a recent book (7). Now I am writing a more clinically oriented book to explain how to apply this approach in clinical practice and am developing a series of psychoeducational modules that can be distributed widely.

Here I will summarize available data about the need to reduce disability, the spiritual needs of people, and the effectiveness of spiritually-oriented well-being therapies. Then I will describe the key clinical concepts about the stages of self-awareness. Finally, I will describe the series of psychotherapy modules that are being produced, to illustrate an efficient catalytic sequence of interventions that help everyone become more mature and happy.

THE NEED TO REDUCE DISABILITY WORLDWIDE

Despite modern advances in psychiatry, mental disor-

ders remain the leading causes of disability throughout the world (8). Major depression alone results in the average loss worldwide of more than 6 years of healthy life. Combining major depression with alcohol use, drug use, and other mental disorders brings the total burden from mental disorders to over 20 years of the lives of every person age 5 and older. Mental disorders are a staggering burden for societies around the world regardless of the ethnic and economic diversity of countries.

The treatment of mental disorders has been improved with the introduction of many medications and psychotherapy techniques that show acute benefits in randomized controlled trials. Nevertheless, available treatments are unfortunately associated with frequent dropout, relapse, and recurrence of illness. For example, in the treatment of major depression, the acute response to antidepressants or cognitive behavioral therapy is only moderate. Substantial improvement occurs in about 50% to 65% of patients receiving active treatment, compared to 30% to 45% in control subjects (9). Relapse is rapid in subjects who drop out or prematurely discontinue treatment, because the interventions are directed at symptoms and do not correct the underlying causes of the disorder. Most patients with major depression who do improve acutely have recurrences within the next three years despite use of medications and cognitive behavioral therapy (10). The outcomes are likewise inadequate from available treatments for other disorders, such as schizophrenia, bipolar disorder, anxiety disorders, alcohol and drug dependence. The available medications for drug and alcohol dependence have weak acute effects and high rates of relapse and recurrence, even when clinical subtypes are distinguished (11,12). Likewise, 74% of patients with schizophrenia discontinued the antipsychotic they were prescribed before 18 months in a recent trial comparing available second-generation (atypical) antipsychotics to the first-generation (typical) drug perphenazine (13). All available drugs were discontinued with nearly equal frequency because of high rates of non-response, intolerable side effects, and non-adherence. The inadequacy of available treatments for most patients with mental disorders results in persistent residual symptoms of disease and distress, as well as low levels of life satisfaction and well-being.

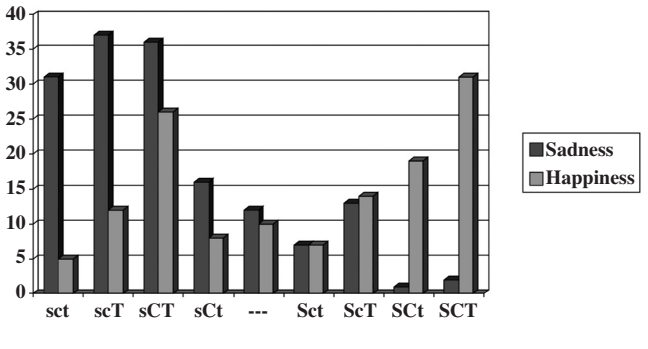
WHAT DOES REDUCE DISABILITY AND ENHANCE WELL-BEING?

Well-being is not enhanced by wealth, power, or fame, despite many people acting as if such accomplishments could bring lasting satisfaction. Character development does bring about greater self-awareness and hence greater happiness. Fortunately, recent work on well-being has shown that it is possible to improve character, thereby increasing well-being and reducing disability in the general population, and in most, if not all, mental disorders (4,7,10,14-16). The most effective methods of intervention all focus on the development of positive emotions and the character traits that underlie well-being.

Randomized controlled trials of therapies to enhance well-being in patients with mental disorders show improvements in happiness and character strengths that increase treatment adherence and reduce relapse and recurrence rates when compared to cognitive-behavioral therapy or psychotropic medication alone (10,14,15). Randomized controlled trials showed that interventions to enhance well-being are also effective in samples of students and volunteers from the general population (4,17).

The methods of improving well-being can be understood as working on the development of the three branches of mental self-government that can be measured as character traits using the Temperament and Character Inventory (TCI) (6,18). These three TCI character traits are called self-directedness (i.e., responsible, purposeful, and resourceful), cooperativeness (i.e., tolerant, helpful, compassionate), and self-transcendence (i.e., intuitive, judicious, spiritual). In essence, high scorers in all these character traits have frequent positive emotions (i.e., happy, joyful, satisfied, optimistic) and infrequent negative emotions (i.e., anxious, sad, angry, pessimistic).

Our findings are illustrated in Figure 1. Using the TCI, we distinguished people who were in the top third of self-directedness (S), cooperativeness (C), and self-transcendence (T), from those in the lowest third (s, c, t), or in the middle third on each test (-). About a third of people who were low in self-directedness were depressed. The percentage of those low in self-directedness who were happy was 5% if people were also neither cooperative nor transcendent, and increased to 26% if they were both cooperative and transcendent. Furthermore, if self-directedness or cooperativeness was high, but not both, then people did not differ much in mood from those with average character profiles. If both self-directedness and cooperativeness



S – top third of self-directedness; s – lowest third of self-directedness; T – top third of self-transcendence; t – lowest third of self-transcendence; C – top third of cooperativeness; c – lowest third of cooperativeness; --- middle third on each test

Figure 1 Percentages of people with prominent sadness or prominent happiness, according to their character profile (adapted from 7)

were elevated, then happiness was much more frequent than sadness (19% versus 1%). Finally, people who were elevated on all three aspects of character had the highest percentage of happiness (26%). In other words, the development of well-being (i.e., presence of happiness and absence of sadness) depends on the combination of all three aspects of self-aware consciousness. The lack of development of any one of the three factors leaves a person vulnerable to the emergence of conflicts that can lead to a downward spiral of thought into a state of depression.

These character traits can be exercised and developed by interventions that encourage a sense of hope and mastery for self-directedness, kindness and forgiveness for cooperativeness, and awareness and meaning greater than oneself for self-transcendence.

Low TCI self-directedness is a strong indicator of vulnerability to major depressive disorders (19). TCI self-directedness is a predictor of rapid and stable response to both antidepressants (20,21) and cognitive behavioral therapy (CBT) (22). Encouragement of problem solving leads to increases in autonomy and sense of personal mastery, which facilitate greater hope and well-being in ways that are common in effective psychotherapies, including CBT (23-25) or CBT augmented with modules for awareness of positive emotions (10,14,15), mindfulness (26,27), or spiritual meaning (15,16,23). The addition of modules for cultivating positive emotions, mindfulness, and/or spiritual meaning reduces drop-outs, relapse, and recurrence rates substantially. For example, in the treatment of patients with recurrent depression, additional work on positive emotions lowered relapse and recurrence rates from 80% to 25% over 2 years in recurrent depressives (15). Likewise, mindfulness training reduced the relapses from 78% to 36% at 60 weeks in depressives with three or more episodes (26-28). Finding of spiritual meaning through self-transcendent values also reduced relapse and improved well-being in randomized controlled trials of patients with depression, schizophrenia, and terminal diseases (16).

Improvements in each of these areas is beneficial, but emotional consistency and resilience depends on the balanced development of all three major dimensions of character (6,7,18). Western concepts of mental health usually emphasize self-directedness and cooperativeness, but neglect the crucial role of spiritual awareness and meaning based on self-transcendent values.

THE NEED FOR SPIRITUAL MEANING

Most psychiatric patients want their therapist to be aware of their spiritual beliefs and needs, because human spirituality has an essential role in coping with challenges and enjoying life (16). Human consciousness is characterized by a capacity for self-awareness and free choices that are not fully determined by past experience (7). The great mystery of neuroscience is that human consciousness cannot be explained or reduced to materialistic processes (29,30).

As a result of the fact that human consciousness transcends materialistic explanations, psychiatry now finds itself at an important crossroad. The fostering of spirituality and well-being is crucial for psychiatry to achieve its meaning and purpose, but spirituality and well-being have been neglected because of a tendency toward materialistic reductionism. Psychiatry has now the opportunity to promote a broader understanding of what it means to be a human being. Humanity cannot be reduced to matter, as in behaviorism or molecular psychiatry. Humanity also cannot be reduced to the dualism of body and mind, as in cognitive-behavioral approaches.

Self-awareness requires an understanding of the physical, mental, and spiritual aspects of a human being. To foster fuller self-awareness, CBT can be augmented with an added focus on existential issues, such as finding self-acceptance and meaning in coping with life challenges. Meaning can be found by encountering someone or something that is valued, acting with kindness and purpose in the service of others, or developing attitudes such as compassion and humor that give meaning to suffering (16,31,32). Spiritually-augmented therapy is more effective than CBT in activating feelings of hope and life satisfaction (16,31,32). It is also shown in randomized controlled trials to reduce relapse rates and enhance the quality of functional recovery (16). The reduction in relapse rates suggests that fostering the search for meaning may sometimes help people develop their character to new levels in which they have reduced vulnerability to future episodes.

In order to incorporate a fuller understanding of spiritual development into general clinical practice, it is necessary to understand the way that people normally develop their sense of well-being. Fostering the development of character traits such as being self-directed, cooperative, and spiritual, automatically leads to a good quality of life. Understanding the ways to foster spiritual development allows a therapist to treat the full range of psychopathology, provided the therapist knows appropriate ways for dealing with the many obstacles that patients may encounter along the path to well-being.

STAGES IN THE PATH TO WELL-BEING

There are three major stages of self-awareness along the path to well-being, as summarized in Table 1, based on extensive work by many people, as I have described in more detail elsewhere (7). The absence of self-awareness occurs in severe personality disorders and psychoses, in which there is little or no insightful awareness of the preverbal outlook or beliefs and interpretations that automatically lead to emotional drives and actions. Lacking self-awareness, people act on their immediate likes and dislikes, which is usually described as an immature or "child-like" ego state.

The first stage of self-awareness is typical of most adults

Table 1 Stages of self-awareness on the path to well-being

Stage	Description	Psychological characteristics
0	Unaware	Immature, seeking immediate gratification ("child-like" ego-state)
1	Average adult	Purposeful but egocentric; cognition able to delay gratification, but has frequent negative emotions (anxiety, anger, disgust) ("adult" ego-state)
2	Meta-cognition	Mature and allocentric; aware of own subconscious thinking; calm and patient, so able to supervise conflicts and relationships ("parental" ego-state, "mindfulness")
3	Contemplation	Effortless calm, impartial awareness; wise, creative, and loving; able to access what was previously unconscious as needed without effort or distress ("state of well-being", "soulfulness")

most of the time. Ordinary adult cognition involves a capacity to delay gratification in order to attain personal goals, but remains egocentric and defensive. Ordinary adult cognition is associated with frequent distress when attachments and desires are frustrated. Hence the average person can function well under good conditions, but may frequently experience problems under stress. Most people ordinarily think in ways that are defensive, so they frequently struggle to justify why they are right and others are wrong. However, at this stage of self-awareness, a person is able to make a choice to relax and let go of negative emotions, thereby setting the stage for acceptance of reality and movement to higher stages of coherent understanding.

The second stage of self-aware consciousness is typical of adults when they operate like a "good parent". Good parents are allocentric in perspective – that is, they are "other-centered" and capable of calmly considering the perspective and needs of their children and other people in a balanced way that leads to satisfaction and harmony. This state is experienced when a person is able to observe his own subconscious thoughts and consider the thought processes of others in a similar way to his observing his own thoughts. Hence the second stage is described as "meta-cognitive" awareness, mindfulness, or "mentalizing". The ability to the mind to observe itself allows for more flexibility in action by reducing dichotomous thinking (26). At this stage, a person is able to observe himself and others for understanding, without judging or blaming. However, in a mindful state people still experience the emotions that emerge from a dualistic perspective, and so they must struggle effortfully to discipline and control their emotional responses. Such effort is tiring and only partially successful, so mindfulness is only moderately effective in improving well-being (7).

The third stage of self-awareness is called contemplation, because it is the direct perception of one's initial perspective – that is, the preverbal outlook or schemas that direct our attention and provide the frame that organizes our expectations, attitudes, and interpretation of events. Direct awareness of our outlook allows the enlarging of consciousness by accessing previously unconscious material, thereby letting go of wishful thinking and the impartial questioning of basic assumptions and core beliefs about life, such as "I am helpless", "I am unlovable", or "faith is an illusion". The third stage of self-awareness can also be described as "soulful", because in this state a person becomes aware of deep pre-verbal feelings that emerge spontaneously from a unitive perspective, such as hope, compassion, and reverence (7). Soulfulness is much more powerful in transforming personality than is mindfulness, which often fails to reduce feelings of hopelessness (33). However, most people never achieve a stable contemplative state in contemporary societies, which are replete with materialistic and anti-spiritual messages.

Extensive empirical work has shown that movement through these stages of development can be described and quantified in terms of steps in character development or psychosocial development, as in Vaillant's work (34) on Erikson's stages of ego development. Such development can be visualized as a spiral of expanding height, width, and depth as a person matures or increases in coherence of personality. Likewise, the movement of thought from week to week or month to month has the same spiral form regardless of the time scale. Such "self-similarity" in form regardless of time scale is a property characteristic of complex adaptive systems, which are typical of psychosocial processes in general (7). The clinical utility of this property is that therapists can teach people to exercise their capacity for self-awareness, moving through each of the stages of awareness just described. Their ability to do so, and the difficulties they have, reveals the way they are able to face challenges in life.

Based on studies of stages in character development and emotional consistency, I have developed a psychotherapy program that involves a sequence of 15 intervention modules to guide a person along the path to well-being (Table 2). These are described as scripts of a dialogue

Table 2 Titles and topics of the 15 modules of "Voyages to well-being"

Set 1	Module 1: What makes you happy? – Recognizing what brings joy
	Module 2: What makes you unhappy? – Understanding traps in thinking
	Module 3: Experiencing well-being – Quieting the mind's turmoil
	Module 4: Union in nature – Awakening your physical senses
	Module 5: Finding meaning — Awakening your spiritual senses
Set 2	Module 6: Beyond mindfulness – Cultivating soulfulness
	Module 7: Observing and elevating your thoughts
	Module 8: Observing and elevating your human relationships
	Module 9: Charting your maturity and integration
	Module 10: Contemplation of being
Set 3	Module 11: Can you learn to reduce stress?
	Module 12: Calming your fears
	Module 13: Observing the power-seekers in your life
	Module 14: Contemplation of mysteries
	Module 15: Constant awareness

with a patient going through therapy to become more healthy and happy. This therapeutic sequence corresponds to the natural sequence by which a person grows in self-awareness, adapted to provide therapeutic guidance and self-help exercises in a way that will provide systematic progress toward well-being. Each module is about 50 minutes long, suitable for use in a self-help format or as an adjunct to individual or group therapy. It is designed as a universal intervention that can be enjoyed by anyone regardless of his or her level of physical and mental health as long as they have the reading comprehension of an average 14 year old (i.e., eighth grade education). The therapist does not have to repeat instructions or go through standard material, but is free to discuss individualized issues with the patient and suggest applications and homework that is especially appropriate to their particular situation. The pacing of intervals between modules in the series can be determined by the motivation and situation of the patient, and orchestrated by the therapist.

All of the techniques have been tested in clinical work (18), and most have been tested in randomized controlled trials described earlier in this article. A randomized controlled trial of the interventions as a complete set is being planned. It is interesting to note that the first set of modules emphasizes behavioral methods focused on positive emotions along with basic concepts of cognitive processing. The second set of modules goes beyond mindfulness to stimulate deeper meta-cognitive awareness of the perspectives that underlie subconscious thoughts. The third set of modules involves contemplative access to and recognition of the meaning of preverbal symbols by which internal and external influences that are usually unconscious communicate by framing subconscious expectations, as in dreams and some forms of advertising, social movements, and other powerful situations. These stages of therapy correspond to stages of spiritual development but are based on explicit psychobiological principles, as I have described in detail elsewhere (7).

It is my hope that providing an explicit description of a sequence of interventions will help therapists overcome their unfortunate reluctance to attend to their patient's spiritual needs. I have found it possible to be non-judgmental in raising questions about spiritual values for my patients. I emphasize that each person must question all authorities, including me, and focus on providing private exercises by which they can obtain answers for themselves. This allows attention to spirituality based on principles of psychobiology with roots in compassion and tolerance, rather than on the basis of dogmatic judgments that are rooted in fear and intolerance. My experience has been that this has made my therapy more effective and more enjoyable for both my patients and myself. Only by addressing spirituality in a scientific and non-judgmental manner can we make psychiatry into a science of well-being that is able to reduce the stigma and disability of mental disorder.

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