

# **The Use of Psychological Capital, Humility, and Discrepancy Theory as Inputs for Strategy and Sociotechnical Systems: Phase One of an Action Research Case Study**

**Lachlan R. Whatley  
Benedictine University  
Trinity Western University**

*This Action Research, Phase I, case study describes one of the first efforts to use Psychological Capital and Humility surveys in a Top Management Team (TMT) to assess an appropriate intervention method for making changes to an organization's strategic direction. These surveys, together with Discrepancy Theory, led to a superior understanding of the dynamics within the TMT and the importance of context, thus greatly aiding further investigations of learning within the organization. This journey led to an ideal environment for considering the organization's future strategy and Sociotechnical Systems, and for understanding how to aid in the development of the individuals.*

## **PROLOGUE**

Weisbord (2004) asserted that one of the characteristics of Lewin's "Practical Theories" was that you can only understand human behavior in relation to all forces acting on a person at a given point in time, which is consistent with Lewin's commonly cited phrase, "If you want to know the system you must first seek to change it." Lewin also asserted that, ideally, "[n]ot only could you solve the problem, you could simultaneously study your own process and thereby refine the theory and practice of change" (Weisbord, p. 77). These two notions are the essential tenets of both Action Research (AR) and Sociotechnical Technical Systems (STS).

Coghlan and Brannick (2010) and Coghlan (2011) suggested that AR change efforts occur from philosophical perspectives that differ from those of the traditional, third person social sciences. Coghlan alluded to AR being a new research method — a third method — as an alternative to quantitative and qualitative methods where the very nature of the inquiry is "action" and the outcome is "research." Cummings and Worley (2009) placed STS as a specific method of AR by stating that STS "techniques and design principles [were] derived from extensive AR in both public and private organizations across national cultures" (p. 386). Cummings and Worley stated that STS has two foundational principles underlying its approach: firstly, the sociotechnical element — the belief that all organizing is a combination of a social element (the human side) and a technical part (task performance); and secondly, the environmental element — the belief that systems are open to their environments. These two principles create the essence of all "self-managed teams." Although Lewin was the first to discuss the relationship between the environment/context and individual behavior, the work of Fred Emery and Eric Trist at the Tavistock Institute is, without question, viewed as the birthplace of STS.

Currently, we are experiencing unprecedented, non-stop environmental turbulence accompanied with a progressively accelerating rate of change. Emery and Trist (1965) stressed the importance for organizations to understand and not miss the importance of their environments. Over time, Clarke (1994) and others (Mirvis, 1988, 1990; Van De Ven & Poole, 1995; Nadler & Tushman, 1999; Pettigrew, Woodman, & Cameron, 2001; Morgan, 2006) have reaffirmed these observations. Weisbord (2004) borrowed the term “permanent whitewater” (p. 185) from Vaill (1996) to depict a world of “accelerated change, growing uncertainty, [and] increasingly unpredictable global connections of economics, technology, and people ... producing [relentless and often unfathomable] ‘irreversible general change’” (p. 186). Pettigrew, Woodman, and Cameron suggested that our understanding of change is changing, while Morgan suggested that the very idea of change as manageable should be questioned, or “[i]s it part of our psychic prison? If so, the ultimate challenge of this chapter [of his book], a new seed, may be to recognize the emergent nature of change” (p. 290). Perhaps the most important aspect of change — how we interpret and view it — shapes more of our organizations than we realize, thus the assertion by Whatley and Kliever (2012) that “change is social construction in flight” (p. 2) is all the more important within AR and STS as a lens for a change intervention. It is exactly because of this change in our understanding — the move toward change being viewed as socially constructed — that the role of the first person and the second person, as suggested by Coghlan (2011), is even more important within all change interventions.

In light of the two observations above that 1) there is an increase in the role and importance of context; and 2) our understanding of the nature of change itself is changing, the purpose of this paper is to focus on using reliable and valid measurement tools, such as Psychological Capital (PsyCap) and a Healthy Humility Index (HHI), combined with discrepancy theory to determine the appropriate intervention method within the “context and purpose” pre-step stage of AR. To this end, this paper: firstly, provides a brief description of the company and the context of the case study; secondly, reviews the theoretical background of the constructs — AR, STS, PsyCap, HHI, and discrepancy theory — used within the case study; and finally, by reflecting on the process, identifies possible contributions to the literature that may have implications for research and the tools and techniques that may aid the practice of OD.

## **THE COMPANY AND THE CONTEXT**

In this particular study, commencing October 2011, the owners wanted to implement a strategic plan to position the company for the future. The owners of the company consisted of five individuals and were made up as follows: 1) one silent partner (30%); 2) the retiring president and previous owner of 19 years (25%); 3) one of the senior manufacturing managers with 31 years of experience in the company (15%); and two up-and-coming managers (15% each). The top management team (TMT) consists of all the owners, all of whom were involved in the pre-step stage, although the silent partner was not involved in the day-to-day operations of the business.

This ownership structure came into place after the president decided that he wanted less time in the “main chair” and wanted to transition to the next generation. The desire to venture into a strategy session or the development of a strategic plan came after 18 months of this significant change in ownership, combined with an outstandingly successful year, and yet, an organization that seemed to be out of “sync” (President, personal communication, Oct 2011). Previously, the company had undertaken a strategy planning activity in 2003 that was described by the TMT as “only mildly successful.”

The TMT had identified a few firms that might be able to aid them in a strategic planning exercise, one of which was the writer’s firm. During exploratory discussions with the TMT, the writer stressed that they needed to appreciate that strategy is not really a document but more about a way of thinking, and that the outcome may or may not be what they expect. In these preliminary discussions, the writer also stressed that change is difficult, and strategy only works when it moves all the way to job design, because this is where, according to an STS philosophy, the behaviors occur and stem from. Additionally, it was emphasized that the process would, in order to be done well, take at least 18 months. This was important

to this writer, since the firm had already undertaken a strategy exercise without much success and this experience was now a hurdle to future success. Secondly, the writer also wanted to ensure that the TMT had the “staying power” to stick it out when the intervention got difficult, knowing that it would.

After a couple of discussions, the TMT engaged the writer to facilitate a two-day “strategy session.” The objectives of this strategy session were to attain clarity and understanding of the “current state” of the company and to discuss potential directions for moving forward. In order to do this, the two-day session addressed what strategy, change, and leadership are and are not, combined with reviewing the entire company’s results over the previous two years — everything from the financials, employee turnover, job descriptions, and planning documents to procedures. In addition, the results of some preliminary surveys (including PsyCap and HHI) of the TMT were discussed and reviewed at the strategy session, while, at the same time, the writer introduced the TMT to the known theories and their implications, a form of Action Learning (AL). This strategy session was critical in the process, as it enabled the parties — the writer, and the owners of the company — to experience each other prior to making a longer-term commitment to any change intervention, which is consistent with Whatley and Kliever’s (2012) assertion that it is essential for the consultant to ensure there is congruence between the context, the intervention method, and the consultant’s identity.

It is against this background or “stage” that the remainder of this paper links the existing research and application of that research to the identification of new research and implications for both practitioner and scholar.

## THE PRACTICE OF GOOD THEORY

*Nothing is as practical as good theory and all action should be based on theory.*  
Lewin (1947)

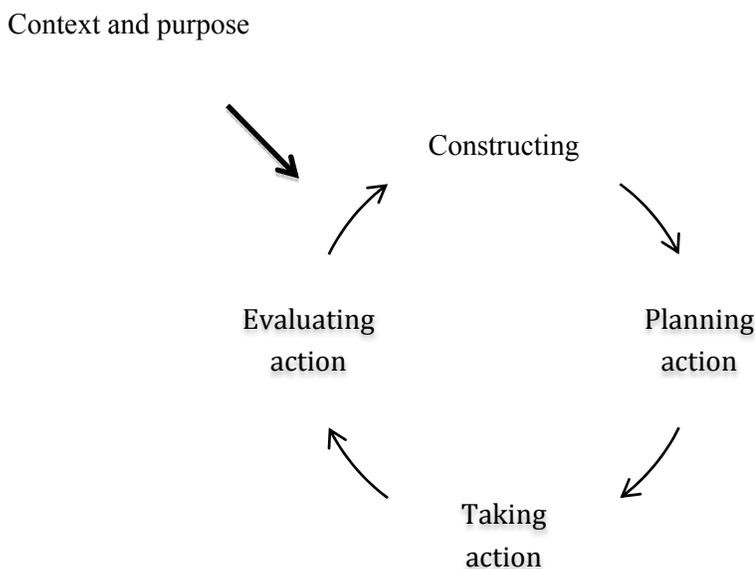
Cummings and Worley (2009) defined “classic” AR as a tool for focused, planned change: ... a cyclical process in which initial research about the organization provides information to guide subsequent action. Then the results of the action are assessed to provide further information to guide further action, and so on. This iterative cycle of research and action involves considerable collaboration among organization members and OD [Organizational Development] practitioners. It places heavy emphasis on data gathering and diagnosis<sup>1</sup> prior to action planning and implementation, as well as careful evaluation of results after action is taken. (p. 24)

In addition, Cummings and Worley detailed a nine-step process (consisting of problem identification, consultation with a behavioral science expert, data gathering and preliminary diagnosis, feedback, joint diagnosis of the problem, joint action planning, action, and data gathering after action) that underscores most “planned change.” Shani and Pasmore (1985) developed a somewhat more pragmatic definition where they highlighted the importance of “real world problems” and the need to develop “self-help” competencies within the organization’s members, while, at the same time adding to “scientific” knowledge. Shani and Pasmore suggested that there are four unique phases of AR. Firstly, there are the contextual factors that involve individual goals of the actors, their motivations, organizational culture/climate, and capability to participate in AR, in addition to the current economic and industry influences. Secondly, there is the quality of the relationships between the various actors, where they suggest trust needs to be the foundational tenet. Thirdly, there should be concern for the quality of the AR itself. Quality within AR, according to Shani and Pasmore, is predicated on ensuring there is equal focus on inquiry and implementation. And, finally, the outcomes, the final results, are: 1) some level of improved sustainability for the organization; and 2) the development of competencies out of the action, which leads to the creation of new knowledge. Clearly, Shani and Pasmore went through a process of condensing and combining Cummings and Worley’s (2009) nine elements into four.

Coghlan and Brannick (2010) built on Shani and Pasmore’s (1985) definition and showcased four broad characteristics that encompass AR. They strongly asserted that the main focus of AR is “research in action” and, thus, “inquiry in action,” which they asserted is foundational, while “collaboration” is a value

of the process. They asserted that “inquiry in action” leads to the critical characteristics of planning, taking action, and evaluating action, all of which leads to further planning, and so the cycle continues (see Figure 1). This results in a continuous spiral, similar to the notion of double loop learning coined by Argyris (2002). As a result, AR is closely aligned with AL; however, not only is AL concerned with this idea of the core cycle of construction, planning, taking action, and evaluating action, but it is also concerned with a second cycle of reflection on the process of AR itself — a notion that is supported by the works of Zuber-Skerritt and Perry (2002) and Argyris (2003). This observation is particularly relevant, given that with the last strategic planning endeavor done by the company there was little to no learning achieved since the members of the TMT felt they were back to the same point — although not exactly the same point — and had little appreciation for what strategy is and is not, and a general sense that the previous intervention had not been “successful.” There was also the general sense that something was missing; however, the learning had not occurred to specifically articulate what was missing. This is what AL within AR should resolve.

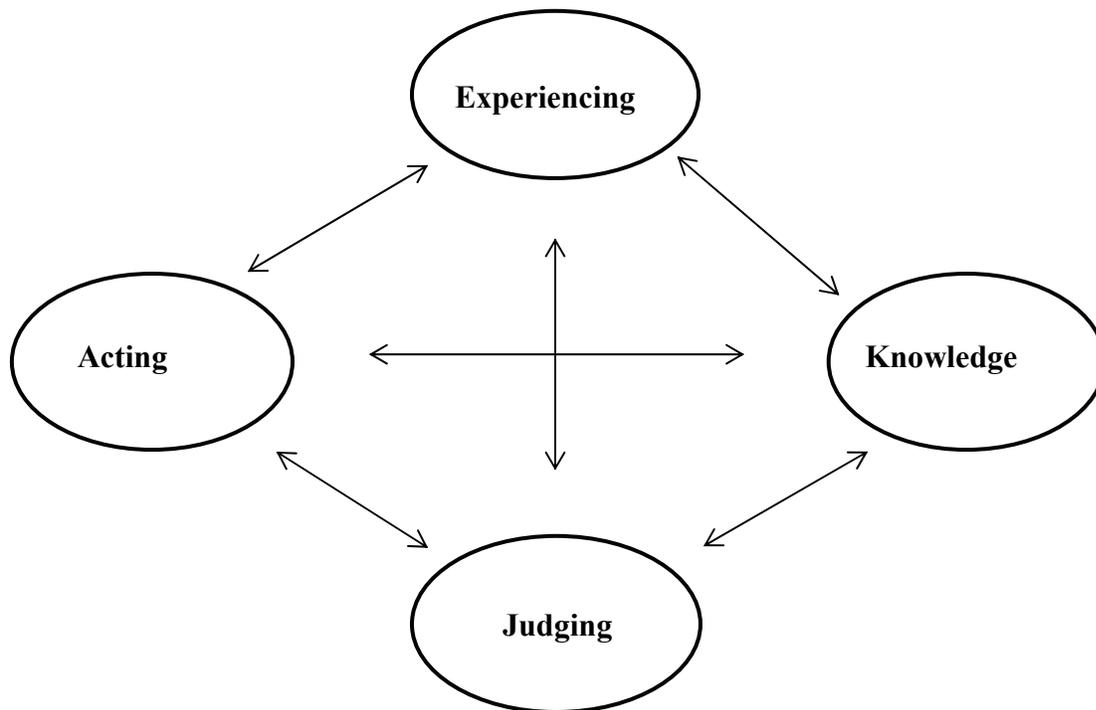
**FIGURE 1**  
**THE ACTION RESEARCH CYCLE**



Coghlan and Brannick (2010)

The key to having a comprehensive understanding of AR is to appreciate how meta-learning occurs and/or should occur within the process, both inwardly (for the individuals within the organization) and outwardly (for the entire organization). If that learning had occurred among the TMT in the first strategic planning experience, there would have been no need to have an external person facilitate the “strategy” process a second time. And, since that was not the case, the writer determined that the TMT needed to review the concepts of strategy in order to ensure there was unity of understanding. The learning aspects of AL within AR were addressed by Coghlan and Brannick (2010) by masterfully integrating Lonergan’s (1971) dynamic cognition model and its four frames — experiencing, understanding, judging, and decision/action — to explain the learning process occurring for the individual (see Figure 2). While, for organizational learning, Coghlan and Brannick suggested the works of Burke (2008), Senge (2006), and or Schein (1996) as sources for explaining the ideal learning environment.

**FIGURE 2**  
**VISUAL REPRESENTATION OF LONERGAN'S DYNAMIC COGNITIVE STRUCTURE**



Lonergan (1971)

In this particular study, we (the TMT and the writer) focused on the pre-step stage of AR, which comprises “context and purpose” (see Figure 1). As asserted by Whatley and Kliewer (2012), “context trumps method” (p. 3) and the right method in the wrong context will not work. This highlights that having an understanding of the organizational context and purpose is essential to any change intervention and, thus, work done at the front to fully appreciate and understand the context and purpose is time well spent. This was, in essence, the main objective of the strategy session — to ensure that the TMT had a consistent understanding of the concepts of strategy, change, and leadership, and to enable the writer to have a more thorough understanding of the “actors” and their “stage.” One question clearly stood out in the strategy session: What is the best intervention method to use for this organization at this point in time? This, then, leads us into a discussion of STS.

*Emery saw multiskilling as the real key to removing  
 parent-child-type supervisory relationship.*  
 Weisbord (2004, p. 178)

Within AR, strategy could be considered through an STS approach, since strategy, if done “well,” has to ultimately influence job design and structure to promote the individual desired behaviors. This approach is consistent with the views of Cummings and Worley (2009) who emphasized STS under the area of self-managed teams and part of “work design” and, thus, considered it part of organizational structure — structuration theory. STS is concerned with the optimization of both the social and technical aspects of work systems and how they interact with the various subcontexts within and outside of the organization. This occurred since STS evolved out of an engineering approach, which predominately focused on efficiency (optimization) and motivation theories which, in turn, looked at job enrichment, job meaning, and knowledge of results (Cummings & Worley, 2009). At its core, STS is about joint

optimization — that is, when both the social and technical systems are designed to fit the demands of each other and the operational context.

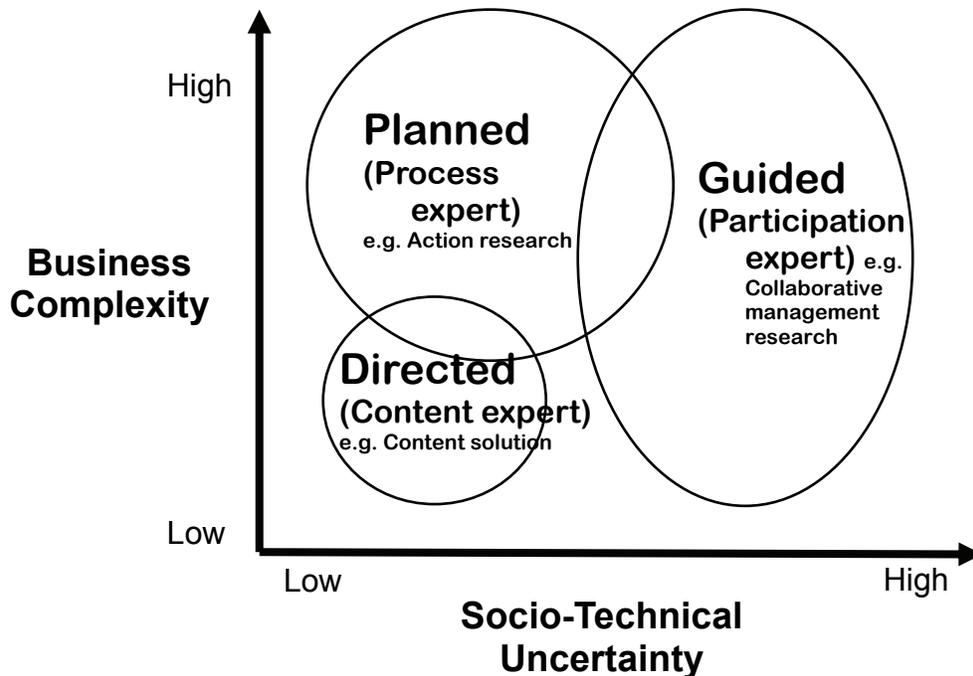
Van Eijnatten, Shani, and Leary (2008) suggested that there are three subfields of STS that have emerged: STS theory, STS design, and STS change and development process. STS theory and STS design are concerned with the elements of structure and work design, while STS change and development process is concerned with creating and transforming organizations. Thus, it is considered a “comprehensive” planned change process. Van Eijnatten, Shani, and Leary asserted that this method uses an AR orientation and provides linkages to strategy, system diagnosis and analysis, and learning structures and systems. As a result, it is a very relevant intervention approach for the case under consideration.

Interestingly, STS has evolved around the world with different nuances existing between North America, Australia, France, Scandinavia, and the Netherlands, yet, as asserted by Van Eijnatten, Shani, and Leary (2008), the common elements are: firstly, organizations are open systems and, thus, the use of systems theory; secondly, organizations optimize performance when there is self-regulation, democracy, and participation from all employees; thirdly, STS is considered a comprehensive planned change process. The differences between these countries are small, subtle distinctions as a result of different degrees of emphasis on either the social, technical and/or structural design elements (Van Eijnatten, Shani, & Leary). In other words, the emphasis is derived from epistemological or ontological beliefs of that culture or their experiences. In this particular case study, the writer is Australian/Canadian, while the members of the company’s TMT are Canadian, with the company residing in Western Canada.

During the two-day strategy session, all of the available company metrics were reviewed. The group identified two significant positives from the data: 1) higher return on equity (ROE) than the industry average — a function of superior profit margins and an outstanding total asset turnover (significantly larger than the industry average), and 2) sales growth that was in excess of the industry average. These two positives showcased the company’s ability to achieve the task — that is, get the job done. However, the group identified two significant, equally important, negatives from the data: 1) employee turnover within the last year was greater than 50%; and 2) the amount of TMT overtime was excessive (over 30 hours of overtime per week). These two metrics concerned the more senior members of the TMT the most and they were of the opinion that the sound results — ROE and sales growth — were not there, because of the high turnover and excessive TMT overtime, and, more importantly, the strong results would not be sustainable over the long term if employee turnover and excessive TMT overtime were not addressed. This line of thinking became increasingly more of a concern over the pre-step stage as the TMT became more knowledgeable about strategy, leadership, change, STS, and the importance of their perceptions and assumptions. This was the beginning of an appreciation of the importance of knowing one’s individual state in order to be an effective group member, as suggested by Whatley (2012), and aided in building self-awareness on the part of members of the TMT.

The work of Kerber and Buono (2005, 2010) proposed a change complexity typology based on business complexity and STS uncertainty. According to Kerber and Buono’s model for classifying the type of change intervention, the company in the case study is well suited for “planned change.” And, using Kerber and Buono’s typology for change intervention, Whatley and Kliewer (2012) mapped particular intervention methods against particular change typologies (see Figure 3). According to this model, the use of AR, and specifically STS, would be considered an appropriate method for this company, in light of the four key results discussed above. As a result of this analysis, it became clear that structure, policy, and operating procedures would have to shift in order to address the two major concerns identified. This naturally led to the question: Do the members of the TMT really believe that they can change? — and, thus, this leads to a discussion of PsyCap.

**FIGURE 3**  
**APPROACHES TO CHANGE TYPOLOGIES, INTERVENTION METHOD AND**  
**CONSULTANT USE OF SELF**



Whatley and Kliewer (2012)

*Psychological ownership is the state in which individuals feel as though the target of ownership is theirs.*

Pierce, Kostova, and Dicks (2003, p. 86)

As part of the required preparation for the strategy session, the author requested that each member of the TMT complete the PsyCap 24 questionnaire (Luthans, Youssef, & Avolio, 2007), the collective results of which would then be shared at the strategy session. While intellectual capital is “what you know,” and social capital is “who you know,” in essence, Psychological Capital (PsyCap) is about “who you are” and, more importantly, “who you are becoming” (Luthans, Youssef, & Avolio, p. 20). What distinguishes PsyCap from other psychological tests is the developmental piece of “moving (developing) from the actual self (human, social, and psychological capital) to the possible self” (Avolio & Luthans, as cited in Luthans, Youssef, & Avolio, p. 26). As a result, PsyCap is a multi-dimensional construct consisting of Hope, Efficacy, Resiliency, and Optimism (the H.E.R.O. within, see Luthans, Youssef, Avolio, 2007). Well established within the positive psychology literature, these four constructs have solidly established PsyCap as a reliable predictor. Hope is defined as “a positive motivational state that is based on an interactively derived sense of successful (1) agency (goal-directed energy) and (2) pathway (planning to meet goals)” (Snyder, Irving, & Anderson, 1991, p. 287). Efficacy is “one’s conviction (or confidence) about his or her abilities to mobilize the motivation, cognitive resources, and courses of action needed to successfully execute a specific task within a given context” (Stajkovic & Luthans, 1998, p. 66). Resilience is “the capacity to rebound or bounce back from adversity, conflict, failure, or even positive events, progress, and increased responsibility” (Luthans, 2002, p. 702). Finally, optimism is the general disposition or outlook the individual uses to interpret events external to him or herself.

Most recently, PsyCap has been shown to be a predictor of a number of individual level, organizational performance outcomes such as employee satisfaction, commitment, turnover, and individual organizational behaviors, such as citizenship and deviance (Avey, Reichard, Luthans, & Mhatre, 2011). Additionally, within this same meta-analysis study, there was a negative correlation between undesirable employee attitudes (cynicism, turnover, intentions, job stress, and anxiety) and undesirable employee behaviors (deviance).

In this particular case study, the resulting PsyCap measures for the individual members of TMT were exceptionally high — with the lowest within the TMT at 71% and the highest at 91%. Collectively, the TMT's PsyCap results came out to a low of 79% and a high of 85%. Interestingly enough, the highest individual element in every case was Efficacy, which is the most important aspect (highest load factor) of the measurement tool itself. These high PsyCap scores are important, as they indicate that the members of the TMT have a propensity to genuinely believe that they can shape their destiny and play a role in moving from the self-as-is to the self-as-could-be (possible self) — an outlook that is important for the success of any change initiative. Yet, the still unanswered question within this strategy session was: Are the TMT really teachable? — thus, leading to an examination of their character and, specifically, their humility.

*The truly humble man never knows that he is humble.*  
Singh, 1967, as cited in Tangney (2000, p. 78)

It was not until the birth of Positive Psychology and its “leaking” into Positive Organization Scholarship (POS) that we, collectively, began to consider the importance of virtues (Cameron, 2003), wisdom (Weick, 2003), and transcendent behavior (Bateman & Porath, 2003), and humility (Tangney, 2002). Prior to POS, these constructs (all virtues) were thought of as being much too “religious” in nature — something that “real” science had little time to consider — but, collectively, it now appears that we can return to these “old” constructs without the fear of being misinterpreted. Perhaps, the urgency of the present context now requires new solutions, such that it matters less “where” valid and reliable answers come from.

Historically, the virtue of humility has not received much attention within the academic literature, nor, in general, at the academy, and there have been only a few scholars (such as Vera & Rodriguez-Lopez, 2004; Collins, 2005; Morris, Brotheridge, & Urbanski, 2005; Senge, 2006; and Nielson, Marrone, & Slay, 2010) who have suggested or implied some importance of humility to leadership, strategy, or more contemporary constructs of organizing. Others have identified humility as a component of Values in Action (VIA) (Park & Peterson, 2003; and Park, Peterson, & Seligman, 2004) where humility is identified as one of the several positive individual character strengths that are reflected in all thoughts, feelings, and behaviors. Fry (1998), Casey (2001), and Exline, Campbell, Baumeister, Joiner, and Krueger (2004) all concur that humility is a state of “being” that enhances learning.

Exline and Geyer's (2004) seminal work showcased that, although there was no agreement around definitions, people generally viewed humility as a positive construct. Yet, it was Quiros (2006) who suggested that humility existed on a continuum (see Figure 4) with an “unhealthy” level at one end and a “healthy” level at the other. Quiros' humility continuum was similar to Aristotle's notion of a “mean virtue” within a spectrum, while Peterson and Seligman (2004) suggested all virtues represent an intention or disposition to do that which is “right” or “good” and, so, humility can be thought of as that crest of human excellence between arrogance and lowliness. In addition, Grenberg (2005) suggested that Kant, an icon in philosophy, believed humility to be so important because it was the “meta-attitude which constitutes the moral agent's proper perspective on himself” (p. 133), and, thus, was foundational to all other virtues.

**FIGURE 4**  
**HUMILITY CONTINUUM**

Unhealthy humility    ←-----→    Healthy humility

Quiros (2006)

Tangney (2002) states that the elements of humility include:

1) an accurate assessment of one's abilities and achievements (not low self-esteem or self-deprecation); 2) an ability to acknowledge one's mistakes, imperfections, gaps in knowledge, and limitations (often vis-a-vis a "higher power"); 3) openness to new ideas, contradictory information, and advice; 4) keeping one's abilities and accomplishments – one's place in the world – in perspective (e.g., seeing oneself as just one person in the larger scheme of things); 4) a relatively low self-focus, a "forgetting of the self," while recognizing that one is but one part of the larger universe; 5) an appreciation of the value of all things, as well as the many different ways that people and things can contribute to our world. (p. 413)

In summary, a humble person subordinates him or herself to a belief that he or she is not perfect or in control and, as such, is constantly attempting to be teachable (Fry, 1998) and consistently seeks accurate self-knowledge, reflection, and a desire to personally improve (Tangney, 2002; Quiros, 2006; Peterson & Seligman, 2004; Owens, 2009; and Ou, 2011). Templeton (1997) suggested that humble people are aware of their talents and abilities yet know their limitations, which Emmons (1999) would claim enabled them to put their strengths in place. This balance, Ou (2011) stated, "keeps them from being both arrogant and self-contemptuous" (p. 14), while Grenberg (2005) claimed the humble are not afraid of disclosing themselves and admitting mistakes. According to Morris, Brotheridge, & Urbanski (2005), knowing they fall short on an "ideal" that feeds their desire to learn and makes them available to learn.

Tangney (2000), in attempting to develop a definition for humility as a multidimensional virtue, asserted that it is imperative to also ensure that humility is distinct and separate from other related concepts. This is particularly important in light of a desire to determine or develop accurate measurement tools. Campbell and Fiske (1959) identified that a critical component of measurement validity is to ensure that there is discrimination validity, and this is particularly relevant in any study of humility, given its nature. In agreement with Ryan (1983), Tangney stated that humility is not low self-esteem, "nor an understatement of one's abilities, accomplishments, or worth" (p. 74). As Tangney pointed out, humility is related to, but very distinct from, both modesty and narcissism. Modesty only captures one aspect of humility, and, as such, one can be modest, but not truly humble. Thus, humility is a higher test than modesty, since if you are humble you are also modest. Tangney's very important distinction does not appear to be embraced by Park and Peterson (2003) since they placed modesty and humility together as part of the same virtue within their Values In Action (VIA) taxonomy. Additionally, narcissism lacks many of the essential elements, as determined by Tangney; however, this does not mean that low narcissists are humble, since, although they can see their own place within the world, they may not be able to have a deep appreciation of others.

Tangney (2000, 2002) asserted that we are still within the early stages of scientifically studying virtues with the single largest challenge being the lack of a valid measurement tool. Tangney identified two main dimensions of humility to be considered within a measurement tool: dispositional and situational. The dispositional dimension, "state-like," is concerned with the individual and his or her individual character, while the situational dimension is concerned less with personality and individual characteristic differences and more with understanding under what conditions/circumstances an

individual's humility increases. In this particular case study, due to the relative "newness" of studying this construct, only dispositional humility was measured.

Since there are many challenges in deriving a valid dispositional humility index separate from mixed radar methods, only three have been developed and tested since Tangney's (2000, 2002) seminal theoretical foundation. All the indices were developed and validated by PhD students as part of their dissertations. The first was by Quiros (2006), who obtained a doctorate in psychology and developed, over two separate studies, the HHI made up of an 11-item scale scored on a 6-point Likert scale, demonstrating a sound reliability (0.8285). This index was then further validated by a third study, which considered the relationships between humility and self-esteem, hope, existential meaning, depression, and anxiety. The essence of this index (self-assessing) is that there are four major factors influencing an individual's disposition toward humility, those being: 1) other-focused; 2) spirituality (a higher purpose and being); 3) accurate self-perception; and 4) openness.

The second dispositional humility index was developed by Owen (2009), a doctoral candidate within a business school, who focused on the role of humility within the context of organizational leadership. Within Owen's study, there was the development of both a self-report and an other-report (measurement of) humility index. Owen also examined the strength of the index relative to consciousness, global self-efficacy, and general mental ability. The major factors influencing humility within Owen's index were: 1) willingness to view oneself accurately; 2) appreciation of others' strengths; and 3) teachability. The final stage of Owen's research was to link humility to leadership in an attempt to explore the implications of humility within a particular situation.

The third dispositional humility index was developed by Ou (2011), a business student who focused on the development of an "other report" and was the first researcher to quantify humility and leadership behavior. Ou specifically linked humility and its relationship to the Top Management Team, TMT, and their ability to implement an empowering organizational climate. Ou's work showed that CEO humility was positively related to CEO empowering leadership; CEO empowering leadership was positively related to TMT integration and empowering organizational climate; and empowering organizational climate was positively related to middle managing ambidexterity.

Of the three existing humility measurements, there are small subtleties between them that may stem from differences in their authors' worldviews. Within Owen's (2009) definition of humility, there is a noticeable absence of spirituality, yet both Quiros (2006) and Ou (2011) placed significant importance on the spiritual or the transcendental element of the indices they derived. Ou used Quiros' index as a starting point for her research and then added the additional element of the transcendental aspects. For Tangney (2000, 2002), Emmons (1999), Quiros (2006), and Ou (2011), one's spirituality/religion was an essential element of humility, while Emmons also claimed that individual personality is very much influenced by one's motivation, which is derived from one's spirituality. Thus, the writer can only speculate that Tangney, Emmons, Quiros, and Ou were no longer concerned with being perceived as "nonscientific" in defining humility as a construct in relation to notions of philosophy or spirituality/religion.

Because of its psychology roots and its proven reliability and validity, for purposes of this case study, Quiros' HHI index was selected as a means to measure the individual dispositional humility of all members of the TMT. The results showed that the lowest individual HHI score was 76%, while the highest was 91% and the average for the TMT was 85%. These high results indicate that the members of the TMT have a strong propensity to being open to hearing new ideas, learning from their mistakes, and, essentially, are teachable. As a result, prior to the strategy session, we discovered that the TMT had high levels of the key ingredients of PsyCap and of the virtue of humility. What was then needed was the ability to aid them in seeing multiple futures and a way in which they could begin to navigate the different possible directions that were available to the organization.

The TMT needed a means to aid them in seeing multiple alternatives that would aid them in eventually reframing the possible future of the company and the multiple possible steps to that future — and thus, the importance and role of discrepancy theory.

*For the strength of the Pack is the Wolf,  
and the strength of the Wolf is the Pack.*  
Kipling (1894)

The notion of shared cognition, which Busche and Coetzer (2007) defined as “shared cognitive structures and processes at the group level” (p. 193), has greatly aided our collective understanding of the dynamics within groups. In other words, who we are as individuals is influenced by who we are within a group. Individual discrepancy theory proposes that the degree of discrepancy between cognitive domains possessed by an individual — referred to as self-state representation — represents particular emotional situations. The self-state representations comprise the actual self-state representations (self-concept) and both the “ideal” and “ought” self-state representations (self-guides). The ideal self represents the hopes, aspirations, and wishes for the self, whereas the ought self represents beliefs about the duties, obligations, and responsibilities of the self. An example of the significant differences between the ideal self and the ought self is the “conflict between a hero’s ‘personal wishes’ and his or her ‘sense of duty’” (Higgins, 1987, p. 321). The research at the individual level has shown that discrepancies between the self-concept and the self-guides are associated with a variety of affects (Higgins, 1987; and Higgins, Bond, Klein, & Strauman, 1986). Busche and Coetzer’s (2007) groundbreaking research used discrepancy theory at the group level and showed that relationships between “membership” and “competence” of the group can be predicted by the extent to which there is congruence and convergence between the group-state ought and group-state ideal.

In this case study, discrepancy theory was used at the strategy session to discuss the future of the company, the members of the TMT, and all other groups/teams within the company and the individuals who work there. Essentially, within this case, discrepancy theory was used at both the TMT level and the company/organizational level. In so doing, all of the dialogue within the pre-step stage of AR was in relation to the “actual,” “ideal,” and “ought” in regards to the TMT and the organization. Within this case, the use of discrepancy theory greatly aided the individual TMT members to identify priorities, possibilities, and next steps for strategy formulation and implementation. These three clear reference points aided in the interpretation of data that unfolded within the pre-step stage of AR over the course of the two-day strategy session, particularly when combined with an understanding of the TMT’s PsyCap and HHI results. And, most importantly, given the high PsyCap and HHI scores (indicating the existence of behavioral skills to influence future states, combined with the skills to learn), the use of discrepancy theory was even more impactful.

## **CONTRIBUTIONS TO THEORY AND PRACTICE**

Since AR is essentially a pragmatic model of inquiry, it can be argued that the contribution to theory is limited and the contribution to practice is only specific under identical contexts. However, it is possible that there are reoccurring themes or patterns that would only be attained or identified through the rigorous process of research through a variety of cases. Additionally, it can also be argued that not only is case analysis practice useful, but, as in this case, it can show the applied application of other theories within the “field,” which only adds to the validity of the theory being used. In this particular case, the use of PsyCap, HHI, and discrepancy theories were all further supported by their application within the field. In addition to the above contribution, upon reflection of the pre-step stage approach taken within this case (an STS method within AR combined with the use of discrepancy theory), there are four specific contributions to both practice and theory for the field of OD, as discussed below.

PsyCap was an excellent tool to aid in determining the “general disposition” of the TMT toward a better or different future for the organization. Additionally, since the members of the TMT learned of the

notion of PsyCap, its four elements, and of the importance of self agency, they have all subsequently commented that this learning changed their thinking. Their meta-cognition had been challenged. As one of the members of the TMT stated, “It’s one thing to believe you can do something; it’s another to know you have the behaviors to achieve it. What a powerful tool for aiding myself and others.” As a result, this case study clearly identified that PsyCap has significant potential as a pre-step assessment tool within AR for both the assessment of the “readiness for change” and the ability to be successful in the change effort itself.

Humility is a new construct within OD literature, and, as a result, there is much skepticism around its validity and reliability. In this particular case, the HHI results indicated a large acceptance to learn, to grow, and to be teachable — teachable to what was needed. In a discussion on the group results for the HHI, the TMT member with the highest humility score, but without knowledge of his own individual score, stated, “I have never really considered myself as humble; however, I definitely would like to think of myself as a being available to learn, even when I didn’t want to hear what I needed to learn.” As a result, this case study suggests a finding that scoring high on humility may be a good indicator of one’s willingness to learn and, thus, has potential as a pre-step assessment tool within AR.

The importance of STS and emphasizing the separation of the individual behavior and motivation from the structural support within the organization was an excellent way of explaining and aiding cognition of the TMT. From the analysis of the PsyCap and HHI results, the two-day strategy session was designed to focus on individual behaviors and motivation, and how they are the underlying drivers to overall performance. This discussion, integrated with the analysis of the overall company performance, was only considered possible due to the high scores on both the PsyCap and HHI indices. This provided an avenue to discuss the differences between the two main aspects of STS: 1) human behaviors; and 2) the structural elements that the organization puts in place to support those behaviors. The use of such tools allowed the TMT to see the importance of aligning the structures within the organization in order to increase the chances of getting the desired behaviors. As one member of the TMT stated, “I just had not thought of thinking about the two [structure and behavior] as separate, yet connected pieces.” Thus, this case study supports the idea that STS is a sound way to aid others in the reframing how TMT consider and reflect on their organization.

Finally, discrepancy theory was used as a way of separating “ideal” states from “best possible” states, under the circumstances. Through this process, members of the TMT were able to place their context within the post, current, immediate future (ought), and preferred future (ideal — although not necessarily attainable). As a result, it took the burden of trying to be “ideal” or “perfect” off the table and enabled the TMT to explore the idea of being “best” under the circumstance context. This was best expressed by the TMT member who stated, “Talking about an ought [best under the circumstances] position or outcome is significantly more forgiving and realistic than an ideal. Context has such an influence on the decisions that we need to allow this in our planning, and, until this discussion, we’ve just never thought about it.” As a result, the use of discrepancy theory (aiding in the collective cognition of appreciating the difference between the group/organizational ideal state and the group/organizational ought state) was an excellent tool/method for considering the implications of context and determining the appropriate next steps.

## **POSTLUDE**

This concludes the theoretical and practical contributions of this AR case study. The case has shown that PsyCap and HHI measures greatly aided within the pre-step stage of this STS AR by identifying whether the TMT had the behavioral elements necessary to realistically undertake a significant change effort. Additionally, the use of discrepancy theory aided the TMT in negotiating the various paths forward by aligning them with considering their “ought” or best future, given their current context/circumstance. And thus concludes Phase One of our journey.

1. Coghlan and Brannick (2011) would refer to diagnosis as “constructing.”

## REFERENCES

- Argyris, C. (2002). Double loop learning, teaching and research. *Academy of Management Learning and Education*, 1(2), 206-218.
- Argyris, C. (2002). Double loop learning, teaching and research. *Academy of Management Learning and Education*, 1(2), 206-218.
- Avey, J. B., Reichard, R. J., Luthans, F., & Mhatre, K. H. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance. *Human Resources Development Quarterly*, 22(2), 127-152.
- Bateman, T. S., & Porath, C. (2003). Transcendent behavior. In K. S. Cameron, J. E. Dutton & R. E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 122-137). San Francisco: Berrett-Koehler Publishers, Inc.
- Burke, W. W. (2008). *Organizational change: Theory and practice* (2<sup>nd</sup> ed.). Thousand, Oaks: Sage Publication.
- Busche, G. R., & Coetzer, G. H. (2007). Group development and team effectiveness: Using cognitive representatives to measure group development and predict task performance and group viability. *The Journal of Applied Behavioral Science*, 43(2), 184-242.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminate validation by the multirait-multimethod matrix. *Psychological Bulletin*, 56, 81-105.
- Cameron, K. S. (2003). Organizational virtuousness and performance. In K. S. Cameron, J. E. Dutton & R. E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline*. (pp. 48-65). San Francisco: Berrett-Koehler Publishers, Inc.
- Casey, M. (2001). *A guide to living in the truth: Saint Benedict's teaching on humility*. Liguori MO: Liguori/Trumph.
- Clarke, A. T. (1992). Humility. In D. H. Ludlow (ed.), *Encyclopedia of Mormonism*. (pp. 663-664). NY: Macmillan.
- Clarke, L. (1994). *The essence of change*. Hemel Hempstead, UK: Prentice Hall.
- Coghlan, D. (2011). Action research: Exploring perspective on a philosophy of practical knowing. *The Academy of Management Annals*, 5(1), 53-87.
- Coghlan, D., & Brannick, T. (2010). *Doing action research in your own organization* (3<sup>rd</sup> ed.). London: Sage.
- Collins, J. (2005). Level 5 Leadership: The triumph of humility and fierce resolve. *Harvard Business Review*, 83, 136-146.
- Cummings, T. G., & Worley, G. C. (2009). *Organization development & change* (9<sup>th</sup> ed.). Mason, OH: South-Western Boulevard.

- Emery, F. E., & Trist, E. L. (1965). The causal texture of organizational environments. *Human Relations*, 18(1), 21-32.
- Emmons, R. A. (1999). *The psychology of ultimate concern: Motivation and spirituality in personality*. NY: The Guilford Press.
- Exline, J. J., & Geyer, A. L. (2004). Perceptions of humility: A preliminary study. *Self and Identity*, 3, 95-114.
- Exline, J. J., Campbell, W. K., Baumeister, R. F., Joiner, T., & Krueger, J. (2004). Humility and modesty. In C. Petersin & M. Sligman (Eds.) *The values in action (VIA) classification of strengths*. Cincinnati, OH: Values in Action Institute.
- Fry, T. (Ed.). (1998). *The rule of Saint Benedict in English*. NY: Vintage Books.
- Grenberg, J. M. (2005). *Précis of Kant and the ethics of humility: A story of dependence, corruption and virtue*. Cambridge, MA: Cambridge University Press.
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94(3), 319-340.
- Higgins, E. T., Bond, R. N., Klein, R., & Strauman, T. (1986). Self discrepancy and emotional vulnerability: How magnitude, accessibility, and type of discrepancy influence affect. *Journal of Personality and Social Psychology*, 51, 5-15.
- Kerber, K. W., & Buono, A. F. (2005). Rethinking organizational change: Reframing the challenge of change management. *Organizational Development Journal*, 23(3), 23-38.
- Kerber, K. W., & Buono, A. F. (2010). Invention and organizational change: Building organizational change capacity. In A. F. Buono & D. W. Jamieson (Eds.), *Consultation of organizational change* (pp. 15-40). Charlotte, NC: Information age publishing, Inc.
- Loneragan, B. (1971). *Method in theology*. Toronto, Ontario: University of Toronto Press.
- Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, 23, 695-583.
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). *Psychological Capital*. NY: Oxford.
- Mirvis, P. H. (1988). Organization development: Part I – An evolutionary perspective. *Research in organizational change and development: Vol. 2*. Stamford, CT: JAI Press. Inc.
- Mirvis, P. H. (1990). Organization Development: Part II – A revolutionary perspective. *Research in Organizational Change and Development* (Vol. 4), p. 1-66.
- Morgan, G. (2006). *Images of organizations: Updated edition of the international bestseller*. Thousand Oaks, CA: Sage Publication Inc.
- Morris, J. A., Brotheridge, C. M., & Urbanski, J. C. (2005). Bringing humility to leadership: Antecedents and consequences of leader humility. *Human Relation*, 58(10), 1323-1350.

- Nadler, D., & Tushman, M. (1999). The organization of the future: Principles of design for the 21st Century. *Organizational Dynamics*, 28(1), 45-60.
- Nielson, R., Marrone, J. A., & Slay, H. (2010). A new look at humility: Exploring the concept and its role in socialized charismatic leadership. *Journal of Leadership Studies*, 17(1), 33-43.
- Ou, Y. (2011). *CEO Humility and its relationship with middle manager behaviors and performance: Examining the CEO-Middle manager interface*. Dissertation Abstracts International, (UMI No. 3453511).
- Owen, B. P. (2009). *Humility in Organizational Leadership*. Dissertation Abstracts International, (UMI No. 3370531).
- Park, N., & Peterson, C. M. (2003). Virtues and organizations. In K. Cameron & G. Spreitzer (Eds.) *Handbook of Positive Organizational Scholarship* (pp. 33-47). NJ: Oxford University Press.
- Park, N., Peterson, C. M., & Seligman, M. E. (2004). Strengths of character and well-being. *Journal of Social and Clinical Psychology*, 23(5), 603-619.
- Peterson, C., & Seligman, M. (2004). *Character strengths and virtues: A handbook and classification*. NY: Oxford University Press.
- Pettigrew, A. M., Woodman, R. W., & Cameron, K. S. (2001). Studying organizational change and development: Challenges for future research. *Academy of Management Journal*, 44(4), 697-713.
- Quiros, A. E. (2006). *The development, construct validity, and clinical utility of the Healthy Humility Inventory*. Dissertation Abstracts International, (UMI No. 3280499).
- Ryan, D. S. (1983). Self-esteem: An operational definition and ethical analysis. *Journal of Psychology and Theology*, 11, 295-302.
- Schein, E. H. (1996). Kurt Lewin's change theory in the field and in the classroom: Note toward a model of managed learning, *Systems Practice*, 9(1), 27-48.
- Senge, P. M. (2006). *The fifth discipline: The art and practice of the learning organization*. NY: Doubleday Publishing.
- Shani, A. B. (Rami), & Pasomore, W. A. (1985). Organization inquiry: Towards a new model of the action research process. In D.D. Warrick (ed.), *Contemporary organization development: Current thinking and applications* (pp. 438-448). Glenview, IL: Scott, Foresman.
- Shani, A. B. (Rami), Mohrman, S. A., Pasmore, B. A., Stymne, B., & Adler, N. (2008). *Handbook of collaborative management research*. Los Angeles, CA: Sage Publications.
- Snyder, C. R., Irving, L., & Anderson, J. (1991). Hope and health: Measuring the will and the ways. In C.R. Snyder & D. R. Forsyth (Eds.), *Handbook of social and clinical psychology* (pp. 285-305). Elmsford, NY: Pergamon.
- Stajkovic, A. D., & Luthans, F. (1998). Social cognitive theory and self-efficacy: Going beyond traditional motivational and behavioral approaches. *Organizational Dynamics*, 26, 62-74.

- Tangney, J. P. (2000). Humility: Theoretical perspectives, empirical findings and directions for future research. *Journal of social and clinical Psychology, 19*(1), 70-82.
- Tangney, J. P. (2002). Humility. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology*. NY: Oxford University Press.
- Templeton, J. M. (1997). *Worldwide Laws of Life*. Philadelphia: Templeton Foundation Press.
- Vaill, P. B. (1996). *Learning as a way of being: Strategies for survival in a world of permanent while water*. San Francisco: Jossey-Bass.
- Van De Ven, A. H., & Poole, M. S. (1995). Explaining development and change in organizations. *Academy of Management Review, 20*(3).
- Van Eijnatten, F. M., Shani, A. B. (Rami), & Leary, M. M. (2008). Sociotechnical systems: Designing and managing sustainable organizations, In Thomas Cummings (Ed.), *Handbook of organization development* (pp. 277-309). Los Angeles, CA: Sage Publications.
- Vera, D. & Rodriguez-Lopez, A. (2004). Strategy virtues: Humility as a source of competitive advantage. *Organizational Dynamics, 33*(4), 393-408.
- Weick, K. E. (2003). Positive organizing and organizational tragedy. In K. S. Cameron, J. E. Dutton & R. E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 66-80). San Francisco: Berrett-Koehler Publishers, Inc.
- Weisbord, M. R. (2004). *Productive workplaces revisited: Dignity, meaning, and community in the 21<sup>st</sup> century*. San Francisco: Jossey-Bass.
- Whatley, L. R. (2012). Individual “states” model for healthy group dynamics. *Organization Development Journal, 30*(3): 40-53.
- Whatley, L. R., & Kliewer, H. (2013). Contextual influences on team effectiveness & consultant identity: Implications for consulting & consultation. In Press. *Journal of Leadership, Accountability and Ethics, 10*(1).
- Zuber-Skerritt, O., & Perry, C. (2002). Action research within organizations and universities thesis writing, *The Learning Organization, 9*(4), 171-9.