

Zest and work

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Summary

Zest is a positive trait reflecting a person's approach to life with anticipation, energy, and excitement. In the present study, 9803 currently employed adult respondents to an Internet site completed measures of dispositional zest, orientation to work as a calling, and satisfaction with work and life in general. Across all occupations, zest predicted the stance that work was a calling ($r = .39$), as well as work satisfaction ($r = .46$) and general life satisfaction ($r = .53$). Zest deserves further attention from organizational scholars, especially how it can be encouraged in the workplace. Copyright © 2009 John Wiley & Sons, Ltd.

Your work is to discover your work, and then with all of your heart to give yourself to it.—the Buddha

Introduction

Recent years have seen a widespread call for the study of work organizations in which people can be well and do well (Cameron, Dutton, & Quinn, 2003; Gardner, Csikszentmihalyi, & Damon, 2001; Luthans, 2003; Wright, 2003). The emergence of the positive perspective within organizational psychology has brought new attention to the venerable topic of work satisfaction (Hoppock, 1935). Satisfaction with the work that one does is seen not just as a contributor to good performance and increased profitability but as a worthy end in its own right (Heslin, 2005). Given the diminishing contribution of increased salary to well-being, full consideration of the other factors that lead to satisfaction at work and life is imperative (Diener & Seligman, 2004).

The present study investigated a dispositional influence on work satisfaction: the overall zest and enthusiasm with which a person lives. Also identified as energy (Thayer, 1996), liveliness (McNair, Lorr, & Droppleman, 1971), vitality (Ryan & Frederick, 1997), exuberance (Jamison, 2004), or *joie de vivre*, zest has also been discussed in the organizational literature as (work specific) vigor (Shirom, 2003) and engagement (Britt, Adler, & Bartone, 2001). Zest is one of the strengths of character

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included in a recent classification of widely valued positive traits, where it is defined as the habitual approach to life with anticipation, energy, and excitement (Peterson & Seligman, 2004).

There exists an associated self-report measure of zest (Park & Peterson, 2006b; Peterson, Park, & Seligman, 2005). It presents 10 statements that respondents rate as characteristic of themselves or not (e.g., “I have lots of energy”). Zest so assessed predicts general life satisfaction among children, youth, and adults (Park & Peterson, 2006a, 2006c; Park, Peterson, & Seligman, 2004). The hypothesis tested in the present research is that zest is also associated with work satisfaction.

We focused on zest—a dispositional characteristic of workers—because past research has shown that work satisfaction is not simply a function of the work itself (e.g., Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). The features of a job of course make a difference. Safety and security matter, and challenge, variety, and responsibility must be present to optimal degrees for satisfying work (Warr, 1987). But what a person brings to his or her work is also important. Those who are generally happy—due to their biological, psychological, or social makeup—are more likely to be satisfied at work (Campbell, Converse, & Rodgers, 1976; Staw, Bell, & Clausen, 1986). Those who are extraverted and socially engaged are also more likely to be satisfied (Watson, 2000), especially if they find close friends in the workplace (Rath, 2006). Zest as a construct captures many of these characteristics (Peterson & Seligman, 2004).

Decades ago, Hersey (1955) made a similar argument that zest on the part of workers translates itself into satisfaction, commitment, and accomplishment. He approached zest as a psychological state as opposed to a trait, and in a series of multiple case studies, he mapped its rise and fall into productive versus unproductive days at work. However, some workers were more likely than others to be generally enthusiastic, and these were the workers who across days were most involved and successful in what they did.

The present research also investigated the association of zest with an individual’s orientation to work (Bellah, Madsen, Sullivan, Swidler, & Tipton, 1985). A job may be regarded as simply that, a source of material benefits to be enjoyed elsewhere. Or work may be more involving and seen as a way to achieve status, power, and self-esteem. Finally, work may be intrinsically rewarding and a central part of one’s very existence. Material benefits and social advancement may occur because of work, but in this case, the real motivation of the worker is to be fulfilled. These three orientations toward work have been respectively identified as jobs, careers, and callings.

Wrzesniewski et al. (1997) devised a self-report questionnaire that measures these orientations as individual differences and administered it to several hundred full-time employees at a small liberal arts college and a large state university student health service, along with measures of work and life satisfaction and various job features. A range of occupations was represented: physicians, nurses, administrators, pharmacists, health educators, librarians, supervisors, computer programmers and analysts, medical technicians, administrative assistants, and clerks.

Their results showed that work regarded as a calling is the most rewarding. Those who regarded work in these terms described it as central in their lives and enjoyable. Not surprisingly, their satisfaction with work was high. They did not look forward to retirement, and they took fewer sick days than other research participants, a finding replicated by Wrzesniewski, Tosti, and Landman (2006) in a study of nurses. Regarding work as a calling was more likely among older workers and those in higher status jobs, but it is interesting and important that this stance was evident among some workers of all ages and all job types.

For whom do callings occur? Research is almost nonexistent except for an ambitious longitudinal study by Dobrow (2006) of talented high school musicians, some of whom went on to pursue work in music and some of whom did not. Her perspective on being called to life as a professional musician was that young people do not discover this calling within themselves so much as create it through extensive

involvement with musical activities and enjoyable interaction with other musicians. Musical ability in and of itself did not predict who would develop this calling.

Most discussions of the antecedents of callings have been theoretical. Organizational scholars have conjectured that people in search of the most satisfying work—callings—need to discover their strengths (Buckingham & Clifton, 2001), identify their interests (Hansen, 1994), recraft their jobs (Wrzesniewski & Dutton, 2001), find a mentor (Murray, 2003), align their personal values with those inherent in their profession (Gardner et al., 2001), find a purpose in their work (Hall & Chandler, 2005), and so on. The present study provided an empirical test of an additional contributor to the stance that work is a calling: dispositional zest. People who are zestful are more likely to pursue flow (engagement) in their everyday activities and to regard their lives as meaningful (Peterson, Ruch, Beerman, Park, & Seligman, 2007). Accordingly, when zest is brought to bear on one's work, then that work should become central, fulfilling, and meaningful—it should be seen as a calling.

Participants in the present study were several thousand adult respondents to an Internet site who completed measures of dispositional zest, orientation to work as a calling, and satisfaction with work and life in general. The data were cross-sectional, precluding strong conclusions about the sequencing of these constructs. The compensating virtue of the sample was its heterogeneity, allowing the questions of interest to be explored across a variety of occupations, from blue collar to professional. Homemakers were also included in the sample, given that this career can be as much of a calling as paid work (Tinsley & Tinsley, 1989). Respondents were from the United States as well as other nations.

The initial findings of Wrzesniewski et al. (1997) imply variation in the mean levels of the measures across occupations but not in how the measures are associated with one another. So, we expected that across all occupations, those individuals high in zest would regard their work as a calling and would be more satisfied with their work and with life in general.

Method

Research participants

The sample consisted of 9803 currently employed adult respondents who completed the measures of interest on the Authentic Happiness website (www.authentichappiness.com) between September 2002, and December 2003. Only respondents currently employed were included (77 per cent of those who registered on the website), which means that the final sample excluded individuals who were retired, out of work, unable to work, or attending school full-time. For the relatively small number (~1 per cent) of respondents who completed a given measure more than once, only the first set of scores was used.

The resulting sample was 75 per cent from the United States. Also represented were respondents from other English-speaking nations—Canada (8 per cent), United Kingdom (7 per cent), Australia (5 per cent), and New Zealand (1 per cent)—as well as a handful of respondents from each of 70+ other nations around the world, mainly Western Europe and East Asia.

Participants provided their occupation type: (a) professional (chief executives, owners of large businesses, doctors, lawyers, and dentists professors); (b) managerial (managers or owners of medium-sized businesses; other professionals with special licenses or certificates: nurses, opticians, pharmacists, social workers, teachers); (c) administrative (administrative personnel, owners, and proprietors of small businesses); (d) clerical (clerks, secretaries, administrative assistants, and salespeople); (e) blue-collar (skilled and unskilled laborers); and (f) homemaker. Table 1 describes the

Table 1. Sample characteristics ($n = 9803$)

Occupation	<i>n</i>	% Male	% From U.S.	Typical education
Professional	1546	53	76	Post-baccalaureate
Managerial	3500	32	72	Baccalaureate
Administrative	2940	35	75	Some college
Clerical	1023	24	78	Some college
Blue collar	434	51	83	High school
Homemaker	360	4	84	Some college

demographics of each group. The typical person in each occupational category was about 40 years of age, but age, education, and gender varied across categories as would be expected. Blue-collar workers and homemakers were somewhat more likely to be from the United States.

Procedure

Respondents were not explicitly recruited to participate in this research. It can be presumed that they learned about the website from our academic or popular articles, media interviews, other websites, or from word-of-mouth. Although diverse, the sample is not representative of the adult population of workers, in the United States or elsewhere.

Respondents first registered on the website and provided basic demographic information, including age, gender, educational level, occupation, and nationality. Because this website was intended for international use, it did not ask respondents about their ethnicity. After completing measures, a respondent received immediate feedback about his or her scores, and we believe that this feature motivated participants and led some of them to mention the website to other people. The measures are presented on this website only in English, which means that respondents needed to be English readers.

Measures

VIA inventory of strengths (VIA-IS) (Peterson et al., 2005)

The VIA-IS is a 240-item self-report questionnaire that uses 5-point Likert scales to measure the degree to which respondents endorse strength-relevant statements about themselves (1 = very much unlike me through 5 = very much like me). There are 24 strengths of character measured by the VIA-IS, including zest, and each strength is assessed with ten items. Sample items measuring zest include:

- I want to fully participate in life, not just view it from the sidelines.
- I look forward to each new day.
- I cannot wait to get started on a project.
- I awaken with a sense of excitement about the day's possibilities.

Responses are averaged within scales, all of which have satisfactory internal consistency measured by Cronbach's α coefficient (α 's $> .70$) and substantial test-retest correlations over a 4-month period (r 's $\sim .70$). Scale scores are negatively skewed (X 's: range from 3.5 to 4.0) but variable (SDs: range from 0.5 to 0.9). In the present sample, the average score for zest was 3.51 (SD = 0.72), and internal consistency estimated by Cronbach's α was .82. There were small correlations between zest and demographic variables: age ($r = .15$, $p < .001$), female gender ($r = .07$, $p < .001$), education ($r = .06$,

$p < .001$), and being from the United States ($r = .03$, $p < .02$). We controlled for demographics in subsequent analyses, although conclusions were never altered by so doing.

Work-life questionnaire (Wrzesniewski et al., 1997)

To measure stance toward work, respondents were provided three brief scenarios describing individuals who approached work as a job, a profession, or a calling. Here are excerpts from each scenario:

Ms. A works primarily to earn enough money to support her life outside of her job. If she was financially secure, she would no longer continue with her current line of work, but would really rather do something else instead. . . [job]

Ms. B basically enjoys her work, but does not expect to be in her current job 5 years from now. Instead, she plans to move on to a better, higher level job. . . [career]

Ms. C's work is one of the most important parts of her life. She is very pleased that she is in this line of work. Because what she does for a living is a vital part of who she is, it is one of the first things she tells people about herself. . . [calling]

For each scenario, they used a 0–3 scale to indicate how much they were like the person described, from 0 = not at all like me through 3 = very much like me. They also rated their satisfaction with work on a 7-point scale, from 1 = completely dissatisfied through 4 = neither satisfied nor dissatisfied to 7 = completely satisfied.

In the present sample, respondents were somewhat more likely to describe their work as a calling ($X = 1.34$, $SD = 1.16$) instead of a job ($X = 1.15$, $SD = 1.15$) or career ($X = 1.13$, $SD = 1.07$). Ratings here for work as a calling were somewhat higher than those reported by Wrzesniewski et al. (1997)—approximately 1.1—but the ratings for work as a job and work as a career were essentially the same. Satisfaction with work was negatively skewed and rated by the present respondents as somewhat north of neutral ($X = 4.66$, $SD = 1.54$), as Wrzesniewski et al. (1997) and other researchers found (Seashore & Taber, 1975).

There were correlations between these orientations and several demographic variables. So, regarding work as a job was more likely among younger individuals ($r = -.12$, $p < .001$) and less educated individuals ($r = -.16$, $p < .001$), and more likely among those from the United States ($r = .05$, $p < .001$). Work as a career was similarly more likely among younger respondents ($r = -.24$, $p < .001$) and less educated respondents ($r = -.05$, $p < .001$). Work as a calling was more likely among respondents who were older ($r = .17$, $p < .001$) and more educated ($r = .20$, $p < .001$). Work satisfaction was somewhat higher for older workers ($r = .12$, $p < .001$), more educated workers ($r = .10$, $p < .001$), and females ($r = .04$, $p < .001$).

Satisfaction with life scale (SWLS) (Diener, Emmons, Larsen, & Griffin, 1985)

The SWLS is a five-item self-report questionnaire that measures one's evaluation of satisfaction with life in general: for example, "The conditions of my life are excellent." Individuals respond to each item on 7-point Likert scales from 1 = "strongly disagree" through 7 = "strongly agree." Responses are summed to yield an overall score of life satisfaction. Research demonstrates acceptable psychometric properties for the SWLS (see Diener, 1994, for details). In the current samples, the scale was highly reliable ($\alpha = .85$). Scores were negatively skewed ($X = 21.0$) but variable ($SD = 7.6$). Again, there were small correlations between this scale and several of the demographic variables: age ($r = .06$, $p < .001$), female gender ($r = .08$, $p < .001$), and education ($r = .16$, $p < .001$). Being from the United States or not had no correlation with life satisfaction ($r = .01$, ns).

Results

Across all occupations, zest predicted the stance that work was a calling as well as work satisfaction and general life satisfaction. Professionals were the highest on zest and satisfaction with work and with life in general, whereas clerical workers were the least zestful and the least satisfied. Homemakers were not especially high in zest, but they were as satisfied as managers with their work and their lives, and many regarded their work as a calling. Professionals were most likely to view their work as a calling, and clerical workers were least likely.

Occupation comparisons

Table 2 presents mean scores on the measures of interest for respondents from the six occupational groups. There were small differences in zest and satisfaction across groups. Professionals were the highest on zest and satisfaction with work and with life in general, findings which remained even when age, gender, and education were taken into account. Clerical workers were the least zestful and the least satisfied. Homemakers were not especially high in zest, but they were as satisfied as managers with their work and their lives.

There were also differences across groups in orientations to work as a calling, career, and job, but the effect sizes were small, supporting previous arguments that these stances cut across occupational types. Interestingly, though, the largest effect size was for work as a calling, which means that occupation accounted for more of the variance in this stance than it did for the other orientations. Professionals were most likely to view their work as a calling, and clerical workers least likely.

Following the example of Wrzesniewski et al. (1997), these data were also examined not just as continuous variables but also in terms of an individual's dominant orientation to work, by calculating the highest score from among the calling, career, and job ratings and using this score to identify their orientation. Most respondents (78 per cent) had one score higher than the two others, and these were distributed across the three stances: calling (37 per cent of entire sample), career (16 per cent), and job (25 per cent). All three predominant stances were evident among respondents in each occupational category, although orientation to work and job type were not independent ($\chi^2 = 747$, $p < .001$).

Table 2. Mean scores ($n = 9803$)

Occupation	Zest	Orientation to work			Satisfaction with	
		Calling	Career	Job	Work	Life
Professional	3.66 _a	1.86 _a	.88 _a	.76 _a	5.07 _a	23.3 _a
Managerial	3.59 _b	1.53 _b	1.07 _b	.97 _a	4.88 _b	21.9 _b
Administrative	3.46 _c	1.18 _c	1.22 _c	1.29 _c	4.45 _c	20.1 _c
Clerical	3.25 _d	.62 _d	1.40 _d	1.79 _d	4.09 _d	18.0 _d
Blue collar	3.35 _e	.93 _e	1.19 _c	1.50 _e	4.21 _d	18.6 _d
Homemaker	3.38 _e	1.24 _c	1.24 _c	1.09 _b	4.52 _c	21.4 _b
$F(5, 9787)$	60*	200*	38*	141*	87*	89*
Effect size	.03	.09	.02	.07	.04	.04

Note: Means in a column with different subscripts differ from one another by least-significant difference (LSD) pairwise multiple comparisons ($p < .05$). Effect size is estimated by partial eta square.

* $p < .001$.

Table 3. Intercorrelations ($n = 9803$)

	1	2	3	4	5
1. Zest					
2. Work as a calling	.39*				
3. Work as a career	-.02	-.13*			
4. Work as a job	-.45*	-.62	.14*		
5. Satisfaction with work	.46*	.54*	-.16*	-.63*	
6. Satisfaction with life	.53*	.32*	-.10*	-.41*	.47*

* $p < .001$.

Consistent with the data in Table 2, callings were the predominant stance among professionals (69 per cent), managers (55 per cent), and homemakers (45 per cent), whereas jobs were the predominant stance among administrative (39 per cent), clerical (56 per cent), and blue collar (49 per cent) workers. Regardless of their occupation, those with calling as their dominant orientation were the most zestful and the most satisfied with work and with life; those with job as their dominant stance were the least zestful and the least satisfied with work and with life (all $F^2[2.7667] > 700$, $p < .001$).

Intercorrelations

Table 3 presents intercorrelations among the measures for the sample as a whole. These simple correlations are consistent with the hypothesis that zestful individuals would be more likely to experience their work as a calling and more satisfied with their work and with life in general. These patterns held not only across occupations but within each of them (correlations not shown). As predicted, zest was a positive correlate of orientation to work as a calling ($r = .39$) and of satisfaction with work ($r = .54$). As already noted, controlling for demographic variables did not change the pattern or magnitude of these results. Among the 24 strengths of character measured by the VIA-IS, zest was the single best predictor of work as a calling. When all of the measured strengths were controlled, the partial correlation between zest and calling remained significant ($\rho = .24$, $p < .001$).

Discussion

The present study showed that dispositional zest predicts not only general life satisfaction but also work satisfaction and the stance that work is a calling. These results replicate previous investigations of work as a calling by showing that this orientation to work is evident among people from different occupations, from blue collar to professional, and that within each occupational group, those who regard work as a calling are more satisfied with work and with life in general. This study extends previous investigations by including a larger number and range of workers, notably those from outside the United States as well as homemakers.

There is no shortage of theoretical accounts of the antecedents of work as a calling, and the present data suggest that dispositional zest is one more influence.

Zest is important in a work organization because of its link to psychological well-being (Park, Peterson, & Seligman, 2004). Psychological well-being in turn predicts improved job performance and reduced turnover (Wright & Bonett, 2007; Wright, Bonett, & Sweeney, 1993; Wright & Cropanzano,

2000, 2004; Wright, Cropanzano, & Denney, 2002). Psychological well-being is also associated with better physical health (Pennix et al., 2001), which means a reduction in absenteeism and of course health care costs (Langlieb & Kahn, 2005).

Given that zest is associated with so many desirable organizational outcomes, and assuming for the sake of discussion that it is a determinant and not epiphenomenal, the obvious practical question is how to promote a worker's zest. Psychologists already know a great deal about how to do this (Peterson & Seligman, 2004). Physical health and fitness set the stage for zest (Thayer, 1996). Hope and optimism sustain it (Seligman, 1991), and there exist reliable strategies for teaching individuals to be more optimistic (Gillham, Reivich, Jaycox, & Seligman, 1995). Depression is a well-documented enemy of zest, and its toll on productivity and physical health is enormous (Burton, Conti, Chen, Schultz, & Edgington, 1999). The prevention or reduction of depression among workers might pay the additional benefit of increasing their sense that work is a calling (Goetzel, Ozminkowski, Sederer, & Mark, 2002).

Hersey (1955) argued that a supportive supervisor at work and good social relationships outside of work are important contributors to zest, implying additional targets for intervention (cf. Kasser & Ryan, 1999). Baker, Cross, and Woolen (2003) similarly proposed that relationships can be characterized as more versus less energizing for participants and that the energy level of an entire work organization can be depicted with a network analysis of these relationships. By implication, the goal of any workplace should be to increase the density of energizing relationships while decreasing or eliminating those that de-energize. One may further speculate that positive psychology exercises that cultivate gratitude and savoring, if tailored to the workplace, might also bolster zest (cf. Bryant & Veroff, 2006; Seligman, Steen, Park, & Peterson, 2005). Any strategy that helps workers see where their activities fit into the larger picture should also increase their enthusiasm for what they do (Park & Peterson, 2003).

We speculate that zest—like many strengths of character—is contagious (Peterson & Seligman, 2004) and further that it may be possible to talk about the zest of an entire group of interacting individuals (Park & Peterson, 2003). As an organizational-level virtue, zest is obviously related to group morale and may even be equivalent to it (Hafsi & Misumi, 1992). Group morale has long been studied by organizational scholars (e.g., Stogdill, 1952), and consistently shown to have desirable consequences for the group (e.g., Motowidlo & Borman, 1977). Perhaps the study of group morale can be reinvigorated by examining it from the positive organizational perspective and specifically in terms of zest.

Although the relationship was small, there was a link between occupation and orientation to work as a calling. Professionals were most likely to have this stance, followed by managers, and then—interestingly—by homemakers. Clerical workers fared poorly. They were the least likely to see their work as a calling, they had the lowest levels of zest, and they were the least satisfied with work and with life in general. At the same time, they were the most likely to regard their work as a career—a means to achieve status, power, and self-esteem and as a stepping-stone to another job. Might the affordances of typical clerical positions be at odds with what workers want from them? In any event, interventions to boost zest and work satisfaction should focus on clerks and not on CEOs and managers who already receive so much attention from organizational psychologists.

Perhaps homemakers were relatively low in zest simply because many were tired. Regardless, homemakers on the whole were relatively satisfied with their work and their lives, and almost half of the sample (45 per cent) had calling as their dominant stance toward work. Among homemakers, zest was as strongly related to this stance and to satisfaction as it was among other occupational groups, implying that interventions to increase their zest deserve attention as well from organizational psychologists. At the risk of stating the obvious, we point out that the method of assessing occupation limited respondents to one choice. Many of the women (and some of the men) in our sample had substantial responsibilities at home as well as at the paid occupations they indicated.

The shortcomings of the present research included its rough classification of occupation types and its cross-sectional design. We have recently modified our website to allow respondents to describe their work in more refined terms, and we are undertaking longitudinal research to map out the processes by which work satisfaction develops (Wright & Staw, 1999).

Preliminary data from our research group are relevant. In a longitudinal study of young teachers, the character strength of zest on the part of teachers predicted classroom-level gains on the part of their students, as measured by standardized tests more than one year later. In other words, zest in this study was apparently causal and clearly not epiphenomenal.

Also worthy of future investigation is the finding reported by Wrzesniewski (2003) that work units where a large proportion of individuals regarded work as a calling had higher morale and better communication. Research on character strengths has had an individual focus, but many of the benefits of good character may be most evident in social contexts like those provided by the workplace (Peterson & Park, 2006).

We should also comment on the use of an Internet sample. Increasingly popular as a research strategy, Internet samples using self-report questionnaires typically yield results of equivalent reliability and validity as do conventional samples administered paper-and-pencil measures (Gosling, Vazire, Srivastava, & John, 2004). Internet samples are often more diverse than traditional convenience samples, which is not surprising given that more than 70 per cent of U.S. adults have access to the Internet (Lebo, 2003). However, in the present research, the sample was not explicitly recruited, and their specific motives for participating were unknown. Compared to the general adult population, respondents were more likely to be female, to be college educated, and to have higher status jobs. We have more confidence in those findings that are similar across these contrasts as opposed to different, but regardless, replication of the present findings in better-characterized samples is needed.

What is clear is that a complex of positive characteristics—zest, orientation to work as a calling, and satisfaction—can be identified and that they have desirable consequences. A psychology of energy has been out of fashion in most academic quarters for many years. So intuitively important is the contribution of zest to making life worth living that we suggest the time has come for the reintroduction of a rigorous psychology of positive energy and zest. Organizational settings are a natural home for this inquiry.

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References

- Baker, W., Cross, R., & Wooten, M. (2003). Positive organizational network analysis and energizing relationships. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 328–342). San Francisco: Berrett-Koehler.
- Bellah, R. N., Madsen, R., Sullivan, W. M., Swidler, A., & Tipton, S. M. (1985). *Habits of the heart*. New York: Harper & Row.
- Britt, T. W., Adler, A. B., & Bartone, P. T. (2001). Deriving benefits from stressful events: The role of engagement in meaningful work and hardiness. *Journal of Occupational Health Psychology, 6*, 53–63.
- Bryant, F. B., & Veroff, J. (2006). *Savoring: A new model of positive experience*. Mahwah, NJ: Erlbaum.
- Buckingham, M., & Clifton, D. O. (2001). *Now, discover your strengths*. New York: Free Press.
- Burton, W. N., Conti, D. J., Chen, C.-Y., Schultz, A. D., & Edington, W. W. (1999). The role of health risk factors and disease on worker productivity. *Journal of Occupational and Educational Medicine, 41*, 863–877.
- Cameron, K. S. Dutton, J. E. & Quinn R. E. (Eds.) (2003). *Positive organizational scholarship: Foundations of a new discipline*. San Francisco Berrett-Koehler.
- Campbell, A., Converse, P. E., & Rodgers, W. L. (1976). *The quality of American life*. New York: Russell Sage Foundation.
- Diener, E. (1994). Assessing subjective well-being: Progress and opportunities. *Social Indicators Research, 31*, 103–157.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*, 71–75.
- Diener, E., & Seligman, M. E. P. (2004). Beyond money: Toward an economy of well-being. *Psychological Science in the Public Interest, 5*, 1–31.
- Dobrow, S. R. (2006). *Having a calling: A longitudinal study of young musicians*. Unpublished doctoral dissertation, Harvard University.
- Gardner, H., Csikszentmihalyi, M., & Damon, W. (2001). *Good work: When excellence and ethics meets*. New York: Basic Books.
- Gillham, J. E., Reivich, K. J., Jaycox, L. H., & Seligman, M. E. P. (1995). Prevention of depressive symptoms in schoolchildren: Two-year follow-up. *Psychological Science, 6*, 343–351.
- Goetzel, R. Z., Ozminkowski, R. J., Sederer, L. I., & Mark, T. L. (2002). The business case for quality mental health services: Why employers should care about the mental health and well-being of their employees. *Journal of Occupational and Educational Medicine, 44*, 320–330.
- Gosling, S. D., Vazire, S., Srivastava, S., & John, O. P. (2004). Should we trust web-based studies? A comparative analysis of six preconceptions about Internet questionnaires. *American Psychologist, 59*, 93–104.
- Hafsi, M., & Misumi, J. (1992). The leader-follower's mutual effect: Developing a performance-maintenance interactional model. *Psychologia: An International Journal of Psychology in the Orient, 35*, 201–212.
- Hall, D. T., & Chandler, D. E. (2005). Psychological success: When the work is a calling. *Journal of Organizational Behavior, 26*, 155–176.
- Hansen, J. C. (1994). The measurement of vocational interests. In M. G. Rumsey, C. B. Walker, & J. H. Harris (Eds.), *Personnel selection and classification* (pp. 293–316). Hillsdale, NJ: Lawrence Erlbaum.
- Hersey, R. (1955). *Zest for work: Industry rediscovers the individual*. New York: Harper.
- Heslin, P. A. (2005). Conceptualizing and evaluating career success. *Journal of Organizational Behavior, 26*, 113–136.
- Hoppock, R. (1935). *Job satisfaction*. New York: Harper.
- Jamison, K. R. (2004). *Exuberance: The passion for life*. New York: Knopf.
- Kasser, V. G., & Ryan, R. M. (1999). The relation of psychological needs for autonomy and relatedness to vitality, well-being, and mortality in a nursing home. *Journal of Applied Social Psychology, 29*, 935–954.
- Langlieb, A. M., & Kahn, J. P. (2005). How much does quality mental health care profit employees? *Journal of Occupational and Environmental Medicine, 47*, 1099–1109.
- Lebo, H. (2003). *The UCLA internet report: Surveying the digital future-Year-Three*. Document available on the Worldwide Web at <http://www.ccp.ucla.edu/UCLA-Internet-Report-Year-Three.pdf>. Retrieved July 31, 2003.
- Luthans, F. (2003). Positive organizational behavior (POB): Implications for leadership and HR development and motivation. In R. M. Steers, L. W. Porter, & G. A. Bigley (Eds.), *Motivation and leadership at work* (pp. 178–195). New York: McGraw-Hill/Irwin.

- McNair, D. M., Lorr, M., & Droppleman, L. F. (1971). *Manual for the profile of mood states*. San Diego, CA: Educational and Industrial Testing Services.
- Motowidlo, S. J., & Borman, W. C. (1977). Behaviorally anchored scales for measuring morale in military units. *Journal of Applied Psychology*, *62*, 177–183.
- Murray, C. (2003). *Human accomplishment: The pursuit of excellence in the arts and sciences, 800 BC to 1950*. New York: HarperCollins.
- Park, N., & Peterson, C. (2003). Virtues and organizations. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 33–47). San Francisco: Berrett-Koehler.
- Park, N., & Peterson, C. (2006). Character strengths and happiness among young children: Content analysis of parental descriptions. *Journal of Happiness Studies*, *7*, 323–341.
- Park, N., & Peterson, C. (2006). Methodological issues in positive psychology and the assessment of character strengths. In A. D. Ong, & M. van Dulmen (Eds.), *Handbook of methods in positive psychology* (pp. 292–305). New York: Oxford University Press.
- Park, N., & Peterson, C. (2006). Moral competence and character strengths among adolescents: The development and validation of the values in action inventory of strengths for youth. *Journal of Adolescence*, *29*, 891–905.
- Park, N., Peterson, C., & Seligman, M. E. P. (2004). Strengths of character and well-being. *Journal of Social and Clinical Psychology*, *23*, 603–619.
- Pennix, B. W., Beekman, A. T., Honig, A., Deeg, D. J., Schoevers, R. A., van Eijk, J. T., et al. (2001). Depression and cardiac mortality: Results from a community-based longitudinal study. *Archives of General Psychiatry*, *58*, 221–227.
- Peterson, C., & Park, N. (2006). Character strengths in organizations. *Journal of Organizational Behavior*, *27*, 1149–1154.
- Peterson, C., Park, N., & Seligman, M. E. P. (2005). Assessment of character strengths. In G. P. Koocher, J. C. Norcross, & S. S. Hill, III (Eds.), *Psychologists' desk reference* (2nd ed., pp. 93–98). New York: Oxford University Press.
- Peterson, C., Ruch, W., Beerman, U., Park, N., & Seligman, M. E. P. (2007). Strengths of character, orientations to happiness, and life satisfaction. *Journal of Positive Psychology*, *2*, 1–8.
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. New York: Oxford University Press; Washington, DC: American Psychological Association.
- Rath, T. (2006). *Vital friends: The people you can't afford to live without*. New York: Gallup Press.
- Ryan, R. M., & Frederick, C. (1997). On energy, personality, and health: Subjective vitality as a dynamic reflection of well-being. *Journal of Personality*, *65*, 529–565.
- Seashore, S. E., & Taber, T. D. (1975). Job satisfaction indicators and their correlates. *American Behavioral Scientist*, *18*, 333–368.
- Seligman, M. E. P. (1991). *Learned optimism*. New York: Knopf.
- Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, *60*, 410–421.
- Shirom, A. (2003). Feeling vigorous at work? The construct of vigor and the study of positive affect in organizations. In D. Ganster, & P. L. Perrewe (Eds.), *Research in organizational stress and well-being* (Vol. 3, pp. 135–165). Greenwich, CT: JAI Press.
- Staw, B., Bell, N. E., & Clausen, J. A. (1986). The dispositional approach to job attitudes: A life-time longitudinal test. *Administrative Science Quarterly*, *31*, 56–77.
- Stogdill, R. M. (1952). Leadership and morale in organized groups. In J. E. Hulett, & R. Stagner (Eds.), *Problems in social psychology: An interdisciplinary inquiry* (pp. 140–152). Urbana, IL: University of Illinois Press.
- Thayer, R. E. (1996). *The origin of everyday moods: Managing energy, tension and stress*. New York: Oxford University Press.
- Tinsley, H. E. A., & Tinsley, D. J. (1989). Reinforcers of the occupation of homemaker: An analysis of the need-gratifying properties of the homemaker occupation across the stages of the homemaker life cycle. *Journal of Counseling Psychology*, *36*, 189–195.
- Warr, P. B. (1987). *Work, unemployment, and mental health*. Oxford: Clarendon Press.
- Watson, D. (2000). *Mood and temperament*. New York: Guilford.
- Wright, T. A. (2003). Positive organizational behavior: An idea whose time has truly come. *Journal of Organizational Behavior*, *24*, 437–442.
- Wright, T. A., & Bonett, D. G. (2007). Job satisfaction and psychological well-being as nonadditive predictors of workplace turnover. *Journal of Management*, *33*, 141–160.

- Wright, T. A., Bonett, D. G., & Sweeney, D. A. (1993). Mental health and work performance: Results of a longitudinal field study. *Journal of Occupational and Organizational Psychology*, *66*, 277–284.
- Wright, T. A., & Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of job performance. *Journal of Occupational Health Psychology*, *5*, 84–94.
- Wright, T. A., & Cropanzano, R. (2004). The role of psychological well-being in job performance: A fresh look at an age-old quest. *Organizational Dynamics*, *33*, 338–351.
- Wright, T. A., Cropanzano, R., & Denney, P. J. (2002). When a happy worker is a productive worker: A preliminary examination of three models. *Canadian Journal of Behavioural Science*, *34*, 46–150.
- Wright, T. A., & Staw, B. M. (1999). Affect and favorable work outcomes: Two longitudinal tests of the happy-productive worker thesis. *Journal of Organizational Behavior*, *20*, 1–23.
- Wrzesniewski, A. (2003). Finding positive meaning in work. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 296–308). San Francisco: Berrett-Koehler.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review*, *26*, 179–201.
- Wrzesniewski, A., McCauley, C. R., Rozin, P., & Schwartz, B. (1997). Jobs, careers, and callings: People's relations to their work. *Journal of Research in Personality*, *31*, 21–33.
- Wrzesniewski, A., Tosti, J., & Landsman, J. (2006). If I could turn back time: Occupational regret and its consequences for work and life. Unpublished manuscript, Yale University.