

MEASURING PASSION FOR SUSTAINABLE HIGH PERFORMANCE

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ABSTRACT

The provocative nature of exploring the seeds of passion, the imperative to drive sustainable results which have everlasting blooms, and the mission to identify the roots of high performance make this a journey worth embarking on. Since the times of Aristotle and Descartes, the topic of passion for high performance in organizations continues to intrigue both academia and the business world. The secret to successfully capturing the essence of passion eludes those in pursuit of high performance. This research provides a brief glimpse of existing theories, measures and techniques and corresponding gaps for measuring passion for sustainable high performance. The philosophy of passion and performance is taken from Descartes (Barnouw, 1992). Lewin's (1935) theories on performance based on personality fit leads to examination of Angyal's person-environment fit (PE-FIT) in 1941, and on to the Big 5 (Kentle 1991). Goleman's (1966) use of Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) provides some of the components of measuring passion for high performance. Naylor's (1980) productivity measurement and enhancement system (ProMES) accounts for a wide-breadth of cultures and performance drivers. Oreg's (2003) resistance-to-change (RTC) measure adapts to multi-cultural organizations and starts to address the sustainability component. Jackson and Colquitt's (2006) psychological collectivism model with characteristics of culture and individuals to measure ability for individuals to perform in groups. Neuroeconomics research is starting to both replace and substantiate self-survey personality profiling and providing significant empirical evidence in support of organizational behavior theories/ The contemporary measures of performance in organizations account for environmental and psychological changes in affect variances in individuals and subsequent group performance or performance resulting in productivity, but there appears to be gaps in measuring sustainability of the high performance.

"It is on the passions alone that all the good and evil of this life depends" (Descartes, 1645).

INTRODUCTION

Where does passion, positive energy, and relentless focus on performing beyond 'average levels' originate? How can organizations sustain the passion, the energy necessary to achieve high performance? Since the times of Aristotle and Descartes, debates ensue as to if passion causes chaos or drives positive progression towards action and results. Descartes (1649) states "what is a passion in the soul is usually an action in the body".

This conceptual research paper starts to explore measures and theories surrounding passion for sustainable high performance. After each is described, a brief discussion of the gaps confirms there is additional work required to accurately define and measure passion for sustainable results. The following definitions come from the English Oxford Dictionary:

1. *Passion* is defined as a strong and barely controllable emotion, intense sexual love, an intense enthusiasm for something.
2. *Sustainable* is defined as keeping something going over time or continuously.
3. *Performance* is defined the act or process of performing a task or a function.

- How can we tap into the passions of individuals to perceive challenges as opportunities for action versus perceiving them as burdens, approach them as part of the 'flow of activity'? The challenge is how to define and measure the factors involved in transforming people from 'animals guided by instincts into conscious, goal-directed, skillful people (Csikszentmihalyi 1990). Can we measure simultaneously the ability to spark the passion and high performance that we see so often in entrepreneurs and if so, can we sustain it in a measurable manner?

RESEARCH METHOD FRAMEWORK

The research focuses on several existing measures or theories passion, sustainability and performance using the following framework of steps;

- 1) Review research spanning from Descartes' perspectives on passion to Goleman's (1966) emotional intelligence (EI) to Neuroeconomics techniques on measuring affect (Brocas and Carrillo, 2008).
- 2) Collect perspectives in research with support or discourse.
- 3) Briefly analyze the measures and theories, for passion, sustainability and high performance identifying a) gaps b) potential for further research for academia and c) implications for practitioners.

RESEARCH FINDINGS – EXISTING MEASURES AND TECHNIQUES

The following provides a brief paragraph or two on the measures or theories with potential to contribute to measurement of passion for sustainable high performance.

EARLY PHILOSOPHICAL THEORIES ON PASSION

Since the seventeenth century, (James, 1999) we have thought that our passions move us to act. Early philosophers favored talk of ‘passion’ and ‘affect’. Descartes described his philosophy on passion in *Passions of the Soul*, a treatise of what are now commonly called emotions, building upon Aristotelianism, the Stoicism of the 16th century, and St. Augustine (James). Hume (1777) discusses passions as impressions, rather than ideas, with direct passions including desire, aversion, hope, fear, grief and joy rise from good or evil, pleasure or pain that we experience. Interestingly, Hume proposes this causal necessity of human actions is not only compatible with moral responsibility, but requisite to it. He states that reason alone is not the driver of will, nor can it oppose passion in the direction of the will.

Kant (Greenberg, 2001) believed the possibility of experience depends on certain necessary conditions—which he calls a priori forms—and that these conditions structure and hold true of the world of experience. He also claimed mathematic judgments are synthetic a priori and in addition, that space and time are not derived from experience but rather are its preconditions. Kant’s perspective is very relevant in that it leads one to believe preconditions can be established to trigger the passion in groups for sustainable high performance, but also that there may not be a quantifiable measure for passion.

PERSON-ENVIRONMENT FIT (PE-Fit)

Lewin (1935) planted the seeds of personality profiling with the notion that people react best to situations when characteristics are similar to other people’s or the features of the environment and react worse in situations where there is a mismatch. Angyal (1941) defined this perspective as the person-environment fit (PE-Fit). Where PE-Fit triggers unpleasant affect, there is potential of less productivity, and where there is a good PE-Fit, the person will experience positive affect, less anxiety, greater cognitive ability and subsequently experience higher performance. (Sels, Menter, 1998) These concepts are the backbone of personality profiling tools; e.g., Big 5 (Kentle 1991), Meyers – Briggs Type Indicator. The Moskowitz and Cote (1995) model is the situational congruent model, stating that people experience positive affect when in engaging in behaviors concordant with their traits and unpleasant affect when engaging in behaviors discordant with their traits. This may account for variances due to affective dynamics of agreeableness and neuroticism and potential for passion. This theory did not specifically address sustainability and high performance.

EMOTIONAL INTELLIGENCE

- EI, measured as an EI Quotient (EQ) involves the ability, capacity, skill or a self-perceived ability, to identify, assess, and manage the emotions of one's self, of others, and of groups (Bradberry and Greaves, 2005). Salovey and Mayer (1994) defined EI as 'the ability to monitor one's own and others' feelings and emotions, to discriminate and use it to guide one's thinking and actions.' The operative term here is 'actions' and how emotions, such as passion, can drive performance. The Mayer-Salovey-Caruso EI Test (MSCEIT) is based on a series of emotion-based problem-solving items. Goleman's model focuses on EI as a wide array of competencies that drive leadership and performance. The self stated assessments weaken the accuracy; it measures conformity and knowledge not capability. This is a concern when it comes to innovation, creativity and performing beyond the norm. EI does not directly address passion as an emotion which can provide positive impact to an organization's performance – this should be further explored both in academic theoretical analysis and in practical applications of EI.

HOLLAND'S MODEL OF OCCUPATIONAL TYPES

Holland's research shows that individuals seek environments that allow them to express their interests, leading to congruence between individuals' occupational interests and their ultimate occupational choice. Holland's (1997) model of occupational types is based on interests being direct expressions of personality and is well-validated. Holland's model has six types: realistic, investigative, artistic, social, enterprising, and conventional, each with a distinct set of attitudes and interests. Development performance is greatest when the environment encourages a person's native capacities (Briggs and Myers, 1980). Theoretically, if the environment can be sustained, high performance can be sustained.

RESISTANCE TO CHANGE (RTC) SCALE

Oreg (2003) provides a new perspective on Holland's theory of occupational types. Occupational environments are often dynamic and prone to change, and as such, individuals are more frequently required to accommodate such changes in their work lives. The ability to accept change is considered a necessary response to global competition, relevant to both labor markets and organizations (Herr & Cramer, 2004). (Oreg) Some people feel excited with change, others experience stress and anxiety. Dispositional resistance is superior in predicting individuals' responses to change situations (Oreg, 2003). Further research may uncover that RTC may be used to identify excitement as passion for change.

PSYCHOLOGICAL COLLECTIVISM

Jackson and Colquitt's (2006) study of individualism–collectivism's productivity-related consequences for agile teams across incentive systems resulted in a model referred to as psychological collectivism. The multidimensional construct has five facets: preference for in-groups, reliance on in-groups, concern for in-groups, acceptance of in-group norms, and prioritization of in-group goals. Group performance is measured and collectivism value is predicted by four dimensions (task performance, citizenship

behavior, counterproductive behavior, and withdrawal behavior). Collectivistic orientation, a cooperative task structure, and equalitarian performance incentives results in higher levels of productivity. Passion for sustainable high performance may be assessable in groups where the individuals are matched up with their preferred orientation, but there is no specific mention of sustainability over time.

PRODUCTIVITY MEASUREMENT AND ENHANCEMENT SYSTEM (ProMES)

ProMES (Pritchard, 2008) improves productivity by providing employees with the information to work smarter and the work environment to motivate them. It uses productivity measures as a foundation for group-based feedback, goal setting, and incentives. Paquin (2007) also found effects are sustainable, in some cases years; and the intervention results in productivity improvements in many different types of settings (i.e., type of organization, type of work, type of worker, country); and moderator variables are related to the degree of productivity improvement. Multinational organizations are finding that thought national interventions are successful; they are less effective in other countries (Aycan et al., 2000). The Naylor, Pritchard, Ilgen (NPI) theory, from which ProMES is derived (Naylor et al., 1980) introduces the extrinsic or intrinsic factors driving motivation, behaviors which emit results to consider in the passion for performance model.

McNabb (2001) argues that job evaluation and a high performance work strategy are either conflictual or compatible. Job evaluation may introduce more rigidity and top-down orientation to the pay and job structure, potentially yielding a conflict with the flexibility and employee involvement inherent in high performance teams. However, job evaluation may generate a feeling of equity in the workplace, increasing trust and commitment on which the success of the high performance strategy depends (Woehr, Sheehan, and et al. 2005). Sturman, Cheramie, et. al (2005) distinguish between the concepts of temporal consistency, stability, and test-retest reliability found stability and consistency of performance ratings over a 1-year time decreased significantly. This is concerning as we search for methods to accurately measure performance and sustainability over periods of time.

PSYCHOLOGICAL CAPITAL (PsyCap)

PsyCap uses multiple-component resource theories and contagion effects within the internal dimensions of constructs such as hope, efficacy, optimism, and/or resiliency (e.g., Antonovsky, 1979; Kobasa, 1979). PsyCap is proposed to build-out and add value to what you already have (e.g., financial capital), what you know (human capital), who you know (social capital), and challenging and promoting the development of who you are today (the actual self) into what you can become in the future (the possible self). The 24-item measure of PsyCap (Luthans, Youssef, et al., 2007a) is being tested for its psychometric properties and nomological network for validity. The more social positive capacities of gratitude, forgiveness, and emotional intelligence and the higher-order capacities of spirituality and courage are still being explored regarding their fit with the inclusion criteria (Luthans, Youssef, et al., 2007a) is open for further development and inclusion of still other criteria-meeting positive capacities rather than being

a closed taxonomy PsyCap research spans a variety of settings, contributing to its external validity. This measure looks to be very promising in terms of measuring potential for passion for sustainable high performance, not as much for measuring existing performance.

NEUROECONOMICS

Neuroeconomic theory (Brocas and Carrillo, 2008) combines the physical analysis of the brain with the study of economics to allow economists to build theoretical economic models and predict human choice and behavior. Just as studies of the human brain can revolutionize economics, they can revolutionize OD and behavior theories (Knutson, 2005). Technologies such as functional magnetic-resonance imaging, allows second-by-second observation of brain’s response in the limbic system, a region that governs emotion, or driving the ‘fight or flight’ decisions. Brain research find an interaction of the limbic and analytic systems governs human decision-making. The emotional brain or limbic system reduces its activation and rapidly recedes as rewards move into the future. This may be why spurts of high performance are common, but sustainable high performance is not common – the mind just does not process without the incentives.

- **SUMMARY OF MEASURES AND THEORIES**
 - Table 1 provides an inventory of the measures and theories with an ‘X’ to identify if the theory or measure addressing the corresponding area; passion, sustainability or high performance.

Table 1 – Inventory of Measures and Theories Related to Measuring Passion for Sustainable High Performance

• Measure or Theory	• Passion	• Sustainability	• High Performance	H
Passions of the Soul & Theory of the Mind	•	•	•	
PE-Fit	•	•	•	X
Emotional Intelligence	•	•	•	X
Occupational Types	•	•	•	X
Psychological Collectivism	•	•	•	
ProMES	•	•	•	X
• RTC	•	•	•	
PsyCap	•	•	•	X
Neuroeconomics	•	•	•	X

ACADEMIC IMPLICATIONS AND FURTHER RESEARCH

This research unveiled significant complexities in defining and measuring passion for sustainable high performance. Existing theories and measures partially address the question – but fall short of measuring passion for sustainable high performance in its entirety. Measurement of high performance over time is inconsistent.

Integration of numerous areas of research to truly understand the drivers of passion for sustainable high performance; philosophy, strategy development

theory, positive psychology (Fredrickson 2003; Fredrickson and Losada, 2005; Cameron, Bright and Caza, 2004; Dutton, Quinn) and organization development (OD) and behavior theory (Wood). The perspectives of the early philosophers provide some boundaries and perspectives for defining and measuring actions involving passion.

The research for this article did not reveal a widely accepted measurement for exceptional performance, although with some refinement, ProMES (Pritchard) and PsyCap (Luthans, et al) provide promise in terms of validity, scrutiny, and global application and with sustainable results.

Holland's' Model of Occupational Types does not measure emotion directly, nor does it focus on the repeatability. It is more of a profiling and positioning technique than PE-Fit (Angyal) and ProMES (Pritchard). A model which incorporates culture, leadership, individual values and tendencies (e.g., psychology collectivism), structure, environment, job definition and Neuroeconomics (Brocas and Carrillo) may bring the many perspectives together into a unified model for building and measuring passion for sustainable high performance.

EI (Goleman, 1966) provides insights into preparedness for situations, but it does not address the provocative area of 'passion', the mysterious intense enthusiasm that triggers an emotional contagion and drives high performance.

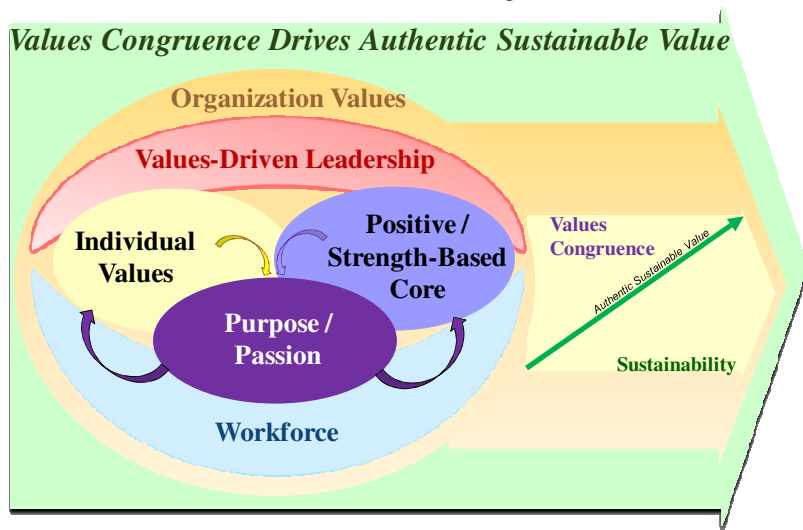
Research of passion and measuring motivation will unveil additional relationships into sustainability and how positioning of people in roles which motivate them increases performance (Galbraith; Fry; Slocum). Validation of the intersections of the variables through the use of Neuroeconomics would expedite the clarification the measures. Limbic resonance integrates neuroscience, psychology, EI and OD theories into Neuroeconomics. The theory of limbic resonance (Jones and Brazzel, 2006) as emotions in an individual mirror the emotions of the groups and people with whom you work, based on their truths and the collective emotional reality in the environment can provide insights into passion driving performance. Can we 'plant' high performers and inspire the team? Situations enabling limbic resonance (Knutson) and linguistics (Quinn & Dutton, 2005) will expedite research around how conversations reflect the demeanor of groups and drive behaviors.

Research indicates values-congruence can increase passion for sustainable high performance. Combined with the positive leadership, values (Cameron) can unleash passion and generate energy (Dutton & Quinn) based on individual and group strengths and personality types (Luthans; Rath). There is synergy when values (Fry), positive strength-based culture and climate (Cameron, Dutton, Losada, Fredrickson, 2003; Cooperrider) and purpose (Reave) coincide across work groups, as illustrated in Figure 2. Fry and Reave's research on spiritual leadership show connections between passion, performance, and sustainability, promoting faith over fear. Strength-based leadership and development can increase team member engagement from 60% to 90% (Rath, 2007). Values congruence may drive sustainability in successful organizations and business models (Brown and Trevino) with transformational, or 'socialized charismatic' leadership being key to high performance. Entrepreneur or founder identities (Dobrev and Barnett, 2005) are linked to the charismatic aspect of the role in the organization and not the person in the role. The role in a growing organization generates a powerful tension as the organization develops which

sparks the passion of the individual in the role to be creative, drive innovation and focus on the growth. When growth slows, the individual is either moved out of the role or they are not as effective in sustaining the organization (Dobrev and Barnett).

Figure 1: Values-Driven Ecosystem, Values Congruence, Sustainability

Values-Driven Ecosystem



Finley, J., 2009

Denrell (2005) views high performance as a signal of capability versus luck. High performance is a rare event, maybe due to luck, may lead to below average, and may be a signal of incompetence rather than competence. Is high performance controlled chaos or synchronicity or have the potential to be mechanized and repeatable. There is the possibility that passion, sustainability and high performance are terms which describe aberrations which are not repeatable. *Is 'high performance' when the performance of the provider exceeds the expectations of the recipient? (in the eyes of the beholder?)*

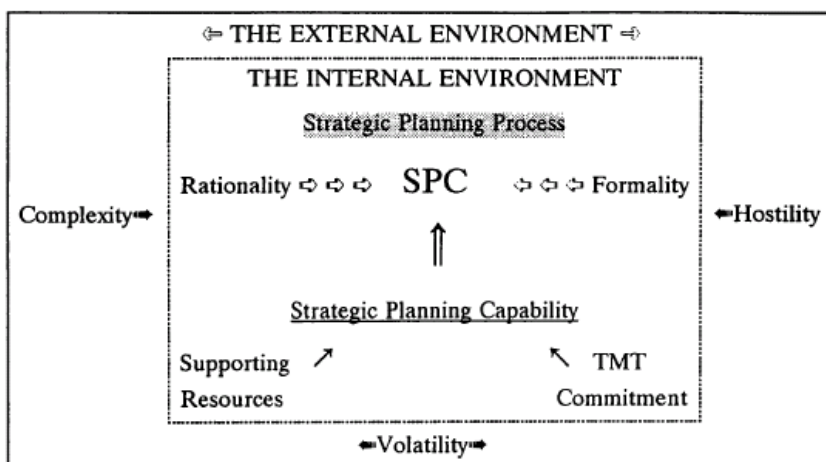
PRACTICAL APPLICATION

The quest is to understand what drives the passion resulting in discretionary efforts and sustainable high performance. Ultimately, the question is how do we measure, influence, leverage and repeat the contribution to get results quicker, better and cheaper. Breene and Nunes (2006) identify the following dimensions of high performance at the organization level:

- **Growth**, revenue expansion.
- **Profitability**, the spread between the return on capital and the cost of capital.
- **Positioning for the future**, a portion of share price not explained by current earnings or company's future value represents.
- **Longevity**, duration of out-performance in total return to shareholders.
- **Consistency**, the number of years out of seven the peer set median in profitability, growth and positioning for the future was beaten.

Of great interest, perhaps disappointment, but no surprise is lack of OD theories tying to the corporate high performance measures. Integration is required across various fields of study; OD, management, social sciences, psychology and strategy to provide theories with integrity. A system's unsatisfactory output (Soteriou and Roberts, 1998) strategic planning may undermine strategic thinking (Bryson and Roering, 1988) and lead to poor performance. Figure 2 illustrates the complexity in developing a successful strategy due to external and internal forces. Additional factors in the assessment of external strategic factors include external stakeholders, market, economic situation, competitive pressures, availability of resources, global presence, environmental, societal and government dispositions.

Figure 2: Model of the Strategic Planning Process (Soteriou and Robert, 1998)



Soteriou recommends further research, as the relationships between strategic planning process, different internal or external environmental factors,

and performance have produced results characterized by fragmentation and controversy (Miller and Friesen 1978, 1983; Ramanujam and Venkatraman 1987). It may be that performance is contingent on important variables that were ignored (Miller and Friesen 1978, 1983).

SUMMARY

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Examination of potential measures of passion for sustainable high performance leads us into a philosophical discussion and the need for additional disciplines in organization design. Delving deeper in both external and internal drivers of passion and high performance (Soteriou) will provide strategic guidance and boundaries for dynamic organization architecture, to allow strategies and business models to leverage their capabilities by leveraging the strengths of their people (Rath, 2007; Reave, 2006; Cameron et. al.) There is so much to do in this area to get into the mainstream of operating in society, making it an exciting field to be a part of now and in the future.

Ultimately, the question is; can we isolate both the internal and external the factors associated with variances in participation in actions; referred to as passion, competition, fear, love, motivation, focus, dedication, immersion, energy, and other factors. If we can identify the factors and measure the synergistic values resulting in various permutations, we may be able to identify levers in motivating a person to continue beyond self actualization and to care about entities, and to facilitate authentic sustainable social responsibility.

REFERENCES

- Angyal, A. (1941). *Foundations for a science of personality*. Cambridge, MA; Holt, Rinehart, & Winston.
- Barnouw, J. (1992). Passion as “Confused” Perception or Thought in Descartes, Malebranche, and Hutcheson. *Journal of the History of Ideas*, 53(3): 397-424.
- Breene, T. and Nunes, P. (2006), Going the Distance, How the World's Best Companies Achieve High Performance, *Outlook Journal*, September.
- Briggs, I and Myers, P. (1980). *Gifts Differing*. Palo Alto, California – Davies-Black.
- Brocas, I. and J. D. Carrillo (2008). Theories of the Mind. *American Economic Review*, 98(2): 175-180.
- Brown, M. E., & Trevino, L. K. (2009). Leader-Follower Values Congruence: Are Socialized Charismatic Leaders Better Able to Achieve It? *Journal of Applied Psychology*, 94,478-490.

Bryson, J. M. (1981). "A Perspective on Planning and Crises in the Public Sector." *Strategic Management Journal*, 2: 181-96.

Cameron, K.S., Bright, and Caza, A. (2004) "Exploring the relationships between organizational virtuousness and performance." *American Behavioral Scientist*, 47: 766-790.

❖ Cooperrider, D.L., Sorensen, P.F., Yaeger, T.F., & Whitney, D. (2005). *Appreciative Inquiry: Foundations in Positive Organization Development*. Champaign: Stipes.

Csikszentmihalyi, M. (1990). *Flow*. New York: Harper Perennial

Descartes, R. (1649), Voss, S. H., trans., (1989) *Passions of the Soul*. Indianapolis: Hackett.

Denrell, J. (2005). Should We Be Impressed With High Performance? *Journal of Management Inquiry* 14(3): 292-298.

❖ Dobrev, S. D. and W. P. Barnett (2005). Organizational Roles and Transition to Entrepreneurship. *Academy of Management Journal*, 48(3): 433-449.

❖ Fredrickson, B. L., & Losada, M.F. (2005). Positive Affect and the Complex Dynamics of Human Flourishing. *American Psychologist*, Vol. 60(7), (pp. 678-686).

❖ Fredrickson, B.L. (2003) "Positive emotions and upward spirals in organizations." In K.S. Cameron, J.E. Dutton, and R.E. Quinn (Eds.) *Positive Organizational Scholarship*. San Francisco: Berrett Koehler.

❖ Fry, L. W. and J. W. Slocum Jr. (2008). "Maximizing the Triple Bottom Line through Spiritual Leadership." *Organizational Dynamics* 37(1): 86-96.

Goleman, D. (1966). *Emotional intelligence*. London: Bloomsbury

Goleman, D. (1998). *Working with emotional intelligence*. New York: Bantam Books

Greenberg, Robert (2001). *Kant's Theory of A Priori Knowledge*, Penn State Press.

Holland, J. L. (1997). Making vocational choices: A theory of vocational personalities and work environments. *Psychological Assessment Resources*, 3rd ed.

Hume, David. (1777). *An Enquiry concerning Human Understanding*, Nidditch. Oxford: Clarendon Press.

James, Susan (1999), *Passion and Action*, [Oxford Scholarship Online Monographs](http://www.ingentaconnect.com/content/oso/674170/1999) <http://www.ingentaconnect.com/content/oso/674170/1999>

Jackson, C. L., J. A. Colquitt, et al. (2006). Psychological Collectivism: A Measurement Validation and Linkage to Group Member Performance. *Journal of Applied Psychology*, 91(4): 884-899.

- Jones B. B. and Brazzel M. (2006). *NLT Handbook of Organization Development and Change, Principals, Practices, and Perspectives*. New York: John Wiley and Sons
- Kant, Immanuel. (1781). *Critique of Pure Reason*, trans. N.K. Smith, London: Macmillan, 1929.
- Knutson, B. (2005). "Mind games." *Economist*, 374(8409): 71-71.
- Lewin, K. (1935). *A dynamic theory of personality*. New York: McGraw-Hill.
- Moskowitz, D.S. & Cote S. (1995). Do personal traits predict affect? A comparison of three models. *Journal of Personality and Social Psychology*, 69, 915-924.
- McNabb, R (2001). Job Evaluation and High Performance Work Practices: Compatible or Conflictual? *Journal of Management Studies*, 38(2): 293-312.
- Miller, D., and P. H. Friesen (1978). "Archetypes of Strategy Formulation." *Management Science*, 24 (9): 921-33.
- Oreg, S., M. Bayazit, et al. (2008). Dispositional resistance to change: Measurement equivalence and the link to personal values across 17 nations. *Journal of Applied Psychology*, 93(4): 935-944.
- Pritchard, R. (1995). *Productivity measurement and improvement: organizational case studies*. Greenwood Publishing Group.
- Pritchard, R. D., M. M. Harrell, et al. (2008). The productivity measurement and enhancement system: A meta-analysis. *Journal of Applied Psychology*, 93(3): 540-567.
 - ❖ Quinn, R.E., & Dutton, J.E. (2005). Coordination as energy-in-conversation. *Academy of Management Review*, Vol. 30(1), (pp. 36-57).
- Rath, T. (2007). *Strength Finder 2.0*. New York: Gallup Press.
- ❖ Reave, L. (2005). "Spiritual values and practices related to leadership effectiveness." *Leadership Quarterly* 16(5): 655-687.
- Salovey, P. & Mayer, J.D. (1994) Emotional Intelligence. *Imagination, Cognition, and Personality*, 9, 185-211
- Soanes, C. and Stevenson, A. (2008). *English Oxford Dictionary*. Oxford University Press
- Soteriou, E. C. and C. Roberts (1998). "The Strategic Planning Process in National Tourism Organizations." *Journal of Travel Research* 37(1): 21-29.
- Sturman, M. C., R. A. Cheramie, et al. (2005). The Impact of Job Complexity and Performance Measurement on the Temporal Consistency, Stability, and Test-Retest Reliability of Employee Job Performance Ratings. *Journal of Applied Psychology*, 90(2): 269-283.
- Woehr, D. J., M. K. Sheehan, et al. (2005). Assessing Measurement Equivalence Across Rating Sources: A Multitrait-Multirater Approach. *Journal of Applied Psychology*, 90(3): 592-600.

