Leadership in the Midst of Heath Care Complexity I:

Team Operations and Design

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There is good reason to believe that the leaders of health care systems in the United States (and elsewhere in the world) are faced with the challenge of complexity. As noted in a recent "Scoping Review" (2018): "nowadays, health systems are generally acknowledged to be complex social systems." Yet, as noted in this report, there are not many studies of leadership within these complex health care systems. Those preparing this scoping report found only 37 documents related to this topic—16 being conceptual in nature, with 14 being empirical studies and 7 being documents that advocated for more studies in this area. The Scoping report itself could be added to those advocating for more attention to what they term "complex leadership."

Apparently, it not only a matter of too few studies of complex leadership but also too limited a definition of complexity. The authors "found that most researchers subscribe to the mathematical complexity perspective.' From this perspective, complexity primarily concerns the extent to which a system is ordered and the resulting extent to which those operating in this system can accurately assess the current situation and act in a manner that leads to a desired end state. Most of the 37 studies of complex leadership rely on a mathematical-based model of complex adaptive systems.

By contrast, there is a social complexity perspective that speaks to the unique nature of human systems and the foundation of these systems in social interactions and patterns of past experience. Conversation and socially constructed meanings play a major role in the dynamic operations of socially complex systems. These systems are not rule based not do they operate in a manner that can easily be quantified or modeled on a computer. Sense-making takes priority over rule-based operations, and patterns of communication are center stage.

VUCA-Plus and Team-Based Leadership

Authors of this Scoping Review note that some authors—particularly David Snowden—propose the blending of the mathematical and social perspectives, yielding a contextual complexity perspective. From this perspective, those who lead complex health care systems adopt different "diagnostic techniques, different intervention devices and different forms of measurement depending on the ontological state." (Snowden and Stanbridge, 2004). The holistic and adaptive view of leadership offered by Mary Uhl-Bien (Uhl-Bien, et.al., 2007; Uhl-Bien and Arena, 2017) is closely associated with this contextual perspective. Complexity is best addressed by being what many leadership theorists identify as "agile" in the identification and initiation of specific plans.

We have tended to embrace both a mathematical and social perspective on complexity. In our own studies of leadership in complex adaptive systems (Fish and Bergquist, 2022; Fish and Bergquist, 2023a; Bergquist and Fish, 2023; Fish and Bergquist, 2023b) Furthermore, we have considered the effective use

of flexible, contingency-based planning and enactment in our description of effective mid-21st Century health care leadership. We believe of even greater importance is our placing of complexity within a much broader framework. In our own description and analysis of contemporary health care systems we interweave complexity (C) with volatility (V), uncertainty (U), ambiguity (A), turbulence (+) and contradiction (+)—creating a condition we have labeled "VUCA-Plus" (Bergquist, 2022) Volatility produces changing patterns of complexity, while uncertainty makes decisions regarding the engagement in complexity suspect. Similarly, the complexity being faced in most health care systems is hazy at best (ambiguity) and is often saturated with contradiction.

Perhaps of greatest important is the presence of complexity in a highly fluid—even turbulent—world where rapid change operates alongside patterned change, non-change (stagnation) and absolute chaos. The authors of the Scoping Review pose an important question concerning the scope of complexity and complex leadership: is complex leadership only to be engaged under conditions of complexity. When VUCA-Plus is introduced and the condition of turbulence is highlighted then this issue becomes moot. There is no time when complexity is absent when seeking to lead within the "white-water" world of a turbulent health care system.

These conditions of VUCA-Plus must be viewed from a social as well as mathematical perspective for sense-making, social construction and patterns of communication are constantly being challenged. VUCA-Plus leadership requires much more than complexity leadership and must be founded in a set of principles and guidelines that go well beyond the traditional leadership theories that are referenced in the Scoping Review. We seek in this essay to point toward some of the theories of leadership (and more broadly system operations) that might help guide us toward effective engagement with the many VUCA-Plus challenges.

In our next essay, we also will be offering some specific examples of effective VUCA-Plus leadership in contemporary American health care systems. We offer these case examples in part to meet the criticism offered by those preparing the Scoping Review. They suggested that there is insufficient evidence-based research to support any one model of complex leadership. While these authors are primarily concerned with quantitative evidence, we would suggest (and have provided) evidence that might be of even greater value. This is evidence "from the trenches." Case examples of actual leadership practices and outcomes.

First, in this essay, we offer several alternative theories and perspectives on complexity and the other VUCA-Plus conditions. We focus on leadership being engaged in a team setting, leadership as coaching, and leadership as engaged alongside the process of emergence, We believe that these three perspectives open new doors in our understanding regarding how Complexity Leadership actually operates in contemporary health care systems. We close by considering the two conditions that we have added to VUCA that make it VUCA-Plus. These two conditions are turbulence (leadership in a "white water world") and contradiction (leadership in competing organizational subcultures).

Team-Based Operations

We are in the midst of a cultural, generational, and technological revolution within US Healthcare. There is wide-based dissatisfaction with our healthcare system, yet we lack tangible ways to lead ourselves into a better future due to the high complexity of the system which limits accountability, transparency, and levers to shift us in new directions. In the midst of this challenge, we have rising

competition from industries like IT that have developed advanced team-based leadership models, distributive and democratic models and others that appear to be far more adaptive and agile than our models in healthcare which have been top-down and hierarchical in nature. Shifting toward team-based leadership will take time and require new mind-set that recognizes and embraces the value of teamwork within the healthcare context. Ironically, some of the earliest team-based models came out of healthcare---particularly in the Operating Room, which requires a high-performance team to reduce risk and improve outcomes. The OR was also the first site in healthcare to establish safety checklists based on the Airline industry after exposure of high levels of error in the OR, including leaving instruments and other items in the patient or removing the wrong limb creating enormous pressure to improve communication and teamwork in the OR.

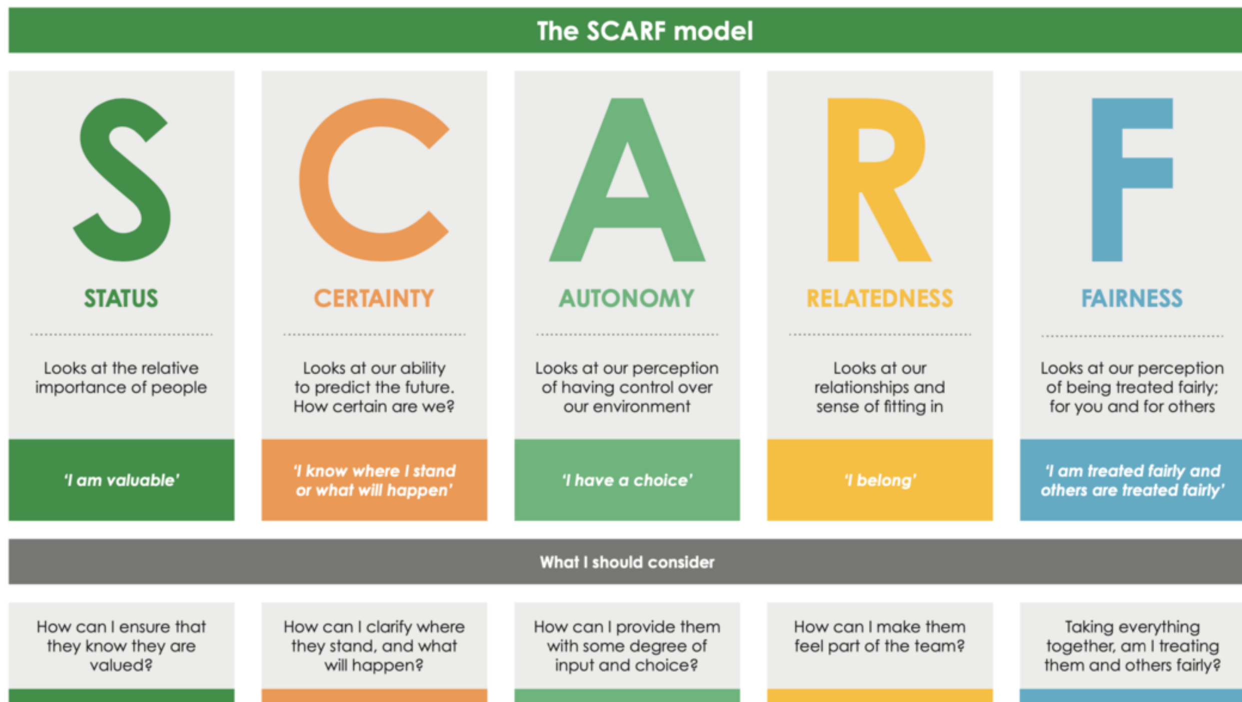
Why is team-based leadership so important now in healthcare? Because time and time again, when we explore the root causes of harm in healthcare, we find fragmentation of care, fragmentation of communication, with lasting negative impacts on all involved. A skilled surgeon must apply for privileges to perform procedures in a hospital, yet may lack training and skill in communication that can lead to enormous malpractice risk and adverse outcomes despite his or her enormous operative skills. Our technological emphasis in healthcare has been primarily on higher and higher tech robotics and procedures that continue to increase the cost of care. Even the introduction of Electronic Health Records has been focused primarily on excessive documentation to justify billing and coding---not on improving communication, workflows, teamwork, and outcomes for patients.

So, as the information age overflows healthcare, we produce nearly 1/3 of all information on the internet---yet lack basic team-enforcing communication tools to support patients within the context of their healthcare team. We make the patient and her family the sole connection amongst the many fragmented ways we try to take care of her. This irresponsible shift of communication to the patient and her family creates enormous stress and confusion for patients, who often struggle to simply find out about their own healthcare. Recent new Chart-review and e-mail / in-basket “MyChart” type engagements only serve to introduce the patient to their own highly fragmented and confusion EHR and appear to lead to excessive electronic contacts with physicians which further strain the physician: patient relationship. Teamwork with healthy communication, role clarity, effective communication strategies must be developed and the first step in doing that is to reduce the sense of threat and fear in healthcare, so that trust-based relationship building can flourish.

The SCARF Model

Neuroscientists have identified a set of social threats that are triggered often on a daily basis for most humans, which David Rock (2008) has compiled into a very simple SCARF Model to help us recognize the many ways we experience Social Threat which our brains perceive as the same as Physical Threat. Gaining insights into the SCARF model can help us all begin to reframe from a threat-response toward a healthier and more effective challenge-response or reward-response. This fundamental shift in mind-set is essential to trust-and-safety within teams—the key to high-performance teamwork as demonstrated by Amy Edmondson (2018).

David Rock’s model is SCARF, looking at the 5 domains of our response to "threat vs reward" systems in the brain.



Status: sense of worth, mattering

Certainty: sense of the future

Autonomy: sense of control and agency

Relatedness: sense of belonging and safety with others

Fairness: sense of fairness, justice

SCARF draws us into community context, team context, and partnership context as it focuses on social contributors to our threat response. Once our social threat response has been triggered by any and all of the SCARF examples, it triggers a clear neuro-physiological response that sports psychology refers to in the Threat ←→ Challenge dichotomy:

Flow chart adapted from: Meijen, C., Turner, M., Jones, M., Sheffield, D., & McCarthy, P. (2020). A theory of challenge and threat states in athletes: A revised conceptualisation. *International Review of Sport and Exercise Psychology, 11*. https://doi.org/10.3389/fpsyg.2020.00126

An athlete competing with others in an individually-focused sport (like running) or in a team-based sport (like basketball) will find herself facing the threat vs challenge dynamic again and again. Combining SCARF with sport psychology Theory of Threat vs Challenge creates a more complex matrix of opportunity in face of potential social threats:

Threat	**Challenge**	**Reward**
Fear-based	Action-based	Reward-based
Often isolating	Pro-Social	Pro-Self
Fight/Flight/Freeze/Fawn	Respond & Overcome	Feels good
Adrenaline + Cortisol	Adrenaline + Oxytocin	Dopamine

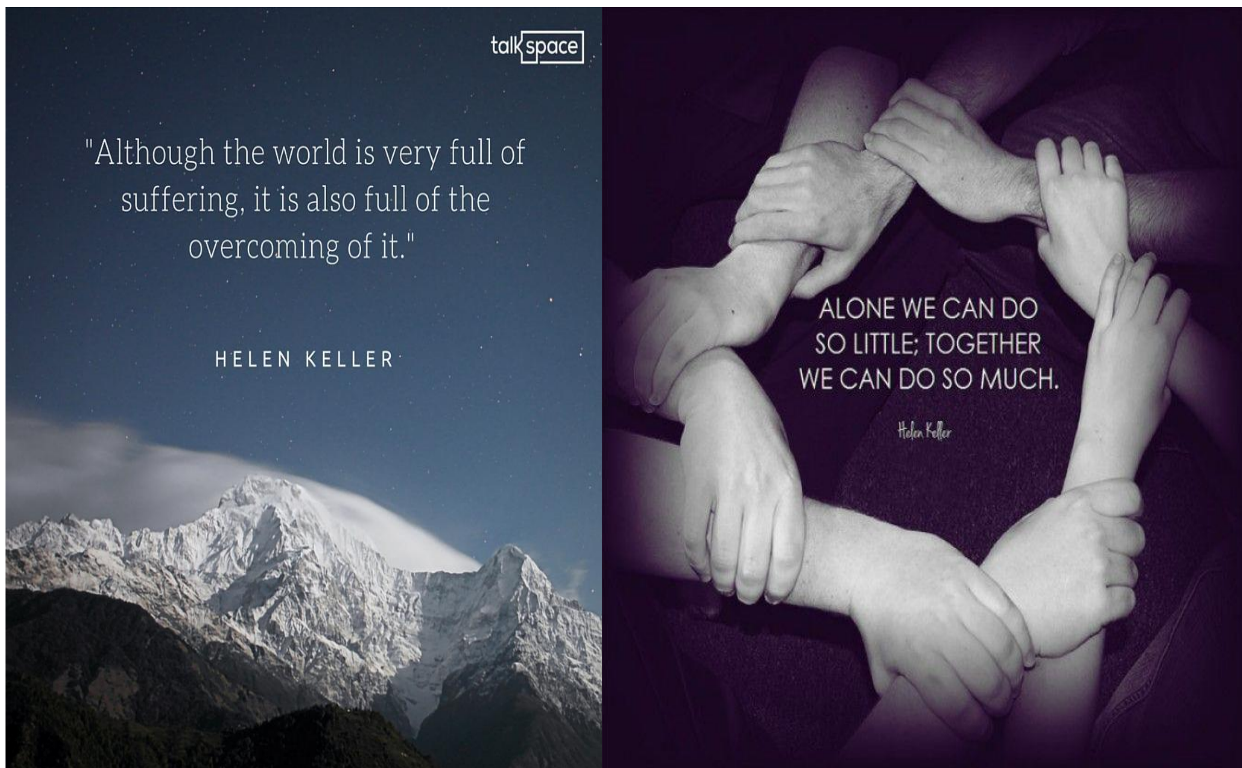
Integrating SCARF and Sports Psychology begins to show us a way to increase trust and teamwork in whatever broader context we find ourselves: https://www.youtube.com/watch?v=hNAcCc1oWR4

There is also mounting evidence that our perception of threat is influenced by the size and trust-level of our in-group (or team) of which we are a part. The larger our positive in-group is, the more capable we are of perceiving even large threats as challenges.
[https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8697704/]

In-group (or team) size matters greatly in how we are able to sustain through higher levels of threat, making sense of this statement:

"We suffer alone, we overcome together." Jeremy Fish, MD, 2015

This is a combination of quotes by Helen Keller



SCARF in Health Care

Let's look at an example of the SCARF and Threat vs Challenge dynamic within healthcare context.

Dr. Jones can feel his pulse rising and his breath shortening as he listens to his long-time patients open up about her struggles with alcoholism and her recent falls at home. He had hoped this would be a brief visit with a familiar patient, but now it is becoming a deeply challenging discussion that may require immediate actions including contacting local law enforcement as she begins to dip into a darker history of domestic violence by her husband and more recent elder-abuse behaviors by her only son.

Dr. Jones feels a deep-ending sense of dread as his MA comes in to remind him that he has a Noon meeting with the Practice Administrator to go over his reduced productivity data and his billing documentation which was flagged by the Coding review committee at their last meeting. And his wife has called to make sure he remembers he has to pick up his daughter for her piano recital at 3pm today because she is meeting with her team in preparation of their coverage of the upcoming Olympics in Paris. A bead of sweat begins its way down his forehead toward his jawbone, which he clinches tightly as his patient continues to dredge up unbelievable stories going on in her life.

STATUS: How does a simple visit in clinic become a threat? Which status is Dr. Jones most focused on? His status as a doctor—looking for solutions for his patient? His status as employee looking to be seen favorably by his supervisors? His status as husband and father who promised his wife that he would pick-up his daughter, something that may become nearly impossible given how his day is suddenly going?

CERTAINTY: He has known his patient for 15 years, yet suddenly she is becoming a far more complex and challenging patient within the confines of his 15 minute schedule. Is what she is telling him true and how does he find certainty to help direct his next actions? Does he need to investigate what is happening since her husband and son are also his patients? Can he call for an immediate family meeting or would that compromise the courage she is demonstrating?

What does she want him to do? Call the police---as a mandatory reporter, he must do so immediately and in written within 48 hours. How will this change his relationship with this patient---particularly if she opposes him reporting it to local law enforcement? How will it change his relationship with her son and husband, who surely will see this as a threat in some fashion? Will one of them sue him or ask for a state licensing review? Patient complaints? Other ways of getting back at him for reporting these events?

AUTONOMY: How much choice does he have right now? Can he ask her to stop and clarify that she has now provided him with sufficient information that he is mandated to report these events to local law enforcement? Will she protest and limit his choices in some fashion? How long will the process of reporting take? Does he need to cancel the rest of his morning schedule to handle this situation? Can he even do that given the concerns about his productivity that he is about to meet with his supervisor about? How does he document this event to demonstrate his professional role with clarity---in service of this patient's health and in service of legal requirements he must meet? What does he risk if he chooses NOT to report to local law authority—thus placing his professional autonomy above his legal mandate?

RELATIONSHIP: Which relationships will be impacting depending on the choices he makes right now? His relationship with this patient? Her husband? Her son? All of them? His supervisor? His wife and daughter? In whose best interest does he act? His own? His patients? Her family? His family? His reputation in the health system he works? His supervisors? All of these relationships are now entwined in this short burst of time---reducing his options and multiplying the complexity and sense of threat he is experiencing. His pulse quickens and now there are several beads of sweat as he glances at

the door trying to figure out how to conclude this most uncomfortable, threat-inducing time with his patient.

FAIRNESS: What is the fairest way in which to proceed? A justice-focused pathway? A health-focused pathway? Who will judge the fairness of his next steps to address this complex and uncertain situation? Does he have the resources to support going in both directions together? For justice and health? Why does that not feel possible to him right now as he sits nervously with his patient? What resources might he need to very quickly and effectively address the threat and begin to shift into a challenge mind-set? Can he approach a fair and just response with such limited time and limited people resources?

Judges who work in the justice and fairness domain have far more control over time and decisions. When faced with complex demands, a judge might postpone hearings for months to prepare and have dozens of people help prepare---yet a primary care physician like Dr. Jones might find only an MA and a waiting patient as he attempts to address complex and urgent situations like today.

So, how does Dr. Jones begin to shift from the clear sense of threat he experiencing into a more challenging and rewarding mind-set? A lesser physician would shift the threat to the patient and begin to silence her before she says too much---"I have to get to my next patient, please make a follow-up appointment in 1-2 weeks for further discussion, you are bringing up matters that require more time and I don't have the luxury of time today" without even addressing the mandatory reporting for what was already revealed, perhaps making the patient feel like her problems are not his own to address and can wait.

She might choose not to come back, feeling dismissed and lodge a complaint against the doctor. I suspect that is likely the most common response to such situations in our low-resource Primary Care environment where "productivity" is defined by "number of people seen by doctor" and not "number of people actually helped by doctor or having improved outcomes through visit with doctor." It is called "productivity" yet it is really "efficiency" a far less impactful measure of the value of time with one's primary care physician. Regardless of how he proceeds, this will be seen as a "productivity" problem by those who review his care as he has already been in the room for 20 minutes before he swiftly exits without formally addressing the most alarming aspects of the visit.

How might changing the context of care from Individual Physician/Individual Patient toward that of Primary Care Team including the patient begin to help shift Dr. Jones from Threat toward Challenge and Reward mind-set?

Such a team-based context would mean Dr. Jones has a behavioral health professional waiting in the wings of his practice who he can bring in to meet with his patient to dig more deeply into understanding what is happening and how he and his team can best help her. He can also call upon the social worker to help set-up the immediate phone reporting of the potential Domestic Violence and potential elder abuse to appropriate authorities in a timely fashion and gather his pre-scripted written summary dot-phrase so a letter can be sent and shared with the patient so she is aware of what is happening. Once the Behavioral Health professional has completed her assessment and recommendations, the social

worker can help the patient understand the complex array of reporting requirements and make sure she understands next steps that will be taken.

Knowing how trauma can impact the entire family, Dr. Jones and the Behavioral Health professional talk through an urgent Virtual Family Meeting to be scheduled ASAP to maintain Dr. Jones and the Primary Care team's relationship across the current patient, her husband and her son---maintaining their keen focus on the health of the entire family as well as the safety of today's patient. She consents and says she will be staying at her sister's home while the primary care health team engages in assuring her safety, health and the health of her family.

While much of this activity is occurring, Dr. Jones has completed seeing his final 2 patients and briefly drops in to check on this patient before heading to his meeting at Noon with his supervisor---armed once again with why he has become far more "productive" now that he finally has the team members that he has been asking for over the last 3 years in this health system. He wants to thank his supervisor for investing in the support and will bring up this case as one more example of how he is able to maintain his high professional standards of care AND meet the time-constraints of post-modern Advanced Primary Care.

Moving to this model of teamwork allowed him to shift away from his prior fear-based way of avoiding these painful conversations into being a more pro-active and effective primary care physician. His stress level has reduced and he feel rejuvenated in his work. Having a team to rely on has dramatically shifted him toward digging into what is truly troubling his patients and makes him proud to be a primary care physician. He can't wait for the medical student to come this afternoon. It's a short clinic, but he wants to share this care to help the student see why Advanced Primary Care is an inspiring and impactful profession. He hopes maybe his student will reconsider his inclination to sub-specialize and dive into the new Advanced Primary Care.

Team Design

We wish to take a somewhat different perspective regarding leadership as engaged in a team setting. Specifically, we turn our attention to the four spans within organizations that Robert Simons (2005) suggests play an important role in determining the effectiveness of teams. These four spans are: (1) control, (2) accountability, (3) responsibility and (4) support. Each of these spans can be narrowed or widened. Two of the spans measure the *supply* of resources the organization provides to project teams. The span of control relates to the level of direct control a team has over people, assets, and information. The span of support is its "softer" counterpart, reflecting the supply of resources in the form of help from people in the organization. The other two spans—the span of accountability (hard) and the span of influence (soft)—determine the team's *demand* for organizational resources. The level of a project team's accountability, as defined by the organization, directly affects the level of pressure on team members to make trade-offs; that pressure in turn drives the team's need for organizational resources.

The team's level of influence, as determined by the structure of the team and the broader system in which the team is embedded, also reflects the extent to which team members need resources. We typically have substantial control (internal locus of control) with regard to two of the four elements (Control and Influence) but

have very little direct control (external locus of control) with regard to the other two elements (Accountability and Support).

Span Analysis

We expand on Simons (2005) analysis by introducing comparable spans within an organization that help to make the work of an individual employee more productive. As in the case of teams, we propose that four factors must be aligned for us to be successful in our job. Once again, two of these factors (Control and Support) relate to the supplies (resources) needed for us to be able to effectively engage in the work we are expected to engage—whether production or service. We introduce several related terms (Authority and Patronage) when exploring several versions of control, as well as several terms (triangulation, investment and encouragement) when considering span of support.

Two of the other factors (Accountability and Influence) relate to the demands being made from outside our job. Once again, we introduce several other terms when considering accountability (expectations and hope), and influence (motivation, enablement, assistance and encouragement). These additional terms are brought in to help us explore both formal and informal versions of each span.

Span of Control: [Internal Locus of Control] [Supply Element]: This first span defines the range of resources—not only people as resources but also assets and infrastructure—for which an employee or team is given decision rights. The team is held accountable for performance resulting from deployment of these resources. To narrow the Span a leader reduces the resources allocated to specific positions or units, while **t**o widen the Span, the leader allocates more people, assets, and infrastructure.

We once again move beyond what Simons has provided by identifying both formal and informal versions of each span element as they operate in both teams and individual jobs. At a fundamental level, control resides in the *Authority* that is invested in a team or job. This is the amount of *Formal Authority* held by a team or in a job. This span concerns the resources which an individual employee or team "owns" or has been officially assigned to and provided for this project.

A team or individual employee is more likely to be successful if it gains access to substantial resources in the organization--though with more substantial resources come increased expectations (a dimension of one of the other spans). There is also *Informal Authority* that influences span of control. This occurs when attention is given to the *Patronage* which operates in organizations. In this case, resources to which employees and teams have access are officially "owned" by or assigned to others in the organization.

Span of Accountability: [External Locus of Control] [Demand Element]: _This second span concerns the range of trade-offs affecting the measures used to evaluate a team's achievements. The setting of this span is determined by the kind of behavior the team's supervisor wants to see. As Simons noted, the span of control and span of accountability are not independent. They must be considered together. The first defines the resources available to a team; the second defines the goals the team is expected to achieve.

By explicitly setting the span of accountability wider than the span of control, leaders can force an employee or members of a team to become more entrepreneurial. In order to narrow the Span, a leader standardizes work by using measures (either financial, such as time-item budget expenses, or non-financial, such as head count)

that allow few trade-offs. To widen the Span, a leader typically uses non-financial measures (such as customer satisfaction) or broad financial measures (such as profits) that allow many trade-offs.

Residing at the heart of this span is an often-elusive factor called *Expectations*. An employee or team is more challenged if the expectations of others in the organization are higher (though higher expectations often come with greater authority over and access to organizational resources). There are *Formal Expectations.* These are the designated and assigned outcomes for the employee or team. *Informal Expectation*s often come in the form of *Hope*. These are the often unacknowledged, but shared, expectations regarding the outcomes of work done by an individual or team members if they are highly successful. We are likely to be more challenged if the expectations of others in the organization are higher (though higher expectations often come with greater authority over and access to organizational resources).

Span of Influence: [Internal Locus of Control] [Demand Element]: The span of influence, according to Simons, corresponds to the width of the net that a team needs to cast in collecting data, probing for new information, and attempting to influence the work of others. Leaders can widen the span when they want to stimulate their employees and teams to think outside the box to develop new ways of serving customers, increasing internal efficiencies, or adapting to changes in external markets. Leaders can widen a team's span of influence by redesigning the task assigned to this employee or project team. For instance, the team can be encouraged to enter into a cross-functional relationship with another team.

Leaders can also adjust an employee's or team's span of influence through the level of goals they set. Although the nature of a team's goals drives its span of accountability (by determining the trade-offs team members can make), the level or difficulty, drives her sphere of influence. As Simons observed, a team that is given a stretch goal will often be forced to seek out and interact with more people and other teams than a team or person whose goal is set at a much lower level. Finally, leaders can use accounting and control systems to adjust the span of influence (e.g. assigning indirect cost allocations to the team).

Leaders can narrow the Span by requiring members of their organization to pay attention only to their own jobs; do not allocate costs across units; use single reporting lines; and reward individual performance. Conversely, they can w*iden the Span by i*njecting creative tension through structures, systems, and goals. For example, the leader can form cross-unit teams, matrix structures, and cross-unit cost allocations.

We can once again move into the heart of this third span —and we will find *Motivation*. In this case, it is all about motivating other people —we influence them by increasing their desire to (and potentially ability) to achieve some important (shared) goal. A job holder or team members are likely to gain much more support in an organization (yet also increase expectations) if they hold the potential of influencing (motivating) other projects in the organization.

At the formal level, we find *Enablement* and *Assistance* —which makes for *Tangible Influence:* This is the direct way in which an employee or members of a team can benefit others in the organization and, more specifically, contribute to the success of other projects. At the informal level we find *Encouragement* which is a form of *Intangible Influence:* These are the indirect ways in which individual employees and teams can be champions or ever-present "colleagues" to others in the organization. These valuable members of an organization can be motivating cheerleaders and admiring observers on the sidelines.

Span of Support: [External Locus of Control] [Supply Element]: This fourth span concerns the amount of help a project team can expect from teams and individual people in other organizational units – how much commitment from others the team needs in order to implement strategy. Simons notes that wide spans of support become critically important when customer loyalty is vital to strategy implementation or when organizational design is highly complex because of sophisticated technologies and a complex value chain.

Teams cannot adjust an employee's span of support in isolation —for the span is largely determined by people's sense of shared responsibilities, which in turn stems from an organization's culture and values. For a leader to narrow the Span of support they can use leveraged, highly individualized rewards, and clearly single out winners and losers. For them to widen the Span, leaders must build shared responsibilities through purpose and mission, group identification, trust, and equity-based incentive plans.

True and enduring support in an organization comes not just from connecting with and receiving tangible or intangible support from other people, another project, another initiative or another agency in the organization. It comes from a *Triangulation,* wherein both you and the other entity link positively with a third entity (a shared mission, a shared vision, a shared commitment to and capacity to enable a more general and critical project in the organization). A triangulated structure is always stronger (able to withstand powerful external forces) than a structure with only two anchor points (or two sets of anchor points: a four-sided structure).

We find formal levels of support in acts of *Investment.* This is the way in which *Tangible Support* is offered. Unwavering and specific contributions of resources arrive from elsewhere in the organization to you and your work. At the informal level, support is offered through *Encouragement.* This form of *(Intangible Support is conveyed through the* sustained and honest best wishes of others in the organization for your success in your current job or team.

Job and Team Design

When adjusting the design of individual jobs and teams, the first step for a leader is to set the span of control to reflect the resources allocated to the team—especially if the team and its project plays an important role in delivering customer value. Next, the executive can determine a specific level of entrepreneurial behavior and creative tension for the team by widening or narrowing spans of accountability and influence. Finally, an executive must adjust the span of support to ensure that the team will get the informal help it needs.

For any organization to operate at maximum efficiency and effectiveness, the supply of resources for each project team must equal the demand. In other words, span of control plus span of support must equal span of accountability plus span of influence. Using the Span Analysis matrix to determine span of control, accountability, influence and support, one can engage as a job occupant or member of a team in reviewing existing spans and most appropriate spans for efficiency and effectiveness.

> ***Step One:*** Place a mark on each of the four lines, based on the job occupant's or team members' assessment of span for themselves and other members of the team.
>
> ***Step Two:*** Draw a line between the span of control mark and the span of support mark [forming the supply of resources line]. Draw a second line between the span of accountability mark and span of influence mark [forming the demand for resources line].

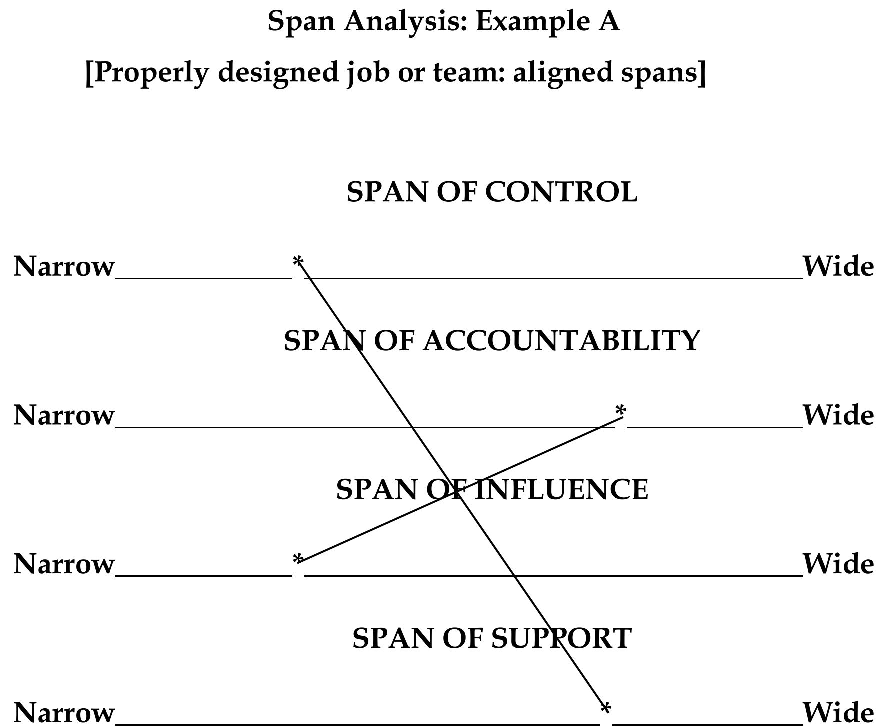
Step Three: If the two lines intersect, forming an "X," then demand equals support (at least roughly) and the job or team is properly designed for sustained performance. If the lines do not cross, then the spans are misaligned. If resources (span of control plus span of support) are insufficient for the task at hand, strategy implementation will fail [ineffectiveness]. If recourses are excessive, underutilization of assets and poor economic performance can be predicted [inefficiency].

Here are two examples of a job or team analysis.

The first displays a properly designed job or team:

Span Analysis: Example A

[Properly designed job or team: aligned spans]

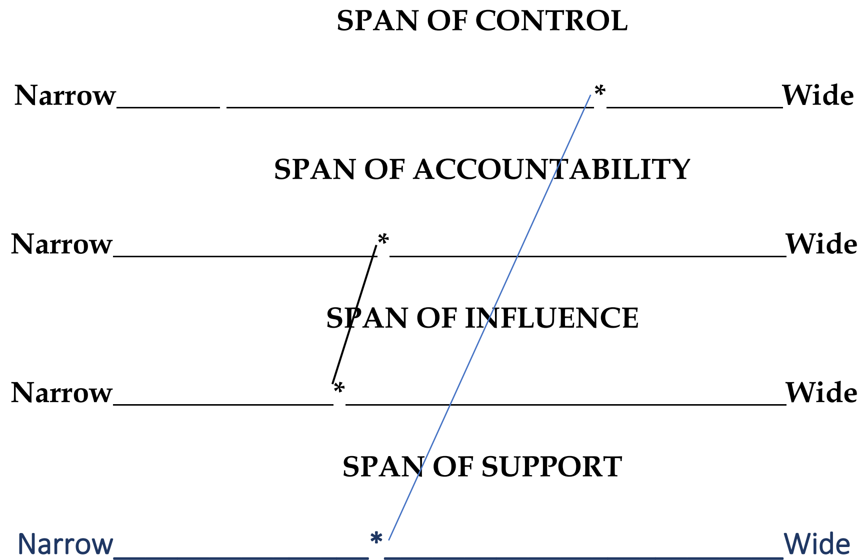


In this case, the job occupant or team doesn't have much control but does have a rather high level of accountability. Fortunately, this person or team is able to focus on their own work (influence) but is provided with a fairly substantial amount of external support—making the condition of low control and high accountability somewhat less challenging.

Following is an improperly designed job or team:

Span Analysis: Example B

[Improperly designed job or team: nonaligned spans]



In this case, there are both somewhat high levels of control and high levels of support. The job occupation or team has all that it needs to do the work; however, the levels of accountability and influence are low relative to the control and support. This is a job occupant or team that has all that it needs; however, there is little accountability that is commensurate with the available resources. Furthermore, there is not much reaching out (with all of its resources) to other employees or teams in the organization. This is a case of isolated abundance, which can produce complacency.

There are several notable crises that are associated with poorly designed jobs and teams. Each of these crises tends to be found most frequently in organizations that are engaged in particular kinds of production processes.

A crisis of resources is most likely to occur when leaders who oversee the work of specific employees or teams spend too much time thinking about control, influence and accountability, and not enough time thinking about support. This is common in both mass and continues production organizations —and when Assertive Roby Red leadership is prominent.

A crisis of control is likely to occur in highly decentralized organizations and in both unit and specialization production organizations where separate operational divisions are created to be close to specific customers (or types of customers). Supply of resources (span of control plus span of support) exceeds a leader's ability to effectively monitor job or team trade-offs (span of accountability) and to ensure coordination of knowledge sharing among employees and teams (span of influence). Silos of craft and artistry prevail.

A crisis of red tape can occur in any organization where powerful staff members or staff groups overseeing key internal processes (such as strategic planning and resource allocation) are inclined to design performance management systems that are too complex for the organization. Spans of accountability and influence are very high, but resources are insufficient and misdirected. The demand for resources exceeds supply.

Conclusions

The two of us are committed to constructing bridges between the professions of psychology, primary care, complexity science, and leadership. We believe that the bridge should provide a roadway for effective leadership, a caring health care system, and a "safe" environment for innovation and collaboration. Hopefully, this series of essays produces some of the piers and beams for this bridge.

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