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Happiness, excellence, and optimal human functioning

Review of a special issue of the *American Psychologist* (2000;55:5-183), Martin E P Seligman and Mihaly Csikszentmihalyi, guest editors

In January 2000, the American Psychological Association's flagship journal, *American Psychologist*, dedicated an entire issue to the growing field of "positive psychology," including both theory and practical applications. The special issue was highly relevant to physician well-being, and in this article I summarize and critique its key papers. Subsequent developments in positive psychology—including conferences, further readings, and grant awards—are available at http://www.apa.org/releases/positivepsy.

Summary points

- "Positive psychology" was launched as a movement to study and build human strengths and virtues
- Empiric studies are under way to identify predictors of well-being and optimal functioning
- Salary, age, gender, and physical attractiveness do not predict general happiness
- Extraversion, social support, marriage, and religiosity predict general happiness
- Positive psychology can have a substantial effect on physical and mental health outcomes

html or the journal editor's web site, http://psych.upenn.edu/seligman.

WHAT IS POSITIVE PSYCHOLOGY?

The special millennial issue contains 15 empirically minded articles by eminent authors in the field of academic psychology. The issue was meant to serve as a state-of-the-art compendium of the burgeoning field of positive psychology. This field marks a deliberate steering away from the dominant "disease model" of human functioning. In the disease model, clinical psychology had become almost exclusively a science about healing damage or controlling maladaptive impulses. In contrast, the primary purpose of positive psychology is to measure, understand, and then build human strengths and civic virtues, including hope, wisdom, creativity, courage, spirituality, responsibility, perseverance, and satisfaction.

The special issue is divided into 4 sections: evolutionary perspectives, positive personal traits, implications for mental and physical health, and fostering excellence. As the editors and several authors point out, positive psychology has significant implications for improving the quality of personal and professional life through applications on both individual and societal levels. As the editors also note, given the breadth of coverage in this issue, the articles are meant to serve as "enticing hors d'oeuvres" that stimulate a more in-depth reading of the literature.

EVOLUTIONARY PERSPECTIVES AND POSITIVE PSYCHOLOGY

The first of the 4 sections includes 2 ambitious articles that examine positive psychology within an evolutionary framework. In "The Evolution of Happiness" (*Am Psychol* 2000;55:15-23), David Buss offers 3 hypotheses to explain why positive states of mind are so often elusive: first, the discrepancies between modern and ancestral environments; second, mechanisms evolved that are "designed" to produce subjective distress (eg, functional jealousy and worry); and third, competitive mechanisms evolved that function to benefit 1 person at the expense of others.

In contrast to Buss' biologically based evolutionary arguments, Massimini and Delle Fave explore psychological and cultural evolution in "Individual Development in a Bio-Cultural Perspective" (*Am Psychol* 2000;55:24-33). They tie the quality of subjective experience to a process labeled "psychological selec-

tion" wherein the individual "preferentially cultivates a limited subset of activities, values, and personal interests." Their summary of cross-cultural studies suggests that optimal selections for well-being are characterized by high involvement and concentration, intrinsic motivation, and the perception of tough challenges matched by adequate personal skills.

PERSONAL TRAITS AND POSITIVE PSYCHOLOGY

The second section includes 5 articles that ask how personality traits contribute to positive psychology. Spanning nearly 3 decades of psychology research, the authors select 4 "traits" they deem of central importance: subjective well-being, optimism, happiness, and self-determination. Deiner's more general opening piece on subjective well-being and Myers's review of self-reported happiness and life satisfaction are solid summaries of scores of empiric articles, all addressing the same question: "What makes people think and feel positively about their life?" They tackle all the usual predictors of happiness, with some surprising results (table).

Interestingly, "yuppie values"—preferring a high income and occupational success and prestige to having close friends and a good marriage—are strongly associated with personal unhappiness.

This section also presents evidence of the great adaptability of the human psyche and the strong role of temperament and personality in subjective well-being. In someone predisposed to a positive state of mind, even spinal cord injuries or other adverse life events cannot keep that person down for long.

Peterson takes a more specific look at "dispositional optimism" and explanatory style—the habits we have of explaining why events happen.⁴ In reviewing the explanatory style, Peterson seeks to highlight 1 of the possibly many powerful processes that mediate between external events and the quality of experience. Persons who tend to explain negative events with external ("it's not my fault"), unstable ("it won't happen again"), and specific ("it applies to this event only") attributions usually have better moods, more motivation, greater success, and better physical health.

The final 2 articles in section 2 address self-determination and its role in positive psychology. Ryan and Deci present an impressive summary of the literature on intrinsic and extrinsic

Predictors of happiness

| Predictor type | Trait or character |
|----------------------------|---|
| Positive | Extraversion Social support Marriage Religion |
| Negative | Physical health* "Yuppie values" |
| Neutral or no relationship | Income (after basic needs are met) Age Gender Physical attractiveness† |

^{*}Weak but consistent, especially in frail elderly persons †Weakly positive for college students.

www.ewjm.com Volume 174 January 2001 wjm 27

motivation.⁵ Although the discussion is heavy on theory and light on practicalities, applications can be fairly easily deduced to encourage behavioral change or promote professional satisfaction. For example, the extrinsic motivation literature can predict the outcomes of managed care incentive programs and highlight better internal and external motivators to encourage physicians' adherence to treatment protocols. Professional satisfaction is most strongly predicted when there is a preponderance of internal motivators—ie, being able to find personal meaning in what one does or has to do. The authors interestingly tie motivational states to 3 basic and related human needs: for competence, for belonging, and for autonomy. Section 2 ends with an essay by Barry Schwartz discussing "the tyranny of freedom"—ie, the dangers of too much autonomy.⁶

IMPLICATIONS FOR MENTAL AND PHYSICAL HEALTH

Section 3 comprises 3 articles that address positive psychology's implications for mental and physical health. Noted psychiatrist and ego defense researcher, George Vaillant, opens the section with his review, "Adaptive Mental Mechanisms: Their Role in a Positive Psychology" (Am Psychol 2000;55:89-98). Vaillant introduces the Defensive Function Scale, which measures the quality of psychological defenses and provides a metric for positive psychology similar to that for IQ. His review focuses on the defenses placed in the "mature" end of the scale, which include altruism, suppression, humor, anticipation, and sublimation (ie, redirecting energy to positive outlets such as art, work, sports).

The second article, by Shelly Taylor's University of California, Los Angeles, research group, focuses on "positive illusions" and their effects on physical health. The authors summarize a vast literature that has convincingly linked optimism, a sense of personal control, and a sense of meaning to physical health, focusing mostly on patients infected with the human immunodeficiency virus or who have AIDS. She argues that even grossly unrealistic optimism is protective of health. Unfortunately, in this literature's zeal for rigor and quantification, authors seem to have assumed that quantity and quality of life are interchangeable. The blinders of "positive illusions" may give patients more days of life, but they may also prevent them from using the important personal and interpersonal opportunities created by the stress of serious illness.

Salovey and his group at Yale University briefly summarize the literature on emotional states and physical health. The authors acknowledge that far more is known about how negative rather than positive emotional states affect health. In this sense, they have little to say directly about positive psychology. Nonetheless, their summary of negative affective states and their effect on immune function and susceptibility to disease is compelling. They share tantalizing snippets of the literature on "venting" or verbal and/or written expressions of negative affect. Despite the initial surge in negative feelings, it appears that venting—in the right place and time—has important health benefits. Interestingly, venting to a diary that no one reads also has health benefits.

The authors also touch on the importance of instilling hope in ill patients and its possible link to improved medical outcomes

through the placebo response. They close with a brief mention of how changes in mood likely affect health-related behaviors such as eating, exercise, and seeking social support. Ironically, although people often drink alcohol, smoke tobacco, or indulge in unhealthy foods as a way to manage their moods, these strategies are usually ineffective in bringing about the desired emotional state.

FOSTERING EXCELLENCE

The final section's 5 articles are based on the theme of "fostering excellence" or the premise that most "normal" people could use advice in how to reach a more fulfilling and rewarding existence. This section is meant to build directly on the spirit of the humanistic psychologists of the 1960s, like Abraham Maslow and Carl Rogers, without falling down the slippery slope of self-help platitudes.

Unlike previous sections, this one fails to achieve its ambitious goal. The 5 articles—on wisdom, "states of excellence," creativity, gifted children, and the development of initiative in children⁹⁻¹³—are interesting and densely packed with information, but it is a struggle to see what can be practically applied in a way that could directly foster excellence. The articles focusing on positive psychology and children are important inclusions in this volume and speak to the editors' appreciation of the need to bring up children in a way that acknowledges their strengths and



The field of positive psychology explores the antecedents of happiness

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not just their weaknesses. In the final article, "Toward a Psychology of Positive Youth Development," Larson addresses the broader societal problems of boredom, alienation, and disconnection and suggests that sports, art, and structured voluntary activities might be a way to encourage initiative in children.

Although no new research or theories are presented in this special issue, it provides a convenient starting point for anyone seriously interested in learning more about the empiric research on well-being.

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Loving you early and late

In the first days in the chem lab the one with ivy dimbing up the back

and the lecture hall with the tiered seats we learned palpation under white coats during talks on respiration.

In the basement in the corner behind the lockers late at night

it was distraction satisfaction or a fraction of the same old disease that infected Eve on the day of her eviction.

Now it's walks and lots of fiber, PSA and yearly mammograms making sure we keep our forms fit and our dry wit for the patients

coping with our
HMO woes, calming
fears of dissolution
I am still here
I won't leave dear
not in this year
or any other.

Martha Johnson Bethesda, MD

Author: Martha Johnson is a medical educator. She met her husband in an undergraduate chemistry class, and they married after the first year of medical school. The year was 1967. They credit the longevity of their relationship to their common interests and commitment.