ТЕОРЕТИЧЕСКИЕ, МЕТОДОЛОГИЧЕСКИЕ И ДИСКУССИОННЫЕ ВОПРОСЫ СОВРЕМЕННОЙ ПСИХОЛОГИИ

FLOW AND OPTIMAL EXPERIENCE: METHODOLOGICAL IMPLICATIONS FOR INTERNATIONALIZING AND CONTEXTUALIZING A POSITIVE PSYCHOLOGY CONCEPT. PART 1

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This article represents the first part of a two part series of articles focusing upon one core positive psychology concept — the peak experience termed flow developed by psychologist Mihaly Csikszentmihalyi — as a test case for examining some of the issues involved when positive psychology is internationalized and made indigenous. In particular, methodological, measurement, and theoretical issues regarding flow research will be discussed. Quantitative, qualitative and mixed methods approaches to flow, including interviews, surveys, and the experience sampling method among others will be described. Evidence is examined from a range of existing research projects on flow from around the globe, raising questions concerning the positive psychology enterprise, including the value of psychological assessment tools and the debate over cross-cultural universals/comparisons. Rather than viewing qualitative and quantitative approaches (or anthropological and psychological perspectives) as rival factions, this project seeks to develop constructive dialogue that acknowledges both strengths and limitations of each approach to facilitate engagement with the topics of mixed methods and human strengths, subjects often neglected in cross-cultural research. The first part of the article series examines methodological implications of this positive psychology concept, and the second part of the article series focuses upon the cross-cultural implications.

Key words: flow, optimal experience, positive psychology, qualitative and quantitative methods

Positive psychology has resulted in a number of advancements in psychology since its formal launch in the late 1990s. In particular, by emphasizing human strengths and virtues it has offered a welcome corrective to what has been termed as the business as usual or doom and gloom psychology that has been the principle focus of most of the discipline since its nineteenth century origins [36; 47]. Positive psychologists state that they aim for an evidence-based, rigorous methodological approach, and work to avoid a naive

Pollyanna-like view of human nature [46; 48]. Thus, for instance, one suspects positive psychologists would be unlikely to embrace the worldview of the fictional Professor Pangloss in Voltaire's eighteenth century classic work *Candide*, whose philosophy seems to consist of endless statements that "all is for the best in the best of all possible worlds" despite tragedy and destruction present all about him, from natural disasters such as an earthquake and a tsunami to physical disease such as syphilis [49].

At any rate, some of the core researchers associated with positive psychology have conducted relevant research prior to the beginnings of positive psychology, including Ed Diener on happiness and subjective well-being [11], Christopher Peterson on optimism [36], and Mihaly Csikszentmihalyi on flow [4]. This article examines Csikszentmihalyi's flow concept in detail, as an example of a positive psychology concept and methodological approach reflective of the discipline of positive psychology more generally, with several exceptions that will be described later in this article.

Flow may be defined briefly as a "state of optimal experience that people report when they are intensely involved in doing something that is fun to do" [7. P. 381]. This concept is worthy of consideration here for a number of reasons. First, despite the relative youth of positive psychology, it has been extensively researched. For instance, a 2011 online search of the PsycINFO database yielded about 1,230 publications on the topic of flow since 1975 (the search excluded non-related uses of the term flow, such as blood flow, optic flow, and electron flow, but did not include searches of other databases outside of psychology, such as ERIC or MEDLINE) [41]. Second, flow is considered a core positive psychology concept. For example, the second of the five pillars in Seligman's PERMA well-being theory of positive psychology [47] is engagement, a term Seligman, positive psychology's co-founder, writes "is about flow" [47. P. 11].

In the early conceptualizations of flow, Csikszentmihalyi [4] argued it was composed of six components: A merging of action and awareness, a centering of attention, a loss of self-consciousness, the feeling of control, coherent, noncontradictory demands, and an autotelic nature [13]. Later, Csikszentmihalyi's [5] understanding of flow developed, and nine components were included. It is worth describing them here. The example of music and flow will be utilized as this is a domain that has commonly been reported as associated with strong experiences in general [18] and with the flow experience in particular [10; 39; 40]. First, the flow experience involves clear goals every step of the way. In the case of written music, the score offers that plan by describing, among other musical aspects, the pitches, the rhythm, and the tempo to be played. Second, there is immediate feedback to one's actions. For instance, one reason classical music performance is conducive to flow is that the musician quickly receives aural feedback about performance; one hears if that note just played rang true or not, and can incorporate that information into the next performance, or perhaps even correct elements of the current performance. Indeed, recently a professor of piano has written an entire book on utilizing flow to assist piano students with piano practice and performance [35]. Feedback in other human activities is not always immediate; for instance students may wait weeks for dissertation evaluations and professors may wait years for tenure decisions. Third, there is a balance of challenges and skills. A professional concert violinist will likely be bored if asked to play a simple tune such as Twinkle, Twinkle Little Star, as such a performer's skills exceed the challenges of the piece. In contrast, a beginning pianist will likely experience great stress and anxiety

if asked to play a very challenging piece of music, such as some of the fiendishly difficult work by Alcan or Rachmaninoff. Fourth, action and awareness are merged. A musical example of this component may be the deep connection musicians often feel towards their instruments. For instance, recently Crowe [3] has assembled a book's worth of interviews with famous guitarists discussing their first guitars. Often these interviews reveal a musician's deep connection to the instrument, similar perhaps to the close psychological merging an athlete such as a rower may experience when an oar feels like it has become an extension of his or her own body. Notably, Crowe's book is subtitled "Tales of True Love and Lost Chords from Legendary Musicians." Some guitarists have been known to sleep with their guitars at night and to give them a woman's name. Such acts reflect the intensity of the merged relationship between human and machine, a relationship that if broken (such as due to theft or destruction) can be emotionally devastating as well as professionally catastrophic. In some cases, guitarists have emphasized such potent relationships by deliberately "sacrificing" their instrument on stage, for example, by setting their guitar on fire or destroying their guitar by slamming it on the stage, in public displays aimed to demonstrate passion and commitment to art and creativity, as in a famous concert by rock star Jimi Hendrix in the 1960s.

Fifth, distractions are excluded from consciousness. The musician in flow is not concerned with thoughts that center on the temperature of the room, the expensive scents displayed by the wealthy concert goers, or where to go for dinner after the performance. The single-minded focus is on the music. Sixth, there is no worry of failure. Cognitive psychologists [21; 27] have long written on attention, and it is well-known that a person's attention has limits. Thus it makes sense that when a person devotes some attention to worries that less attention is available for the task at hand. If skills and challenges are truly closely matched, as is expected for flow experiences, then if attention is shifted to one's performance or personal anxieties for instance, it is likely that a musician's musical performance and musical capabilities will be diminished. Seventh, self-consciousness disappears. This flow component relates to the fifth and sixth components. Again, if one is truly and fully engaged with an activity, then there is no attention left over for other activities, such as self-consciousness. The musician in flow is not worrying about how cool they may be appearing to the audience, or whether she or he has put on a few extra pounds, or how, if any exist, retirement plans may be performing, or what aches and pains one may be feeling in the body. Eighth, sense of time becomes distorted. This component merits special discussion in the case of music, since in music, timing such as rhythm and tempo are critical dimensions. In the case of flow, what it means when time is distorted is that "outside" time becomes irrelevant and beyond the musician's awareness or concern. For the musician in flow, it does not matter if it is eight o'clock in the evening or eight o'clock in the morning, or if one has been practicing for one hour or many hours. Issues of time in the music itself are indeed a focus of the activity and are keenly experienced in a nuanced manner by the musician in flow. There are countless stories of jazz musicians at all-night jam sessions that began in the early evening and continued until the musicians finally were exhausted, ultimately noticing that light outside indicated the arrival of the next day. Finally, ninth, if the previous eight criteria are mostly met, the activity is described as autotelic, meaning it becomes an end in itself. For most musicians, music is a matter of intrinsic motivation. Few musicians continue to pursue music in the hopes of winning

awards, earning huge amounts of money, or becoming world famous. Yet, music remains pervasive around the globe in nearly every society and culture examined in the present day and through history [1; 30]. The nature of the flow experience in music may offer a partial explanation for why music is such a common, and enduring human activity; simply put, it is fun. It is an end in itself and as the research on flow illustrates, when the flow experience is over, it typically results in a sense of happiness, well-being, and satisfaction that leads people to want to repeat the activity that resulted in flow in the future [5].

Csikszentmihalyi and subsequent researchers have documented the flow experience in a veritable plethora of populations. For instance, Csikszentmihalyi and Csikszentmihalyi [8] document the flow experience in elderly Korean immigrants, during writing, during solitary ordeals, during ocean cruising, among the Jesuits, in talented students, and in families. Other populations that have been studied and that appear to experience flow include yoga practitioners, artists, dancers, surgeons, chess players, and athletes [5].

Flow Lessons: Methods. One reason an examination of the flow research is valuable is that it offers insights into a developing understanding of how to test positive psychology constructs more generally. Positive psychologists have aimed for an empirically based rigorous psychological science and this goal in general has led to the pervasive use of quantitative methods, the dominant method in fact in North American psychology as a whole for much of the twentieth century to the present day.

However there are a number of concerns with the use of quantitative methods that merit discussion here. This critique of positive psychology is not new in fact, and dates close to its formal founding in the late 1990s. For instance, Rich [38] asks "How should psychologists approach the study of optimal experience? Will traditional quantitative methods suffice? Can we understand creativity via ANOVAs, happiness with regression, or the good life through structural equational modeling? Or are there topics that positive psychology cannot comprehend without the use of qualitative methods such as interviews, observations, and intense fieldwork?" [38. P. 9]. This critique of positive psychology's use of quantitative methods continues to the present day [42]. For instance, in *Psychology's Ghosts,* Kagan [28] offers an extended critique of positive psychology and psychology in general, with a special focus on the problematic use of self-report measures and the failure to consider the setting and context of psychological research. For example, given the great extent to which positive psychologists rely on self-report questionnaires from convenience samples (often of college sophomores), Kagan finds it troublesome in that such measures are used to develop grand theories of human behavior and to make sweeping conclusions that purport to describe all of humanity. Often such psychological assessments do not take into account the demographics and other important characteristics of the sample (e.g., age, race/ethnicity, culture, gender, social class) when drawing conclusions. For instance, Kagan notes that positive psychology theory tends to view happiness as a universally shared ultimate goal for all. In contrast, Kagan offers numerous examples through history and across the globe of societies and cultures that have or had different primary goals. For example, he lists food, personal security, freedom from authority/political liberty, public education, and universal suffrage, as goals that other places and times have viewed as more centrally important goals than happiness [28. PP. 123—124].

Furthermore, self-reports are subject to numerous biases, from forgetfulness or ignorance on the part of the participants, to unconscious social desirability bias and

deliberate deception. As Kagan notes, should psychologists and other scholars believe in astrology if 98% of research participants report on a survey that they believe it is reliable and accurate? [28. P. xv]. An additional problem with quantitative numeric questionnaires that Kagan notes is that verbal self-reports are not necessarily equivalent across cultures. For example, interpretation of apparently equal subjective well-being scores by different people is difficult, and important cultural nuances may be lost, as when, for instance, Asians tend to be more likely to rate their subjective well-being based on achieving sufficient levels of serenity, social harmony, and quality fulfillment of obligations linked to personal relationships (such as family), whereas many in majority culture North America and Europe rate their subjective well-being based on individual achievement and personal success [28. PP. 79—80]. Two identical questionnaire scores could thus have very different meanings, meanings that are lost to researchers if only such quantitative questionnaire items are utilized.

Perhaps part of psychology's (over)dependence on quantitative methods stems from a certain type of what may be termed physics envy. That is, as a younger discipline, aiming for acceptance and respect from older, more established sciences, perhaps psychologists have felt a need or desire for acceptance by these other academic disciplines and scholars that in part has resulted in inappropriate use of methods more suited for atoms and ants than for states and traits, emotions and motivations, in living human beings. Whatever the reason, psychologists' use of scientific tools and concepts from other disciplines has led to a number of controversies. For example, though Sigmund Freud undoubtedly made significant contributions to the discipline, and his work continues to influence psychology today [14], his use of concepts from thermodynamics to describe the human psyche rarely fails to draw a chuckle from physical scientists. As a more recent controversy, and one solidly in the core of positive psychology, one need look no further than the recent debates over work on the critical positivity ratio as proposed by Frederickson and Losada [17] and published in the leading journal *American Psychologist* and other publications. This positivity ratio draws on the use of differential equations from fluid dynamics (a subdiscipline of physics) and attempts to apply them to the human condition, arguing persons should "aim for a positivity ratio of at least 3 to 1. This means that for every heart wrenching negative emotional experience you endure, you experience at least three heartfelt positive emotional experiences that uplift you" [16. P. 32]. Brown, Sokal, & Friedman [2], also writing in *American Psychologist*, offer a detailed critique of the positive ratio work on methodological grounds, and note that they found "no theoretical or empirical justification for the use of differential equations ... to describe changes in human emotion over time; furthermore, we demonstrate that the purported application of these equations contains numerous fundamental conceptual and mathematical errors. The lack of relevance of these equations and their incorrect application lead us to conclude that Frederickson and Losada's claim to have demonstrated the existence of a critical minimum positivity ration of 2.9013 is entirely unfounded. More generally we urge future researchers to exercise caution in the use of advanced mathematical tools, such as nonlinear dynamics, and in particular to verify that the elementary conditions for their valid applications have been met" [17. P. 801]. Among the many critiques by Brown, Sokal, and Friedman [2] is that Frederickson and Losada did not reveal numerous important details about the business teams and their meetings examined in their research (such as length of meetings

or basic demographics of the eight member teams), and over-generalized from this specific sample (business teams of eight people) to make overly broad conclusions. Though the debate continues in a series of comments published in *American Psychologist* and other publications [44] it is important to note that though it is evident that there a numerous errors in the Frederickson and Losada work, Frederickson has produced much of merit, and certainly is not alone among scholars who have perhaps not always utilized best practices in research design, analysis, and interpretation. One can cite many examples of the problems that result from the overexuberant endorsement of science-like quantification and measurement programs; a few more that are worth remembering are nineteenth and early twentieth century phrenology and the abuses of intelligence testing [22].

Qualitative methods provide an alternative to quantitative methods, and may offer much of value to positive psychology [42—44]. Though psychologists in recent decades have certainly neglected and at times denigrated qualitative methods [38], it is important to recall, as Gergen, Jossellon, and Freeman [20] do, that some of the most influential and enduring work in all of psychology was primarily based upon qualitative research, including key publications by scholars such as Freud, Piaget, Bartlett, Lorenz, Vygotsky, Milgram, and Zimbardo. As Gergen, Jossellon, and Freeman [20] note, qualitative methods can enrich psychology by offering a pluralist orientation to knowledge and to practice, increased cultural understanding, challenging cultural conventions, and directly fostering social justice as in action research. These authors also note that qualitative methods may inspire new theory, assist with minority inclusion, promote interdisciplinary collaborations and may help contribute to psychology's contribution to positive social change.

Recently, there has been an increase in interest and activity in qualitative methods in psychology in general and in positive psychology in particular. For instance, the American Psychological Association's Division of Evaluation, Measurement, & Statistics (Division 5) is being replaced with the new name "Division of Quantitative and Qualitative Methods" and a new APA journal entitled *Qualitative Psychology* has begun publication in the past year. In positive psychology, the recent publication of an edited volume by Marujo and Neto [32] is subtitled "Collective, qualitative, and cultural-sensitive processes in positive psychology," reflecting that methodological emphasis, and recently, plans for a special issue of the *Journal of Positive Psychology* devoted to qualitative methods have been announced, a further indication that such methods- so common in anthropology, sociology, and other social sciences and humanities- may be reentering the mainstream of psychology in North America once again [43].

Flow is an excellent model in many ways for how the use of multiple methods may facilitate positive psychology research. Over the decades, Csikszentmihalyi and colleagues have utilized a broad range of techniques in examining the flow experience, including both quantitative and qualitative methods, as well as mixed methods. As Rich [38] notes "rather than to summarily dismiss one approach in favor of the other... a better approach may be to ask, What is the correct method for this particular research question? and What are the pros and cons of each method?" [38. P. 9].

Some of the earliest work on flow [4] utilized interviews with research participants to inquire about their experiences and perceptions when various activities in which they

were involved were going well. Such qualitative interview data helped define the flow experience, and of course at that time one could not administer a quantitative closed-question survey about flow since researchers would not have known what questions to ask. By allowing participants to describe the experience in their own words, rather than requiring them to check off various fixed category responses, data emerged that led to a research program that has continued for decades and influenced many psychologists and other scholars. Thus, one use of qualitative methods is certainly explorative, as in the initial stages of a research project. Yet the value of qualitative methods go beyond such pioneering efforts. Often qualitative data allow research participants to reveal nuances of experiences that may otherwise have gone undetected if only simple Likert-scale type forms are utilized. For instance, flow has been examined in a number of eminent elder creators, including Grammy, Pulitzer, and Nobel Prize award winners [6]. Given the high level of professional accomplishment of this sample, it is likely that psychology researchers may not begin to know what survey questions to pose and what scales to construct to assess for instance the flow experience during creative moments in physics or biology. Could a non-musician effectively design quantitative survey questions to assess creativity in an eminent musician such as Grammy award winning pianist Oscar Peterson, to name one of the participants in the study? Using semi-structured and open-ended qualitative interviews allowed such creators to express themselves in their own words, revealing insights into their flow experiences that were at times unique or specific to their professions or personal psychologies [10; 39]. An additional reason to utilize qualitative methods in the Csikszentmihalyi study of 91 eminent creators was that many of these busy professionals were reluctant to take the time to fill out questionnaire forms or consent to perhaps more intrusive quantitative measures such as the week-long version of the experience sampling method. Another reason qualitative methods may be of value is that the flow experience may be relatively rare, especially in its strongest forms. For instance, peak experiences relating to transcendent, spiritual concerns may happen only several times in one's life. Thus, it is unlikely that a researcher could reliably and routinely spot deep flow experiences in a laboratory setting, though occasionally some attempts have been made to induce milder flow-like experiences in such experimental settings [33].

Sometimes it is helpful to be able to quantify experiences, and indeed another line of flow research has utilized survey questionnaires extensively. A Flow Questionnaire derived from the early interview data has been developed [8], and psychometric properties have been examined in both long (36 item) and short (9 item) forms of flow scales [25; 26]. Non-English versions of flow scales exist, but again, one must ask what is missed by applying translations of the English version developed in the USA, when it is applied to other nations, cultures, and language groups. Of course, if some nuances are lost in translation, perhaps other valuable data are gained, as in Fournier et al. [15], who argue that studies of the French version of the Flow Scale-2 support the idea of invariance of the flow construct across the English and French languages.

One helpful technique to deepen understanding, especially when working cross-culturally or with diverse samples, would be to combine the use of questionnaires with other methods, especially qualitative ones. As an example, Garcia-Quijano, Poggie, Pitchon and del Pozo [19] have conducted multiyear work in Puerto Rico, exploring connections between quality of life and well-being and coastal resources. Though the

team utilized common quantitative measures of well-being such as the satisfaction for life scale, they tailored the measures to better fit the local context and also integrated qualitative approaches into their project with the small-scale fishers they examined, concluding "without good old fashioned ethnography, we would have missed key elements of what constitutes quality of life/well-being for people in our study's region and of the relationship between coastal resources use and quality of life/well-being" [19. P. 6]. Another example of how qualitative work may extend quantitative positive psychology work by adding thick description and rich local knowledge is present in Keith and Shalock's *Cross-cultural Perspectives on Quality of Life* [29], which examines people with developmental disabilities around the globe, utilizing not only quantitative survey questionnaires and positivistic, experimental approaches, but also constructionist methods such as naturalistic, phenomenological, and ethnographic methods, including participant self-reports, which may be viewed as autoethnographic data, which in part serve an empowering function in line with some additional forms of scholarship, such as action research.

Flow research has long integrated both quantitative and qualitative approaches. In fact, the major methodological innovation in flow research has been the development of the Experience Sampling Method (ESM) [5; 24]. This method combines some aspects of qualitative work with some aspects of quantitative work. In the ESM, research participants are given pagers (such as programmable wristwatches, personal digital assistants, or tablet computers) that are pre-programmed to sound an alarm at various times during the day. Typically the pager is programmed to beep about a half dozen or so times per day for one week. At each beep of the pager the participant is to fill out a brief questionnaire, often called the experience sampling form that requests the participant indicate their location, their physical and social environment, and their moods and emotions. Usually most versions of the form offer space for open-ended responses as short answer fill-ins. In some studies Csikszentmihalyi and colleagues have employed mixed-methods, using the ESM in combination with pre and post week qualitative interviews with the participants. This arrangement allows for follow up probing questions to explore responses that had been made during the week on the experience sampling forms and often yields rich data. The ESM has been utilized with a broad range of populations, including adolescents and emerging adults [45], couples in romantic relationships [23], and television viewers [9]. One may envision applying the ESM technique to other topics relevant to positive psychology, such as examinations of hope and optimism, self-regulation and control, persistence and perseverance, and care and compassion, among other strengths and virtues.

Finally, methodologically, it is worth noting that in recent years some work has been conducted utilizing methods from biopsychology [12; 31]. Such work may offer insights into how the flow experience is represented in the brain and despite the complexities may offer yet another helpful approach by illuminating aspects of the flow experience that previously remained unclear or unknown when only interviews, surveys, experience sampling methods and other qualitative and quantitative methods are used. Of course there are a number of challenges and limitations to such neuroscience and biological psychology work. First, as noted earlier it may be difficult indeed to induce a sufficiently intense flow experience in the laboratory to permit its investigation; this reality may be especially true given the need to connect the participant to various types of assessment

equipment, potentially awkward and uncomfortable technological trappings that may preclude or reduce flow. Second, the lab procedure for inducing flow, and the sample utilized may not generalize well to other sets, settings, and participants. For instance, work with video gamers or pianists in the lab may not apply to gamers or musicians at home or on stage. Third, there is a significant risk that the neuroscientific data may be misinterpreted; one imagines the possibility of a sort of "neo-phrenology", in the sense that a single part of the brain may be described in superficial popular media sound bites as the flow center, and the complexities of phenomenology of the flow experience, as well as factors of situated cognition and individual differences such as may relate to various sociocultural and demographic variables are unjustly neglected. Examples of overly reductionistic neuropsychological approaches to peak, spiritual, religious and mystical experiences are certainly present in the modern research literature [34], and thus caution is urged with both research design and analysis, as well as dissemination of findings. For instance, in Newberg and d'Aquili's popular "neurotheology" book [34], the authors focus on the cerebral cortex which they describe as the "seat of our human nature" and "where mind and body come together to create our self-image and our view of the world" and as one of the structures "most pertinent to spiritual experience" [34. PP. 18—19], though they acknowledge in the endnotes that "other structures ... may eventually be found to be involved in spiritual experiences, such as the thalamus, the reticular activating system, the septal nucleus, and the cerebellum" [34. P. 186]. Certainly many scholars of religion would argue that such a reductionistic approach may 1) risk misrepresenting neuroscience, in that these same structures also have many other functions as well, and 2) risk informational loss of many of the aspects of religion that make it a central concern of many humans, such as differences in the various belief systems of the various faith traditions; cognitive/moral distinctions in personal meaning, values, and ethics which the neuroscientific approach cannot detect. To offer an example more specific to flow, if scholars argued that flow merely represents dramatic changes in dopamine levels, what types of informational loss or misrepresentation of neuroscience is risked? For instance, dopamine is associated with many other phenomena as well, such as schizophrenia and the pleasures associated with use of some illegal street drugs. Many psychologists would thus argue that there are aspects to the flow experience that would be lost if the experience is analyzed at the level of neurotransmitters and neuroscience alone, rather than at the level of self-reports such as may be available from interviews that tap into the phenomenology of conscious, lived experience.

At any rate, if the psychophysiological data are interpreted with caution, one may find that they add one other helpful dimension to our understanding of flow; just as qualitative and quantitative methods each have strengths and limitations, so to do more biologically-based methods. De Manzano and colleagues [31] found when a flow state was induced in classically trained pianists in a laboratory, a significant relationship was found with flow and heart period, blood pressure, heart rate variability, activity of the zygomatic major muscle (a major facial muscle), and respiratory depth. Dietrich [12] adds that a needed prerequisite to the flow experience is a transient state of hypofrontality in the brain that "enables the temporary suppression of the analytical and meta-consciousness capacities of the explicit system" [12. P. 746]. Analysis at the level of neurotransmitters and brain and body processes offers a level of analysis that offers insights into underlying

mechanisms for the flow experience and helps answer related types of questions, but largely leaves unanswered questions relating to the sociocultural level of analysis (such as how the lived experience of flow may vary cross-culturally), which is the topic of the next section of this article.

In sum, it is clear that flow offers many lessons in how to evaluate and to test positive psychology constructs, as a review of the various scales, instruments, and methods above indicates. The multiple and mixed methods used to examine flow offer many models for assessing other positive traits, interventions, and outcomes, and such techniques, if sensibly utilized, are likely to advance both the science and the practice of positive psychology more generally. In the second article in this two part series, cross-cultural implications of flow for internationalizing and contextualizing positive psychology will be examined.

REFERENCES

[1] Blacking J. *How musical is man?* Seattle, WA: University of Washington, 1974.
[2] Brown N.J.L., Sokal A.D., Friedman H.L. The complex dynamics of wishful thinking: The critical positivity ratio. *American Psychologist,* 2013, vol. 68, no 9, pp. 801—813.
[3] Crowe J. *My first guitar: Tales of true love and lost chords from legendary musicians.* Toronto, Canada: ECW Press, 2012.
[4] Csikszentmihalyi M. *Beyond boredom and anxiety*. San Francisco, CA: Jossey-Bass, 1975.
[5] Csikszentmihalyi M. *Flow.* New York, NY: Harper Row, 1990.
[6] Csikszentmihalyi M. *Creativity.* New York, NY: Harper Row, 1996.
[7] Csikszentmihalyi M., Rich G. Musical improvisation: A systems view. In K. Sawyer (Ed.), *Creativity in performance*. Greenwich, CT: Ablex, 1997, pp. 43—66.
[8] Csikszentmihalyi M. Flow. In A.E. Kazdin (Ed.), *Encyclopedia of psychology.* Washington, DC: Oxford University Press, 2000, vol. 3, pp. 381—382.
[9] Csikszentmihalyi M., Csikszentmihalyi, I. (Eds.). *Optimal experience*. New York, NY: Cambridge University Press, 1988.
[10] Csikszentmihalyi M., Kubey R. *Television and the quality of life*. Cambridge, MA: Cambridge University Press, 1990.
[11] Diener E. Subjective well-being. *Psychological Bulletin,* 1984, no 95, pp. 542—575.
[12] Dietrich A. Neurocognitive mechanisms underlying the experience of flow. *Consciousness and Cognition,* 2004, no 13, pp. 746—761.
[13] Engeser S., Schiepe-Tiska A. Historical lines and an overview of current research on flow. In S. Engeser (Ed.), *Advances in flow research.* New York, NY: Springer, 2012.
[14] Feist J., Feist G.J. *Theories of personality* (7th ed.). Boston, MA: McGraw Hill, 2009.
[15] Fournier J., Gaudreau P., Demontrond-Behr P., Visioli J., Forest J., Jackson, S. (2007). French translation of the flow state scale-2. *Psychology of Sport and Exercise,* 2007, vol. 8, no 6, pp. 897—916.
[16] Frederickson B.L. *Positivity*. New York: Three Mile Press, 2009.
[17] Frederickson B.L., Losada M.F. Positive affect and the complex dynamics of human flourishing. *American Psychologist,* 2005, no 60, pp. 678—686.
[18] Gabrielsson A. *Strong experiences with music.* New York: Oxford University Press, 2011.
[19] Garcia-Quijano C.G., Poggie J.L., Pitchon A., del Pozo M. (2012). Investigating coastal resource use, quality of life, and well-being in southeastern Puerto Rico. *Anthropology News,* 2012, vol. 53, no 3, pp. 6—7.
[20] Gergen K.J., Josselson R., Freeman M. (2015). The promises of qualitative inquiry. *American Psychologist,* 2015, no 70, pp. 1—19.
[21] Goldstein B. *Cognitive psychology* (4th ed.). Stamford, CT: Cengage, 2014.
[22] Gould S.J. *The mismeasure of man*. New York, NY: W.W. Norton, 1981.

[23] Graham J.M. Self-expansion and flow in couples' momentary experiences. *Journal of Personality and Social Psychology,* 2008, vol. 95, no 3, pp. 679—694.
[24] Hektner J., Schmidt J., Csikszentmihalyi M. (Eds.). *Experience sampling method.* Thousand Oaks, CA: Sage, 2006.
[25] Jackson S., Marsh S.A. Flow experience in sport. *Structural Equation Modeling,* 1999, vol. 6, no 4, pp. 343—371.
[26] Jackson S.A., Martin A.J., Eklund R.C. Long and short measures of flow. *Journal of Sport and Exercise Psychology,* 2008, vol. 30, no 5, pp. 561—587.
[27] James W. *Principles of psychology* .Vol. 1. New York, NY: Henry Holt, 1890.
[28] Kagan J. *Psychology's ghosts.* New Haven, CT: Yale University Press, 2012.
[29] Keith K., Shalock R.D. (Eds.). *Cross-cultural perspectives on quality of life*. Washington, D.C.: American Association on Mental Retardation, 2000.
[30] Koen B., Lloyd J., Barz G., Brummer-Smith K. (Eds). *The Oxford handbook of medical ethnomusicology.* New York, NY: Oxford University Press, 2008.
[31] De Manzano O., Theorell T., Harmat L., Ullen F. (2010). The psychophysiology of flow during piano playing. *Emotion,* 2010, vol. 10, no 3, pp. 301—311.
[32] Marujo H. A., Neto L. M. (Eds.). *Positive nations and communities: Collective, qualitative, and cultural-sensitive processes in positive psychology*. New York, NY: Springer, 2014.
[33] Moller A.C., Meier B.P., Wall R.D. Developing an experimental induction of flow. In B. Bruya (Ed.), *Effortless attention*. Cambridge, MA: MIT Press, 2010, pp. 191—21).
[34] Newberg A., d'Aquili E. *Why God won't go away: Brain science and the biology of belief.* New York, NY: Ballantine Books, 2001.
[35] Parente T.J. *The positive pianist: How flow can bring passion to practice and performance.* New York, NY: Oxford University Press, 2015.
[36] Peterson C. *A primer in positive psychology.* New York: Oxford University Press, 2006.
[37] Peterson C., Bossio L.M. *Health and optimism.* New York: Free Press, 1991.
[38] Rich G. Positive psychology: An introduction. *Journal of Humanistic Psychology,* 2001, vol. 41, no 1, pp. 8—12.
[39] Rich G. The flow experience in jazz pianists: Positive psychological motivation and cognition. *Indian Journal of Positive Psychology,* 2012, vol. 3, no 4, pp. 340—344.
[40] Rich G. A cinematic lens on healthy talent development in piano prodigies: Considerations for positive psychology. [Special issue: Positive Psychology]. *Psychology,* 2012, no 3 (12A). doi: 10.4236/psych.2012.312A171
[41] Rich G. Finding flow: The history and future of a positive psychology concept. In J. Sinnott (Ed.), *Positive psychology: Advances in understanding adult motivation*. New York: Springer, 2014, pp. 43—60.
[42] Rich G. Positive institutions, communities, and nations: Methods and internationalizing positive psychology concepts. In H. Agueda Marujo & L. Miguel Neto (Eds.), *Positive nations and communities: Collective, qualitative, and cultural-sensitive processes in positive psychology.* New York, NY: Springer, 2014, pp. 17—34.
[43] Rich G. The promise of qualitative inquiry for positive psychology: Diversifying methods. *Journal of Positive Psychology.* (in press).
[44] Rich G. Positive psychology and humanistic psychology: Evil twins, sibling rivals, distant cousins or something else? Bridging methods. (in press).
[45] Schmidt J., Rich, G. Images of work and play. In M. Csikszentmihalyi & B. Schneider (Eds.), *Becoming adult: How teenagers prepare for the world of work*. New York: Basic Books, 2000, pp. 67—94.
[46] Seligman M.E.P. *Authentic happiness.* New York: Free Press, 2002.
[47] Seligman M.E.P. *Flourish.* New York: Free Press, 2011.
[48] Seligman M.E.P., Csikszentmihalyi M. (2000). Positive psychology: An introduction. *American Psychologist*, 2000, vol. 55, no 1, pp. 5—14.
[49] Voltaire. *Candide.* New York, NY: Oxford University Press, 1992.

ПОТОК И ОПТИМАЛЬНОЕ ПЕРЕЖИВАНИЕ: МЕТОДОЛОГИЧЕСКОЕ ЗНАЧЕНИЕ ДЛЯ ИНТЕРНАЛИЗАЦИИ И КОНТЕКСТУАЛИЗАЦИИ ПОЗИТИВНОЙ ПСИХОЛОГИИ. ЧАСТЬ 1

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Данная статья является первой из двух статей, посвященных одному из ключевых понятий позитивной психологии — вершинным переживаниям, называемым «поток», разрабатываемым психологом Михаем Чикесентмихайи — в качестве примера для рассмотрения некоторых вопросов, связанных с интернализацией позитивной психологии. В частности, обсуждаются методологические, психодиагностические и теоретические вопросы исследования состояния потока. Описаны количественные, качественные и смешанные методы изучения состояния потока, включая интервью, анкетирование и кейс-стади. Рассматриваются примеры исследований состояния потока в разных странах мира, поднимающих вопросы относительно качества психодиагностического инструментария, а также кросс кросс-культурных универсалий/различий. Предлагаемый автором подход не сводится к рассмотрению качественных и количественных методов (или антропологических и психологических перспектив) как конкурирующих между собой, он направлен на развитие конструктивного диалога, который признает сильные и слабые стороны каждого подхода, чтобы стимулировать использование смешанных методов исследования сильных сторон человека, чем часто пренебрегают в кросс-культурных исследованиях. В первой статье прежде всего рассматривается методологическое значение позитивной психологии, во второй — ее кросс-культурная значимость.

Ключевые слова: поток, оптимальное переживание, позитивная психология, количественные и качественные методы