



Introducing The HV Model for Overcoming Barriers to Global Leadership Development

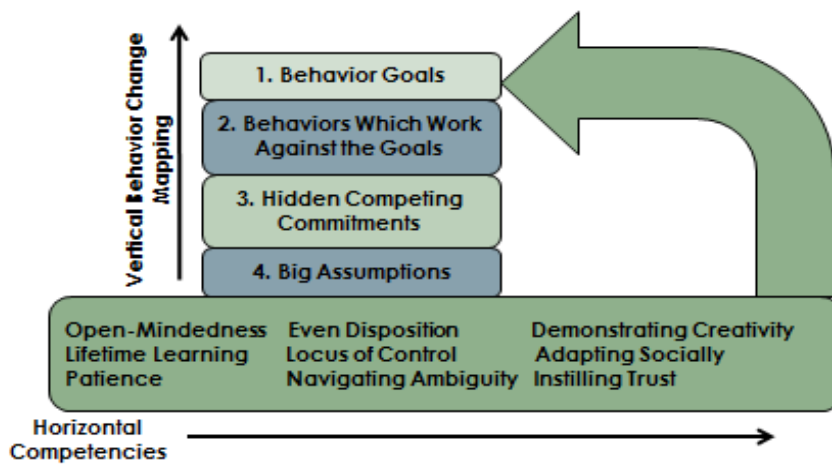


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A Word from the Author

During the Summer of 2012, Owen Sullivan of the Manpower Group and I wrote the following lead to our White Paper on our study of the intercultural competencies required for global leadership success:

“To be successful, global organizations need leaders who can drive business on a global scale. Globalization today is the norm, not the exception. As we enter the Human Age, where *Talentism* is the new *Capitalism*, no organization can afford to overlook optimizing the performance of leaders who operate globally. Productivity and innovation in the Human Age require talent strategies that focus on developing and nurturing global leaders. Leading across cultures is a critical element of leading in the Human Age and unleashing the power of what is humanly possible. It often requires making decisions in complex or ambiguous environments, understanding cultural nuances and adapting one’s style accordingly.”

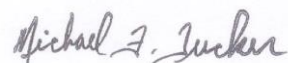
Our study identified the cultural competencies needed for global leaders to be successful and what success looks like when these competencies are present and fully developed.

As a result of our study (Tucker, et al. SpringerPlus 2014, 3:127 <http://www.springerplus.com/content/3/1/127>) a nine competency global leadership assessment instrument was produced. This provides global leaders and high potential talent a look at their competency levels compared to our 1800- strong global data base and starts them on a developmental path. This is the “H” in our HV Model (Horizontal)

However, as the present White Paper explains, competency assessment and development is a good starting point, but it is not enough. Full development of these competencies requires a level of mental complexity equal to the complexities extant in today’s global business environment. The “V” in our Model refers to the Vertical behavior change mapping process that can help to achieve this level of mental complexity.

I think that you will agree that this new Model is a refreshing and innovative approach to meeting the need for better global leadership.

Michael F. Tucker, Ph.D., CMC
President
Tucker International



ABSTRACT

This paper presents an approach to global leadership development to help fill the pressing need for more effective leaders who can operate across cultures. The HV model of global leadership development combines a horizontal approach (traditional competencies) with a vertical one (self-transformation). The model's horizontal aspect is based on a study of global leaders of nine nationalities (n = 1880). Nine competencies are measured, and individual profiles are compared against this global data base. Feedback and coaching begins the development process by verifying results, achieving self-recognition and establishing motivation and potential for change. The vertical aspect is based on the work of Kegan and Lahey (2009) in which self-transformation can be attained by overcoming an "immunity to change" and engaging in behaviors measured by the horizontal assessment. Examples of behavior change maps are shown for the Patience and the Open-mindedness competencies.

Global Leadership Gap

Global leadership is in a crisis. Global studies by IBM of 1500 CEOs and Development Dimensions International (DDI) of 14,320 HR professionals and business leaders show that a majority of companies do not have the leaders they need to keep up with the speed of business, they are not satisfied with the quality of their leadership (particularly their Asian leaders), and they do not have the bench strength to meet their future business needs (IBM, [2011](#); Boatman & Wellins, [2011](#)). Joann S. Lublin, the Wall Street Journal's Management editor, observed that "global businesses are looking for leaders who have the ability to move easily between different cultures... Finding such executives is very challenging... The talent pool is very small" (Lublin, [2011](#)). A study by Right Management and the Chally Group found that some 80% of HR professionals rated Cultural Assimilation as the greatest challenge facing successful leaders outside of their home countries (Right Management, [2011](#)). Another major study found that "cultural issues will dominate the new competencies that will be required for global leaders over the next ten years" (Training Magazine, [2011](#)). A McKinsey Global Survey (2012) concluded that "developing leaders who are culturally and functionally proficient across regions is a key to more effective multiregional operations."

This paper explores an innovative, practical approach to developing global leaders who can operate successfully across cultures. It is based in part on Robert Kegan's constructive developmental theory (1982, 1994), which builds on the work of [Jean Piaget](#), [Lawrence Kohlberg](#), [William Perry](#), and others. [Kegan's](#) theory of adult cognitive development defines five stages of mental complexity or "orders of mind" that represent five successive levels of more complex ways of thinking (Pruyn 2010).

Horizontal and Vertical Development

A strong case has been made (Petri, 2011) that both a traditional competency approach and a cognitive development approach focused on mental complexity is needed to provide the type of leadership equal to the challenges presented by the contemporary, increasingly complex global environment. As suggested in Petrie's white paper (2011), "it is time to transcend and include" a leadership competency mentality so that in the future we are able to grow our leaders with required skills. Petrie's approach includes competencies, which he describes as horizontal development, and suggests they can be "transformed" or learned from an expert. Horizontal learning, the development of new skills, abilities and behaviors, is most useful when a problem is clearly defined and

there are known techniques for solving it. It has been and remains an essential part of leadership development.

In contrast, the development of more complex thinking, which Petrie terms vertical development, must be earned for oneself. Vertical development refers to Kegan's model of the stages through which people progress in making sense of their worlds in increasingly more complex and inclusive ways. The stages are the impulsive mind, found in 2-6 year olds; the instrumental mind, found in 6 year olds through adolescence; the socialized mind, found in post-adolescence; the self-authoring mind may occur at variable ages; and the self-transforming mind, found beyond 40 years, if achieved. It is the fifth stage that concerns us here and that differentiates our approach. According to recent research, less than 1% of adults have achieved the "Level 5" mental complexity of the self-transforming mind. This is the ability to:

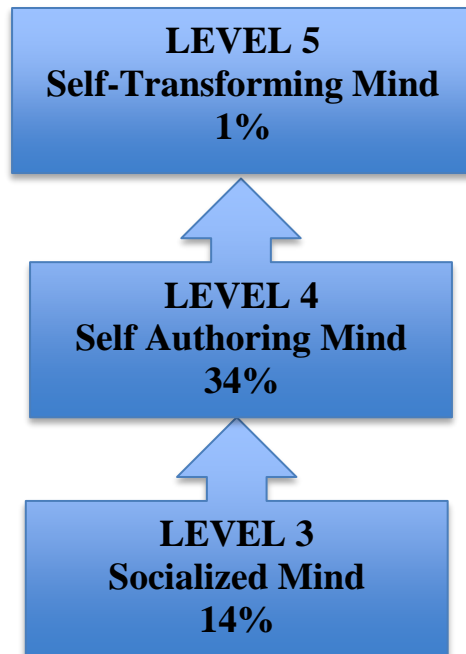
"Step back from and reflect on the limits of our own ideology or personal authority, see that any one system or self-organization is in some way partial or incomplete, be friendlier toward contradiction and opposites and seek to hold on to multiple systems rather than projecting all but one onto the other" (Kegan & Lahey, 2009).

This fifth level of complexity is contrasted with the third and fourth levels, the socialized mind and the self-authoring mind. The socialized mind (about 14% of adults) operates within the perceived social environment or "schools of thought" with which one identifies. Here, information flow is strongly influenced by what one believes others want to hear. At the level of the self-authoring mind (about 34% of adults), "we are able to step back enough from the social environment to generate an internal seat of judgment or personal authority" (Kegan and Lahey, 2009, p. 17). Information flow here is characterized by messages that I send being more likely to be a function of what I deem others need to hear to best further the agenda or mission of my design. The self-authoring mind creates a filter for what it will allow to come through. It places a priority on receiving the information it has sought (Kegan and Lahey, 2009).

The self-transforming mind also has a filter, but is not fused with it. The self-transforming mind can stand back from its own filter and look *at* it, not just *through* it. Therefore, when communicating, people with a self-transforming mind are not only advancing their agenda and design, they are also making space for the modification or expansion of their agenda or design (Kegan & Lahey, 2009, pp16-20).

These three states are illustrated below in Figure 1.

Figure 1. Stages of Mental Complexity



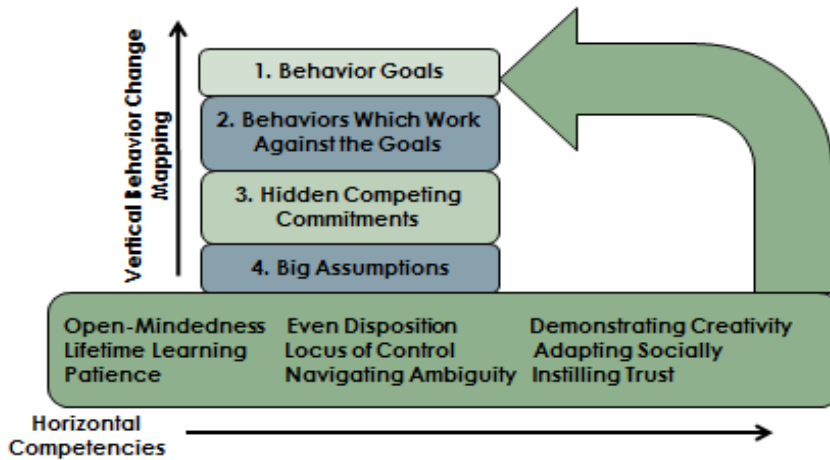
The need for a self-transforming mind certainly applies to those who aspire to be successful global leaders in today's complex business environment (Rhinesmith, 1996).

The HV Model

The model for a combined horizontal and vertical approach to developing global leaders (the HV Model) has the horizontal axis based on empirical research on intercultural competencies, while the vertical axis builds on the work of Kegan and Lahey (2009) in creating behavior change maps for these competencies. We first target individual competencies and then place them into the framework of a behavior change map. The HV Model is illustrated in Figure 2 and then explained.

Figure 2:

The HV Model of Global Leadership Development



Horizontal Competency Assessment

The competencies listed below that were used in the horizontal development of this model are based on an empirical study by Tucker et al. (2014) and is further described in the appendix.

WORLD VIEW

Open-Mindedness
Lifetime Learning

SITUATIONAL APPROACH

Patience
Even Disposition
Navigating Ambiguity
Locus of Control
Demonstrating Creativity

SOCIAL/INTERPERSONAL STYLE

Adapting Socially
Instilling Trust

The Global Leader Tucker Assessment Profile (GLTAP) instrument was developed to measure these nine intercultural competencies. In addition, a social desirability scale detects responses that are systematically more positive (higher scores) than they should be. A five-point, Likert-type scale was used to measure responses to each item. The GLTAP was completed during 2010 by 1469 leaders of nine nationalities. Study participant criteria included that the participants were leading across cultures and they were working in many different industries. In addition, 437 corporate leaders and NASA international project managers

completed the GLTAP during 2013 and 2014. The GLTAP global database is therefore 1880 (26 were eliminated because of their high score on the Social Desirability Scale).

In order to link intercultural competencies to performance, three performance areas, or global leader success criteria, were defined as follows:

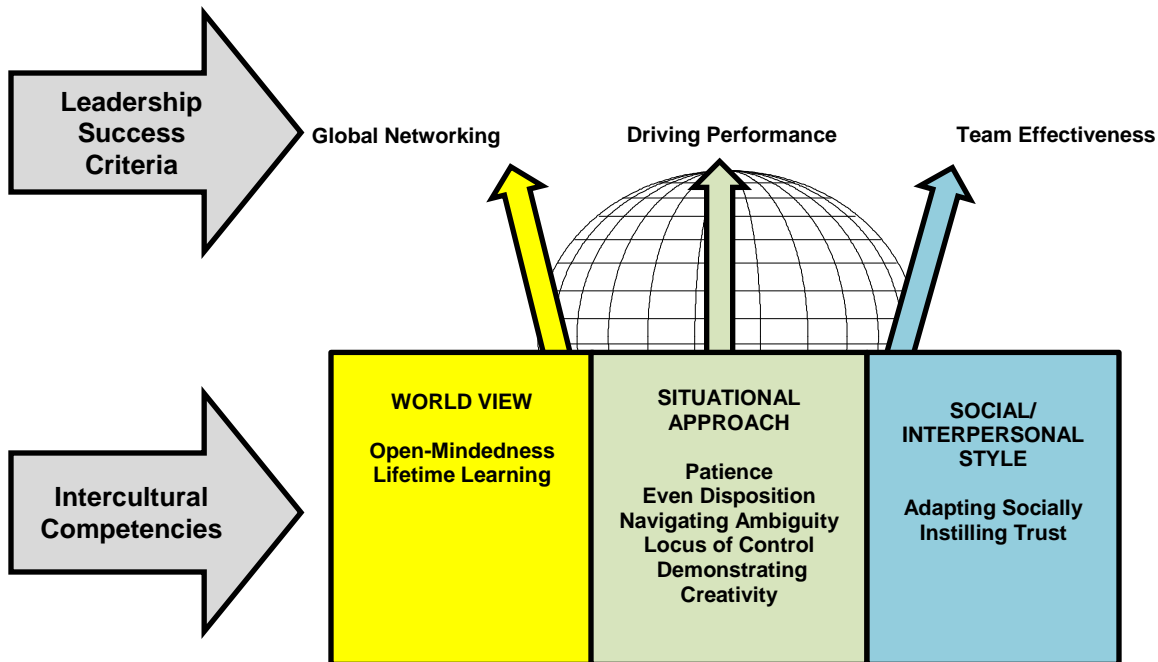
- *Global Networking*: The demonstrated ability to develop a network of international relationships and make a successful transition to work with people of other nationalities.
Sample item: I have developed a network of international relationships that help me to succeed with my work.
- *Driving Performance*: The demonstrated ability to provide objective evidence of effectiveness in a global leadership role, team achievement of global business goals, company success in countries of operation, and proof that the company is seen as a preferred place to work.
Sample item: Performance data indicates that my team has achieved our global business objectives.
- *Building Team Effectiveness*: The demonstrated ability to successfully coach team members build trust and a culture of respect, and learn from the team.
Sample item: I have been able to build trust among my global team. I can rely on them and they on me.

A 12-item instrument was created to measure these success criteria, the Survey of Global Business Experience (GBE). They constitute the leadership success Criteria. Figure 3 represents the resulting competency model, showing each competency and the separate criteria of leadership success.

Figure 3:

NINE COMPETENCY MODEL

N=1880, 9 nationalities



Intercultural Competencies

The Intercultural Competencies are in three clusters, World View, Situational Approach, and Social/Interpersonal Style. They are described below.

WORLD VIEW

Open-Mindedness (15 items)

Being receptive to and nonjudgmental of the ideas and ways of other countries, cultures, and ethnic groups and demonstrating respect for diverse spiritual and political beliefs.

Sample item: I seek out and enjoy people who are different from me and who have different ideas and opinions.

Lifetime Learning (6 items)

A pattern of learning over time, reading newspapers and periodicals (in print or electronically), viewing national and international news broadcasts, and attending formal learning sessions.

Sample item: It is a habit of mine to learn from a variety of sources.

SITUATIONAL APPROACH

Patience (7 items)

The ability to be patient in the face of unanticipated delays or frustrating situations and with people who do not meet expectations of time.

Sample item: I remain calm when I have to wait for other people.

Even Disposition (8 items)

The ability to remain calm, not be critical of himself or herself, and learn from mistakes.

Sample item: I take things as they come and do not get down on myself.

Navigating Ambiguity (7 items)

The ability to see through vagueness and uncertainty, not become overly frustrated, and eventually figure out how things are done. Taking the initiative and leading through difficult situations.

Sample item: I am comfortable with situations involving uncertainty or unexpected outcomes.

Locus of Control (14 items)

The belief that one's own actions and abilities play a direct role in the process and outcome of the events in life instead of relying on fate, luck or circumstance. Taking responsibility for actions.

Sample item: Throughout my life, no matter what I did, events seemed to run their own course. (reverse scored).

Demonstrating Creativity (8 items)

Enjoying new challenges, striving for innovative solutions to social and situational issues, and the ability to see around corners, predict outcomes and act despite uncertainty.

Sample item: I like to experiment and try out new ways of doing things instead of staying with familiar methods.

SOCIAL/INTERPERSONAL STYLE

Adapting Socially (13 items)

Being comfortable in new and unfamiliar social settings, seeking out and enjoying diverse groups of people, and showing genuine interest in others.

Sample item: I enjoy meeting strangers and getting to know them.

Instilling Trust (8 items)

Valuing trust, being seen as someone who can be trusted, and building trusting relationships.

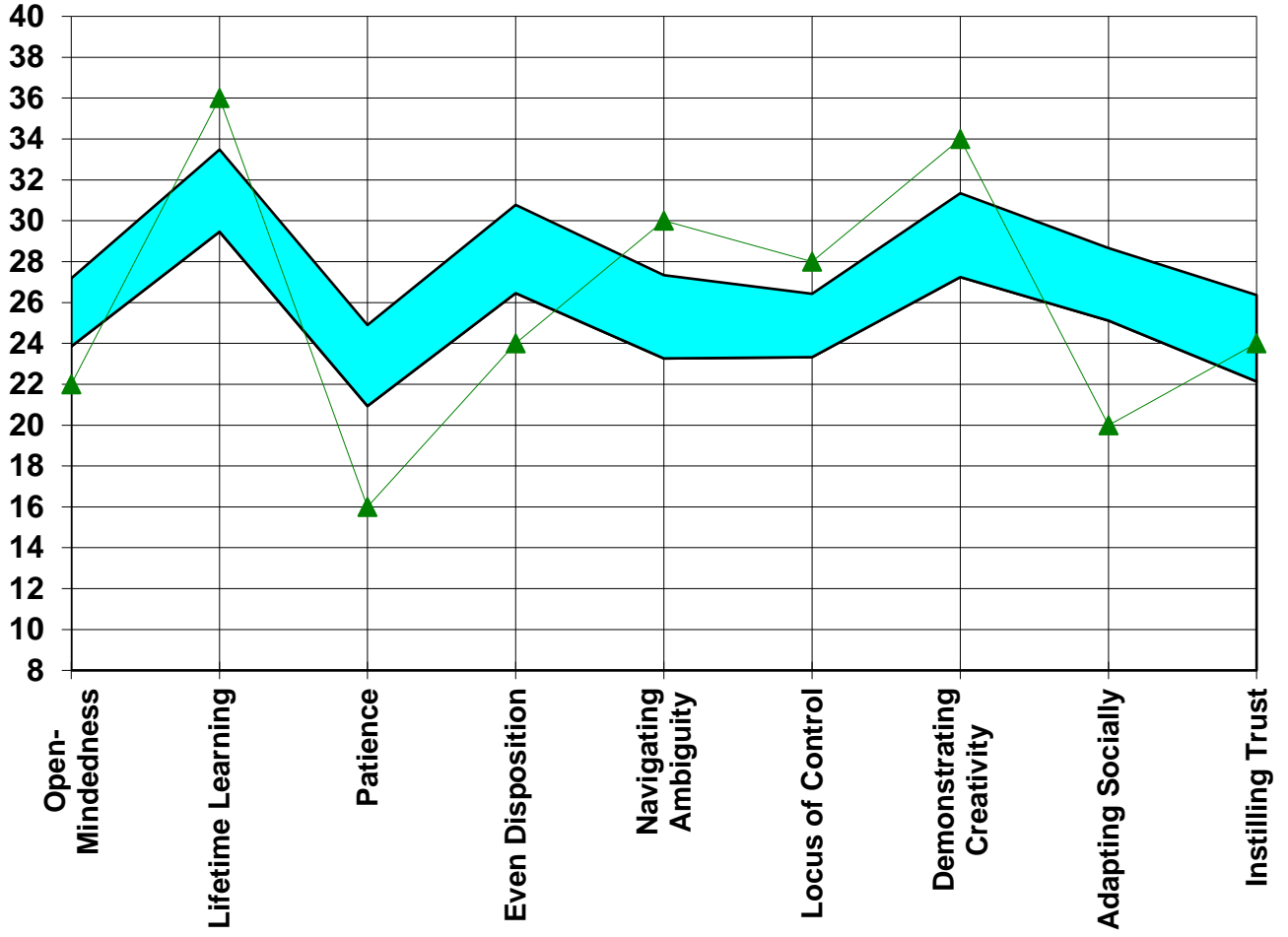
Sample item: Most people cannot be relied on to follow through with their promises (reverse scored)

A sample GLTAP Profile is shown below (Figure 4). The blue band is a global norm, based on a sample of 1880 global leaders (mean plus or minus ½ S. D.) described in the Appendix. An individual set of responses is plotted against this norm.

Figure 4:

Blue Band: Global Norm (mean \pm 1/2 S.D. n=1880)
▲ = Individual Scores

Global Leader
Tucker Assessment Profile (GLTAP)
SAMPLE



Horizontal Development

At this point, using the GLTAP, we have a reliable and valid way to assess global leadership competencies compared to a database. But where do we go from here to develop these competencies? In order to proceed from this data to behavior change we need to achieve the following:

- Establish verification, to ensure that the results are a fair and accurate reflection of the person illustrated in the sample.
- Achieve self-recognition. Development is more successful when individuals are able to “see themselves in their scores” and accept that they are an accurate reflection of their current strengths or developmental areas.
- Establish motivation for change. Define why recognition and development matters and how it can improve performance.
- Acknowledge the potential for change. The GLTAP scores are not static. An individual can change and develop the areas measured.

This is done when a certified coach completes a behavioral interview to verify an individual's results and initiate the development of their competencies through feedback and by inspiring self-recognition.

For example, to verify a very low score on the Patience competency (as in the GLTAP Profile sample given in Figure 4), a behavioral question might be “Please think about a time when things did not proceed as you had planned or a time when you became frustrated with a situation. What happened, how did you feel and what did you do?” A person with a low score in this area might respond by saying, “I get very frustrated when people are late to meetings.” Or, they may say, “I feel my time is wasted in meetings where it takes too long for others to make a decision when the solution to the problem seems very obvious to me.” Later when the coach provides feedback they can reflect on these answers to illustrate why these responses might reflect an individual who is low on patience. They can then discuss how the perception of time can differ across cultures or how emotions that evolve from feeling impatient can negatively affect interactions. Or, they can explain how being patient, listening and encouraging others to take the time they need to come to a solution is a much more effective leadership strategy than dictating a solution (even if that solution is the very one that they had in mind).

The area of Open-Mindedness is another example of a potential opportunity for development based on the example in Figure 4. In this case a coach may ask the individual if they have ever “had an experience when they observed or interacted with someone from a different culture and they expressed beliefs or

engaged in behavior that was very different from what they were used to? What was the situation? How did you react? What was the outcome?" Individual responses to these questions are varied and often informative. One respondent noted how he felt somewhat offended when attending a conference in the Middle East and people would walk away from the meeting at certain times during the day to pray on a prayer rug provided at the back of the room.

Discovering and discussing examples like these with the individual during feedback can be a very powerful method for inspiring self-recognition. The coaching discussion can then turn toward why this area is important for successful global leaders. Most importantly, you can establish that this competency can be developed and that there is potential for change. As a whole, the process combines to create the motivation to change and the ripe opportunity for vertical development.

Vertical Development

The next step in the HV Model is a way to help leaders achieve a Level 5 self-transforming mind by overcoming an "immunity to change." This is done through a process of vertical development of the nine competencies. Experienced or emerging global leaders often feel comfortable in their current leadership style, and it may be difficult for them to change and fully perform these new competencies. They have developed an *immunity* to break out of their style and try new behaviors. They may be operating at levels lower than the self-transforming mind (either the socialized mind or the self-authoring mind). Following the process described by Kegan and Lahey (2009), we will use the **Behavior Change Map** for the **Patience** competency (Figure 5) as an example of how to overcome immunity and move on with development.

Figure 5: **PATIENCE**

Behavior Change Map*

The ability to show patience in working with people of other cultures is difficult in the fast-paced global business environment. However, acting too quickly or showing irritation in frustrating situations can lead to poor results. Being patient with people who speak a different primary language or have a different sense of time is the key here. "Go slow to go fast."

1 Behavior Goals (Visible Commitments)	2 Doing/Not Doing Instead (Behaviors Which Work Against the Goal)	3 Hidden Competing Commitments	4 My Big Assumptions
<p>I need to be more patient with people:</p> <ul style="list-style-type: none"> • Wait till they have finished talking. • Talk slower. • Walk around the office slower. • Not pressure people so much. • Give other people a chance to talk. • Listen to people. <p>I need to be more patient in frustrating situations:</p> <ul style="list-style-type: none"> • Do not react immediately to the situation. • Try to understand why your expectation was not met. • Think of alternatives to get results: Allow more time, Ask for explanation, Modify your approach • Identify a person in your life who demonstrates a great deal of patience. Observe what that person does and try to do those things yourself. <p>Add your own actions</p>	<ul style="list-style-type: none"> • I interrupt people when they are talking to me. • I make decisions very quickly. • I walk very fast around the office. • I talk very fast and very loud. • I sometimes forget to say hello to people. • I sometimes pay no attention to people who are talking. <p>Add your own:</p>	<ul style="list-style-type: none"> • Being fast and impatient to get results. • Not wasting my time on nonsense. • Not damaging my home life. • Not seeing my performance drop because of people wasting my time. • Not having my image and career stalled because my performance drops. <p>Add your own:</p>	<ul style="list-style-type: none"> • I will have to spend several more hours every day. It will mean long days. • My family will be affected. • My home life will affect my work life. • My attention will be diverted to nonsense things and that will delay important things. <p>Add your own:</p>

*Adapted from Petrie (2011 p. 33)

The development challenge for the Patience competency (Figure 5) is to reduce the column 2 behaviors and learn to engage in the column 1 behaviors. Looking at columns 2, 3 and 4, it can be seen that this person has built up a self-reinforcing system for the column 2 style. This person is in a hurry (and looks like it) makes decisions quickly and does not pay attention to others. This style fits her commitments to not waste time and to get results, which in turn supports her big assumptions in column 4. If this person is operating at the level of the self-authoring mind, it is extremely difficult to transition to the Level 5 self-transforming mind, which is necessary to engage in the column 1 behaviors. It may be that this leader, like many global leaders, operates at the self-authoring level, where they have advanced and been rewarded by strongly influencing others to follow their directions, plans and designs. This self-reinforcing system has worked well for her. However, by coming face to face with her assumptions, competing commitments, and current behavioral style, she may be able to break out of this style, advance to the Level 5 self-transforming mind and engage in column 1 behaviors. This is the big difference between levels of complexity—remaining at the self-authoring level will not allow the difficult process of change required in this example.

The coaching process in this HV Model is directed at buying in to the Behavior Change Map, which suggests a series of small experiments in the workplace to test out goal achievement and the validity of the assumptions. For example, this person could commit to talking slower and improve attention and listening skills by seeking verification of messages through paraphrasing. As these new behaviors settle in, she checks to see if her performance is really dropping or improving and if her assumptions are valid (maybe she has been overlooking “nonsense things”).

We will use the **Open-Mindedness competency** (Figure 6) as a second example of how the Vertical Development process works. A Behavior Change Map for Open-Mindedness is shown below.

Figure 6: **OPEN-MINDEDNESS**

Behavior Change Map

The global business environment severely tests one's mind set. Being open to different values, beliefs and ways of thinking and doing things is essential for successful global leadership.

1 Behavior Goals (Visible Commitments)	2 Doing/Not Doing Instead (Behaviors Which Work Against the Goal)	3 Hidden Competing Commitments	4 My Big Assumptions
<p>I need to be more open-minded regarding other beliefs and ways of thinking and doing:</p> <ul style="list-style-type: none"> • Challenge my own culture-based assumptions about others. • Withhold judgment and action until I get all relevant information. • Show respect, both verbally and in my body language. • Do not attempt to convince others of my spiritual and political beliefs. <p>Add your own actions:</p>	<ul style="list-style-type: none"> • I make judgments and act too quickly based on my own assumptions. • I get into lively discussions in which I press my spiritual or political beliefs. • I am not sure that I communicate and show respect for others (especially those who are different from me). <p>Add your own:</p>	<ul style="list-style-type: none"> • I need to stand up for my culture. • I need to explain and defend my spiritual or political beliefs. • I need to be seen as a leader with strong values and opinions. <p>Add your own:</p>	<ul style="list-style-type: none"> • I will have to compromise my values. • I will not be true to my spiritual or political beliefs. • I will be seen as weak and not standing for anything. <p>Add your own:</p>

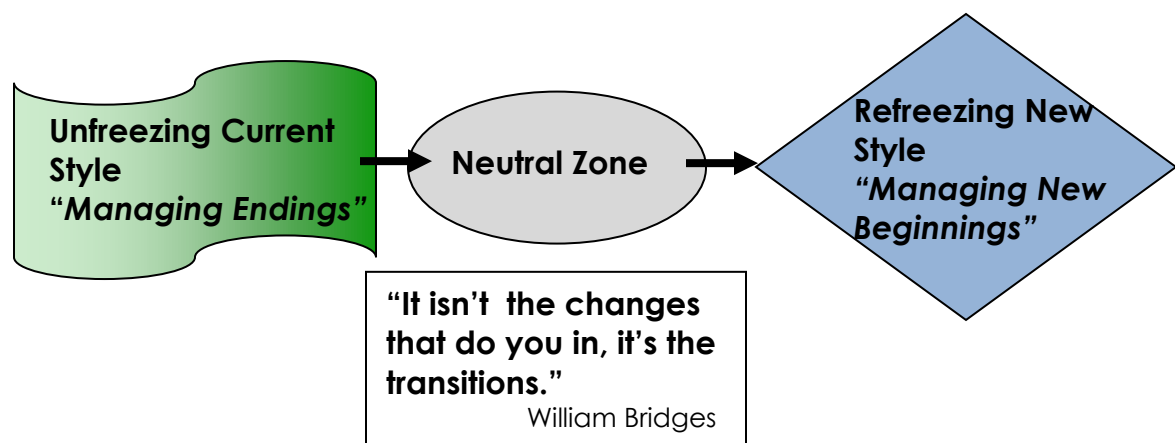
- The first column is a set of behavior goals or new visual commitments.
- The second column is a possible set of current behaviors that work against the goals.
- The third column contains hidden commitments that compete with the goals.
- The fourth column lists some assumptions that underlie perceived difficulty in achieving the goals.

We now have a Behavior Change Map for the Open-Mindedness competency. With coaching support, the Map is customized by each individual as they add to each column. This allows for vertical development and the opportunity for an individual to own their own development. As Petrie states, "people's motivations to grow is highest when they feel a sense of autonomy over their own development."

Again, as with the process for the Patience competency, the development challenge for this competency is to reduce the column 2 behaviors and learn to engage in the column 1 behaviors. Looking at columns 2, 3 and 4, it can be seen that this person has built up a self-reinforcing system for the column 2 style. This person is stuck in Bennett's Ethnocentric Defense Stage (Bennett, 1993). This style is based on very deep cultural, spiritual and political values, has apparently worked well for this person (or so he thinks) and is therefore very difficult to change. However, change toward a Level 5 self-transforming mind is possible through an understanding of the importance of this competency in leading across cultures, uncovering hidden commitments and assumptions and challenging these in small behavioral steps.

MANAGING CHANGE AND TRANSITIONS*

As the transition is made from current behavior (column 2) to behavioral goals (column 1), the following process is recommended.



**Based on the work of William Bridges "Transitions" (2004) and "Managing Transitions" (1991)*

Managing Endings

New behavioral goals cannot just begin to be performed. Current behavior must first be ENDED. This is the unfreezing stage first described by Curt Lewin (1947). As attempts are made to end current style, it may feel uncomfortable because doing this in a certain way has become a familiar pattern. For example, in trying to become more PATIENT, a familiar pattern may be making decisions quickly, speaking rapidly, and getting frustrated when expectations are not met. This style can END by being MINDFUL and---

- Taking more time to make decisions.
- Speaking slower and more clearly.
- Breathing deeply and trying to remain calm during frustrating times.

Neutral Zone

As progress is made through the transition process, the NEUTRAL ZONE will be entered, which involves ending current style and trying out the new one. The feeling of dis-orientation and what is called COGNITIVE DISSONANCE may be experienced. This is the discomfort experienced when two or more contradictory beliefs, ideas or values are held at the same time. Internal consistency is naturally strived for as inconsistency (dissonance) is experienced as one strives to END the current style and begin the new. This dissonance is resolved as Column 1 style goals are practiced and become more natural.

The good news about this NEUTRAL ZONE is the opportunity that it presents for innovation and creativity. As current style is UNFROZEN, and the experience of being “between trapezes”, the mind opens up to ways of doing things that had not been thought of before.

Managing New Beginnings

While working through the NEUTRAL ZONE and beginning to engage in the Column 1 goals as the new, preferred style, it may be seen that the Column 4 “Big Assumptions” were really not valid. The messy part from the Galsworthy quote comes from the start and stop process where one falls back occasionally to the old style. Getting positive feedback about the new style helps to keep it in place and reinforced. A new self-esteem and self-development may now actually seem to be rather fun!

The goal of this managing change and transition process is to enable people to be more effective global leaders, working successfully across cultures. Managing the NEW BEGINNINGS is the third and final step in this TRANSITION process.

Conclusion

This paper has presented a model of global leadership development and explained why both the “H” in the Model and the “V” are necessary. Horizontal competency leadership assessment and feedback has been around for a long time, and there are many competency assessment instruments and processes that are available to support horizontal leadership development. However, since global leadership is in a crisis, this approach alone is clearly not enough. Adding a Vertical approach, supported by the managing change and transitions process can lead to powerful behavior change toward the competencies required to lead across cultures. It may be especially useful for getting beyond the immunity to a change in leadership style we often see in emerging and global leaders.

The HV approach to global leadership development is not an “easy fix” that can be accomplished by checking some boxes. It requires an acceptance of the need for change by the leaders involved and a commitment to a sometimes difficult and uncomfortable foray into new territory.

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APPENDIX

Summary of the Tucker et al. (2014) Study and Creation of the GLTAP.

A literature review indicated that a large number of leadership competencies had been proposed or studied (perhaps over 50). Clearly, there was a need for a more concise set of competencies. Based on this review, a set of 13 competencies were selected, which had been developed in 2004, Tucker, et al. (2004). These were examined for logical application to global leaders, and ten were developed, as follows:

WORLD VIEW

- Open-Mindedness/Respect for Beliefs
- Lifetime Learning

SOCIAL/INTERPERSONAL STYLE

- Instilling Trust
- Adapting Socially

SITUATIONAL APPROACH

- Flexibility
- Patience
- Even Disposition
- Navigating Ambiguity
- Humility
- Locus of Control/Initiative

A 107 item instrument called the Global Leader Tucker Assessment Profile (GLTAP) was developed to measure the ten intercultural competencies. In addition, a social desirability scale was included to detect responses that are systematically more positive (higher scores) than they should be. A five-point, Likert-type scale was used to measure responses to each item. The GLTAP was completed during 2010 by 1469 leaders of nine nationalities. Study participants were screened for those who were leading across cultures, and working in many different industries.

This study included a wide variety of mid-size to Fortune 100 organizations. There were 134 industries represented. Some 66% of respondents were male, 34% female (mean age = 43). Some 80 NASA International Project Managers and their international colleagues were included. A global leader was described as one who is engaged in managing people across cultures, either on international assignment or working from a home base. Responsibilities for leaders included (respondents were asked to check all that applied):

- 59% as having top executive responsibility;
- 51% as having profit and loss responsibility;
- 50% as having responsibility over a group of businesses;
- 42% as having top executive responsibility for their business function.

Confirmatory factor analysis (CFA) did not converge, so that the 10 competency model was not confirmed. However, a set of six factors was created, as follows: *Respecting Beliefs* (seven items; $\alpha = .82$), *Navigating Ambiguity* (nine items; $\alpha = .80$), *Instilling Trust* (eight items; $\alpha = .72$), *Adapting Socially* (12 items; $\alpha = .86$), *Even Disposition* (seven items; $\alpha = .72$), and *Demonstrating Creativity* (eight items; $\alpha = .72$).

In order to link intercultural competencies to performance, three performance areas, or global leader success criteria were defined as follows:

- *Global Networking*
- *Driving Performance*
- *Building Team Effectiveness*

A 12-item instrument was created to measure these success criteria, called the Survey of Global Business Experience (GBE). A 20-point scale was used to measure these items, so that an item could be rated from 0 (complete lack of agreement) to 20 (complete agreement). "This scale therefore has a meaningful absolute zero point" Guilford (1965). Some 689 of the 1469 leaders who had completed the GLTAP were followed up with three to six months later and completed the GBE. A confirmatory factor analysis (CFA) was conducted to assess the hypothesized three-factor structure and showed good fit standards. The alpha values were as follows: *Global Networking* ($\alpha = .78$), *Driving Performance* ($\alpha = .91$), and *Building Team Effectiveness* ($\alpha = .97$). The GLTAP scores were then used to predict the GBE scores. The results were: $R = .22$ $R^2 = 4.80\%$, $F_1 = 34.94$, $p < .001$, $\beta = 24.23$, $p < .001$. Next, each of the six factor scores were included as separate predictors, in order to assess the criterion-related validity of separate factor scores when included in a single model. The results of the overall model are as follows: $R = .29$ $R^2 = 8.30\%$, $F_6 = 10.26$, $p < .001$. These results show that the six factor GLTAP model significantly predicted GBE success scores.

Next, the validity of the GLTAP competency factors were assessed in predicting the GBE criteria using an extreme groups analysis approach. About twenty percent of those who scored highest ($N=141$) and lowest on

the GBE (N=143) were identified for comparison. Using hierarchical logistic regression, group membership was predicted (high GBE scores/low GBE scores) with respondents' scores on the six GLTAP factors. The six-factor model correctly classified 67% of those with the top 20% of GBE scores, and 73% of those with the lowest 20% GBE scores $\chi^2 (6, N = 284) = 49.29, p < .001$. These results demonstrate that scores on the six GLTAP factors can be fairly effective at differentiating those with the highest and lowest GBE success scores.

Following the Tucker, et al. (2014) study summarized above, the 107 item GLTAP was administered during 2014 and 2015 to a total of 437 corporate leaders and NASA international project managers. This resulted in a total sample of 1469+437=1906. Some 26 of these were eliminated because of high scores on the Social Desirability Scale. Thus, the sample consisted of 1880 leaders of 41 nationalities. The responses were examined to see if a set of competencies larger and more meaningful and useful than the original six could be defined. A set of nine competencies measured by a reduced, 86-item instrument were defined and the data set was subjected to an item/competency correlation and estimates of alpha reliability.