Executive Summary:

The business world is constantly searching for ways to expand the skills of its leaders. "Business Improvisation", performance under pressure combined with the creative process, is becoming increasingly popular as a strategy to resolve these unexpected challenges. A promising approach to teaching new skills in an experiential manner is using improvisation exercises. Accordingly, we felt it valuable to study the characteristics of skilled improvisation professionals to see which ones might be applicable to leaders in business.

In order to see if we can identify characteristics that differentiate improvisation professionals from business executives, we studied a group of active, talented improvisers. We used a performance psychological inventory with these improvisation professionals, one that has consistently differentiated among elite performers in sports, the military, and business. We compared the profile or pattern of scores for these improvisation veterans with the data we had for senior executives in various corporations around the world.

Business Improvisation workshops offer that most rare of events in business—the chance to practice real skills in an active environment where executives can see what works and what does not. Business people do not have the luxury of such things as scrimmage or practice in sports or rehearsal in the theatre. They are too busy to go to the equivalent of training camp.

We found the improvisation professionals to have some attentional and interpersonal characteristics that serve them well as they have to think on their feet and creatively solve problems in real time. Given that speaking in public is regularly reported as the #1 fear in North America and that having to improvise produces even more pressure to perform, they indicated that they seemed to rise to the occasion, performing their best under pressure.

Improvisation professionals score higher on the two input attentional scales (awareness and analytic/conceptual) and lower on the output one (action/focused). Accordingly, they read their environments well and make sense out of it before acting. In other words, they listen well in all senses of the term. This is in opposition to the typical executive profile of being analytical and orderly in the way they processed information combined with being driven to action and less tuned to their environment.

A major difference between executives and practicing improvisation professionals was revealed in their competitiveness and need to control people and events. Executives score quite high on the scales that indicate a need to take charge, they are confident in their ability to do so, and need to keep score or win. Improvisation professionals score in the middle range on these variables indicating they are more likely to accept situations as they are presented and be egalitarian in their approach. Given the prime operating process and principles of improvisational success—listen, accept, adapt and advance, executives’ greater need for control would appear to be a stumbling block to creatively solving problems while under pressure. They do not show as much willingness to listen and to explore new or unexpected outcomes.

More and more approaches to leadership emphasize performance under pressure and situational leadership based on increased awareness and improvisation. Improvisation professionals recreate this environment in performance situations and engage these attributes at every performance. They seem poised to share this learning experience with executives so they can add to their repertoire for flexible leadership in a changing world.
Overview and Introduction

Improvisation is the act of accessing creativity in the moment and under pressure, to resolve or direct the resolution of a situation to meet objectives. It is the ability to converge composition, creativity and execution to achieve success.

Creativity is defined as the ability to transcend traditional ideas, rules, patterns, relationships and in doing so, brings forth meaningful and original ideas, forms, methods and interpretations.

Business improvisation is not “winging it” nor is it blustering your way through a situation. In fact improvisation is a skill that is mastered through preparation, practice and patience.

Professional development for business leaders is big business. Although it is tricky putting a dollar amount to mistakes executives make, it is clear that leadership performance makes a difference on the bottom line (Hay/McBer "Leadership That Get Results" 2000). The essence of their paper on leadership styles is that each of the six approaches has its place and each is counterproductive at times. Their research clearly indicates that an effective leader switches between the styles seamlessly and also uses a combination of styles depending on the business situation. The goal is to increase the repertoire of leaders so that they may have some flexibility in matching approach to situation. This means that most people must move from reliance on one or two “natural” styles for them to skilled use of at least four of the six approaches (coercive, authoritative, affiliative, democratic, pace setting, coaching).

Although companies evaluate their senior executives on different criteria thus making it difficult to collect comparative data on successes and failures, we do know that failures are frequent at the highest levels, approaching 50% for new CEOs. Given that the selection process is flawed, companies are left to develop the people they have. As such, many businesses are engaging the experiential learning environment of improvisation theatre.

“Sports clarify things. Within the magic circle of time and place where the game is played, we can see what works and what doesn’t. Neither smooth talk, nor charm, nor a rich father, will get you a 2:10 marathon or a sub par round of golf.

“Life outside the field of play is different. It’s easier to fool others and yourself, to keep going up the same dead-end road again and again, to do things which would have gotten you thrown out of any respectable game in five minutes.”


Taking Leonard’s first sentence seriously, we can surmise that performance environments are much clearer about what works and what does not than business is, even with its frequent worshippers at the shrine of the bottom line. To the extent that “It’s easier to fool others and yourself” in business one can see at least one reason for the lack of real improvement even given significant spending on management and leadership training. Anything that would provide clarity and immediate feedback—the
breakfast of champions—offers the arena for learning new skills. When you add the essence of improvisation —learning to think quickly and creatively on your feet guided by keen listening skills, you see why improvisation may be a fertile environment for executive development.

So we wondered what it is that improvisation professionals have innately, or learn through practice, that executives might profit from. We have found that The Attentional & Interpersonal Style (TAIS) inventory helps us define Mission Profiles or success templates or patterns in many other arenas including world champion athletes, elite military troops, and leaders in business and sales. In every other arena, we have been able to show reliable differences between top performers and those with mediocre records. There have been significant differences in attentional styles, distractibility and recovery from mistakes, and such interpersonal tendencies as taking charge, decision making, social style, and ways of communicating (ideas, criticism, and support). Everyone pays attention in different ways and research has shown that lapses in attention are key factors in 85-90% of all accidents. (Brown, W.E. and Johnson, C. (1999) Concentration at Work, Professional Safety (ASSE), pp. 22-46.) Even though few organizations keep records of mistakes as strictly as they do accident rates, we have found that all mistakes (not listening, decision errors, failure to react to changes, lack of awareness of audience reactions to your input) have a similar genesis. We have also found that such errors are fixable through increased self awareness and tailored training about how to master one’s attention.

“This is what intelligence is, paying attention to the right things.”
Edward T. Hall,
Cultural Anthropologist

Why we used TAIS Inventory

Over the past 33 years, TAIS Inventory has consistently differentiated among elite performers in sports, the military, and business. It is used by the US Navy Seals to select candidates for its intense and exclusive program, as well as by hundreds of other organizations for whom hiring an inappropriate candidate often has dire consequences.

- TAIS is used around the world for the selection and training of high-level performers in sport, business, and the military.
- TAIS measures the specific concentration, and interpersonal skills necessary for effective decision-making, and for the coordination of mental and physical processes in high-pressure situations.
- TAIS results allow you to identify the specific environmental conditions likely to facilitate and/or interfere with an individual’s ability to make effective decisions and perform at the upper limits of their physical and mental potential.
- TAIS results also allow you to identify the specific behaviors an individual needs to change to improve performance.

The Attentional and Interpersonal Style (TAIS) inventory is an on-line 144 item self-report questionnaire that measures twenty different concentration skills, personal and interpersonal attributes. Those specific concentration skills and personality
characteristics can be thought of as the building blocks upon which more complex human behaviors depend.

Concentration skills and the ability to shift both the width and direction (internal vs. external) are critical determinants of success or failure in virtually any performance situation. You cannot cross the street safely without paying attention to performance relevant cues. You cannot communicate with another individual effectively without paying attention to the right cues. You cannot problem solve without shifting attention and focusing on task relevant cues. You cannot get out of the starting blocks in the Olympics in time to win the race without paying attention to the right cues.

**TAIS Attributes**

**Attentional Processes**

**Awareness**: High scores indicate good environmental awareness and skill at assessing what is happening in real time (“street sense”).

**External Distractibility**: High scores are associated with errors because attention is inappropriately focused on irrelevant external stimuli (e.g., due to boredom, irritation, feeling rushed).

**Analysis**: High scores indicate good analytical or conceptual skills used in planning and developing strategy. High scorers tend to be good at learning from mistakes.

**Internal Distractibility**: High scores are associated with errors due to distractions from irrelevant internal sources (e.g., thoughts like daydreaming, overanalyzing, negative thinking).

**Action**: High scores indicate the ability to remain task oriented, to avoid distractions and to stay focused on a single job, to follow through, take action.

**Reduced Flexibility**: High scores are associated with errors due to a failure to shift attention from an external focus to an internal one or vice-versa. This rigidity is tied to strong emotions usually anger or anxiety.

**Interpersonal Processes**

**Information Processing**: High scores are associated with a desire for, and enjoyment of, a diversity of activity, a fast paced life (multi-tasking). Low scorers typically prefer to do one task at a time.

**Orientation Toward Rules and Risk**: High scores are associated with an increased likelihood of either “acting out” in impulsive ways and/or a tendency to establish one's own rules, to take risks rather than adhering strictly to social conventions or expectations. Low scores indicate a conventional, obey-the-rules orientation.

**Control (of others)**: High scores are associated with both needing to be in control in interpersonal situations and with actually being in charge, dominant. Low scorers tend to be more easy-going in their dealings with others.
**Self Confidence:** High scores are associated with feelings of optimism, self-worth, and self-confidence. Low scores typically indicate modesty and a tendency to underestimate one’s abilities.

**Physical Competitiveness:** High scores are associated with being physically competitive and with the enjoyment of competitive activities. Low scorers generally avoided such games when young or were not afforded many opportunities or encouragement for such. Correlates indirectly with competitiveness in the workplace.

**Decision Making Style:** This scale reflects speed of decision making as affected by worry and anxiety about making mistakes. High scores are associated with increased caution and difficulty making quick decisions. Low scores indicate quick decisions and impatience with waiting.

**Extroversion:** High scores indicate an enjoyment of social involvement and a tendency to assume leadership in social situations, to be the center of attention. Low scorers are less likely to lead social and group interactions.

**Introversion:** High scores indicate a need for, and enjoyment of, personal space and privacy.

**Expression of Thoughts/Ideas:** High scores indicate a willingness to express thoughts and ideas in front of others, to ask and answer questions. Low scores are associated with keeping ideas to self.

**Expression of Criticism/Anger:** High scores indicate a willingness to confront issues, to set limits on others, and to express criticism and even anger. Low scorers typically prefer to avoid verbal confrontation.

**Expression of Support/Affection:** High scores indicate a willingness to express support, encouragement, and affection to others. Low scores indicate lack of comfort with or need for such expression.

**Self Critical:** A high score is associated with being critical of one’s self, sometimes to point of depression. Depression is often situational (transient) and, as a result, this score will usually change every time one takes the test.

**Focus over Time:** High scores indicate a willingness to sacrifice other pursuits in order to become good at something like one’s profession, sport, or music; a sustained pursuit of the goal.

**Performance under Pressure:** High scores indicate individuals who consider themselves ready, willing, and able to perform when everything rides on the outcome; indicates whether or not one tends to perform well in a crisis.

**Procedure**

Several active professionals experienced in improvisation theatre were identified and asked to take TAIS inventory online. The fact that these people had been making a living in this unpredictable profession indicated that they had significant skills in their
They were told that we were researching their characteristics in order to compare them with some other groups of interest to us. There was no benefit to them to adjust their answers nor any cost to them for patterns that did not fit any real or imagined pattern of success. Their careers were unaffected by this process.

We had conducted previous research on various leaders in many corporations around the world. Following are the characteristics of the groups of interest to us, target audiences for the training in Business Improvisation to improve performance under pressure and leadership skills.

- Presidents and CEOs – 1035 CEOs, 940 males and 95 females with a mean age of 43.9 years. Ninety percent of the CEOs reside in the US or Canada with the remainder working in Europe or Asia.

- Business Executives – This group consists of 91 males and 89 females with a mean age of 43. The group consists of senior managers including GM’s and VP’s but does not include presidents and CEOs. These managers work in financial institutions, the oil and gas industry, transportation, manufacturing, and high technology companies. The companies are headquartered in North America, but approximately five percent of the senior managers work in offices overseas.

- Managers - This group consists of 274 males and 277 females with a mean age of 41.5. This group includes managers up to the level of director. These managers work in financial institutions, the oil and gas industry, transportation, manufacturing, and high technology companies. The companies are headquartered in North America, but approximately five percent of the senior managers work in offices overseas.

Results

Figure 1 presents the improvisation professionals’ mean scores on the 20 TAIS inventory scales. The dark vertical line is the mean for the nine drivers on that scale, corresponding to the numerical percentile score to the left of the graphs. Percentiles are calculated using the norm group on which TAIS inventory was standardized—college students. The gray area for each scale represents the range from -1 standard deviation to +1 standard deviation for business executives.
### TAIS PERCENTILE SCORES

<table>
<thead>
<tr>
<th>Category</th>
<th>Score</th>
<th>Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>16.2</td>
<td>74%</td>
</tr>
<tr>
<td>External Distractibility</td>
<td>20.4</td>
<td>70%</td>
</tr>
<tr>
<td>Analytical / Conceptual</td>
<td>20.9</td>
<td>77%</td>
</tr>
<tr>
<td>Internal Distractibility</td>
<td>14.2</td>
<td>55%</td>
</tr>
<tr>
<td>Action / Focused</td>
<td>21.0</td>
<td>38%</td>
</tr>
<tr>
<td>Reduced Flexibility</td>
<td>21.4</td>
<td>25%</td>
</tr>
<tr>
<td>Information Processing</td>
<td>48.6</td>
<td>80%</td>
</tr>
<tr>
<td>Orientation towards Rules and Risk</td>
<td>21.4</td>
<td>66%</td>
</tr>
<tr>
<td>Control</td>
<td>42.2</td>
<td>54%</td>
</tr>
<tr>
<td>Self-Confidence</td>
<td>23.7</td>
<td>63%</td>
</tr>
<tr>
<td>Physically Competitive</td>
<td>12.8</td>
<td>31%</td>
</tr>
<tr>
<td>Decision Making Style</td>
<td>12.9</td>
<td>31%</td>
</tr>
<tr>
<td>Extroversion</td>
<td>33.2</td>
<td>82%</td>
</tr>
<tr>
<td>Introversion</td>
<td>21.0</td>
<td>36%</td>
</tr>
<tr>
<td>Expression of Ideas / Intellectually Competitive</td>
<td>19.1</td>
<td>62%</td>
</tr>
<tr>
<td>Expression of Criticism &amp; Anger</td>
<td>9.8</td>
<td>29%</td>
</tr>
<tr>
<td>Expression of Support &amp; Affection</td>
<td>22.1</td>
<td>67%</td>
</tr>
<tr>
<td>Self-Critical</td>
<td>7.8</td>
<td>82%</td>
</tr>
<tr>
<td>Focus Over Time</td>
<td>14.0</td>
<td>22%</td>
</tr>
<tr>
<td>Performance Under Pressure</td>
<td>19.1</td>
<td>40%</td>
</tr>
</tbody>
</table>

**Figure 1**
What do these scores or TAIS inventory profiles mean?

Attentional processes of improvisation professionals vs. business executives

A quick look at where the improvisation professionals fall relative to the gray areas indicating the trends for business executives shows no dramatic differences. But we can tell you that there is a significant difference between working with or for someone with a score on Control of 85%ile, the business mean, versus working with someone whose Control score is 54%ile, the mean of the improvisation professionals (which is near the bottom of the executives’ gray area). So, we are going to interpret these differences based on our experience with thousands of people living out these profiles.

We found the improvisation professionals to have some characteristics that serve them well as they have to think on their feet. Given that speaking in public is regularly reported as the #1 fear in North America and that having to improvise produces even more pressure to perform, they indicated that they seemed to rise to the occasion, performing their best under pressure. These improvisation professionals show very little tendency to choke under pressure, to develop tunnel vision as their arousal level rises. In other words, they keep a cool head and actually seem to focus better when under pressure. They share with top executives the ability to handle pressure without getting too emotional, but their “go-to” reaction is to stay open to changes rather than to push harder to get from A to Z as planned (the executives’ tendencies).

Improvisation professionals score higher on the two input attentional scales and lower on the output one. They thus read their environments well and make sense out of it before acting rather than the other way around. In other words, they listen well in all senses of the term. This is in opposition to the executive profile of being analytical and orderly in the way they processed information and less tuned to their environment.

Unlike top business executives, the improvisation professionals admit to be fairly easily distracted. They are quite sensitive to their surroundings and indicate that this often distracts them. They also are distracted at times by their wandering minds. Whereas such distractions are often cause for concern with athletes and people doing detailed work in business, it appears these improvisation professionals actually benefit from such sensitivity. It would appear that they use these attentional detours to fuel their creativity in real time. They refuse to lock in too early on what the goal is and this openness and spirit of adventure helps them enjoy the process. They do not seem to fret about a few distractions, considering them simply the cost of doing business in a constantly changing environment with many peers and an active audience.

In all likelihood, they link their active minds and the associated distractions to their unconventional approach to rules and risk. This enables them to go for it, to seize the moment and let it take them to new and unexpected outcomes. This is in direct contrast to many senior executives who live by their strategic plan, Outlook calendars, and to do lists. The exception to this structured approach in business comes only at the top with CEOs showing more willingness to challenge the status quo and use their instincts. They seem undaunted by some distractions they encounter in their beyond-hectic approach to competitive advantage. It may be that becoming CEO frees people to carve out new trails or it may be that those who do this become CEOs or crash and burn along the way to the top.
Interpersonal tendencies of improvisation professionals and business executives

A major difference between executives and practicing improvisation professionals showed in their competitiveness and need to control people and events. Executives score quite high on the scales that indicate a need to take charge, they are confident in their ability to do so, and need to keep score or win. Improvisation professionals score in the middle range on these variables indicating they are more likely to accept situations as they are presented and be egalitarian in their approach. Given the prime operating process and principles of improvisational success—listen, accept, adapt and advance, executives’ greater need for control would appear to be a stumbling block to creatively solving problems while under pressure. They do not show as much willingness to listen and to explore new or unexpected outcomes. Business professionals have to be more precise in their goal orientations. They are required to set up conditions under which they work and are evaluated.

Yet, the leaders of tomorrow will need to add to their repertoire. Acting, especially in an improvisational manner, gives people the chance to explore different ways to listen and cooperate. They can add skills without substituting them for their hard earned business stripes in accounting, strategic management, etc. More and more approaches to leadership emphasize performance under pressure and situational leadership based increased awareness and improvisation. Improvisation professionals recreate this environment in performance situations and engage these attributes at every performance. They seem poised to share this learning experience with executives so they can add to their repertoire for flexible leadership in a changing world.

Our improvisation professionals did not seem to differ much from business executives in their social and communication styles. Both groups were more extroverted than introverted and more likely to communicate their ideas and support than most people. Executives were slightly more expressive of their ideas and their criticism. When put together with their much greater need to control things, this makes them more argumentative and likely to critique what someone says in an improvisation exercise rather than accepting it and going with it. In other words, they are not as good at listening.

Discussion

The picture of improvisation professionals fits what we know about what they have to do to engage audiences each night without a script. They have to listen, accept, adapt and advance. They cannot afford to get too set in their ways or to expect things to go as planned. They must adapt on the fly.

Because the executive profile shows that it is a challenge for them to use the skills that the improvisation professionals employ regularly, we find great reason to welcome

“I used to think that running an organization was equivalent to conducting a symphony orchestra. But I don’t think that’s quite it; it’s more like jazz. There is more improvisation.”

--Warren Bennis
executives into the world of improvisation. There, they can practice in an engaging and changing environment, develop the confidence to be creative and think on their feet, and, above all, listen in real time without rebuttal. In other words, really listen.

Although this is preliminary research with a relatively small sample size, the picture of how these improvisation practitioners differ from executives encourages us to continue the exploration and training of executives in this manner.

Conclusions and Implications

Improvisation exercises offer real performance challenges with the chance to see what works and what does not. They generate enough real challenge to get the attention of those participating and force (in a good way) the use of skills that may be unfamiliar to most people. These skills certainly are different from the stock and trade of many business leaders. These exercises would seem to systematically foster the skills that can enable leaders to differentiate themselves in this ever-more competitive world. Furthermore, here would be a relatively safe place to practice needed skills. In other words, those in business can simulate scrimmage or rehearsal with minimum outlay of time and money and maximum return on their investment.

Business Improvisation is poised to be the next “killer app” for organizational growth and performance. It is a highly valuable tool designed to enhance the skills and productivity of an organization’s most valuable asset—its people.

Investing in the performance of the moment, during crisis and under pressure, is the next frontier for maximizing ROI. Learning the skills of business improvisation and employing them in the market place will enhance a leader’s success in navigating through the unexpected and achieving results in an uncertain world.

Business improvisation – a harmony of composition, creativity and brilliant execution. The sweet sound of success.

“The most important thing I look for in a musician is whether he knows how to listen.”

Duke-Ellington