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ZEAL AND Z-FACTOR: WILL, ADAPTABILITY AND COPABILITY IN DYNAMIC COMPLEX ENVIRONMENTS

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Abstract:

Zealous social systems prosper and effectively respond in dynamic complex environments and crises. Z-factor is an essential competence in managing crises. Zeal and Z-factor are comprised of three mutually synergic processes of willfulness, adaptability, and copability (cope-ability). Will determines the drive and the commitment to achieve the overarching purposes. Adaptability is the capability to understand and make necessary adjustments to address requisite external factors. Copability is the internal processes that help maintain a sense of well-being and wholeness. In dynamic and complex environments, zealous social systems strive to achieve their will through adapting and coping. Those with feeble zeal are less capable of adopting the will for adapting to their external conditions or sustaining their internal wholeness. When facing complexity and change, the zealous willfully strives to build and maintain external relevance to adapt and sustain internal efficacy and coherence. The zeal to succeed is driven by the purposeful will and synergy of adapting and coping for responding to externally induced changes while assuring a well-functioning system internally. This article explores zeal and Z-factor as a requisite determinant of social systems' effectiveness, well-being, and revitalization in dynamic complex environments.

Keywords:

Z-Factor, Zeal, Will, Adapting, Coping, Adaptability, Copability, Change, Crisis, Crisis Management, Complexity, Complex Environments, Zealous Leadership, Covid-19 pandemic, adapting, resilience, Overcoming Adversity, Leading through upheaval

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Introduction

Rapid unanticipated life changes, crises and complexities accompany opportunities and threats for individuals, groups, organizations, communities, and transorganizations. In response, zealous social systems manage to survive, excel and prosper by pursuing prudent, willful values, developing, building, and sustaining their capabilities and resources. They plan and take effective action executing their judicious goals capitalizing on opportunities and averting threats. They engage in change without compromising their enduring positive core values. Low zeal systems falter, regress, and lose external and internal relevance.

Zealous social systems and organizations embody leaders and teams diligent in pursuing overarching prudent goals. They are capable to capitalize on challenges as opportunities and to turn threats and dis-favorable situations into positive outcomes. They create, drive, build, and reward long- and short-term organizational, team, and personal success. Z-factor is the critical ingredient to create success in view of unfolding complex circumstances that would often set back and cause many ordinary organizations and leaders to lose their way and fail. Zealous organizations and people are willful and determined to create success. They diligently pursue prudent goals, create success adapting to challenging difficult and volatile circumstances, and advance their internal capabilities and well-being while overcoming hardships and fragmentation.

Awareness of the three key components of Z-factor helps determine and develop critical resources, confidence, positive attitudes, and essential competencies not only to deal with obstacles and complexities of change, but capacity to create success far beyond what may seem possible. Many exemplary societal leaders and contributors have faced and overcome difficult or seemingly insurmountable life experiences and crises. For some, life challenges and early bitter experiences have led to valuable learnings and thus gaining Z-factor mastery. Examples range from Edison's determination through thousands of failures before inventing the light bulb to that of Victor Frankl (1969, 1996) and his horrific experiences of surviving WWII concentration camps. He helped many to survive the deadly and hopeless conditions, and so developed logotherapy approach to clinical psychology. Logotherapy is based on the premise that humans are motivated by a "will to meaning," an inner pull to find meaning in life and the attitude taken in responding and dealing with any situation and sustaining inner well-being.

Human history is populated by evolving and enduring social systems succeeding and illustrating the importance of Z-factor. The detailed journals of the surviving members of the Donner Party expedition trapped in the high Sierras during the harsh winter of 1848 on route to California, tell a story of successes and failures by members of the expedition. The expedition had lost its way and abandoned in the harsh winter season faced life threatening crises, starvation and deaths. The men of that event resorted to competitive attitudes, violence, and cannibalism. Many of the men facing internal fragmentations engaged in predatory behavior and some did not survive. However, the women held together, sheltered the children from harm and overcame the long and threatening hostile situation with positive support of each other. They protected their young and sustained themselves from imminent death in the freezing temperatures and ensuing starvation without engaging in violence and cruelty as the men did. All the women survived and

prospered by exhibiting superior zeal through their strong will, adapting to the situation, and coping with internal struggles of survival and hopelessness. Their overarching will to save their children facing demise and delivering them to safety was the paramount driving will in their decisions and deeds. They adapted to harsh and dangerous conditions and coped internally in their camp sustaining a functioning cohesive community under duress. They succeeded the unbearable crises of hunger, cold, depression, and feelings of loss while maintaining their care of the young and needy.

Z-factor underlies many great contributions across a broad spectrum of science, technology, literature, music, art, business, and economic development. Many great leaders possess Z-factor attributes. In business. They built innovative and successful companies such as Apple, Google, Boeing, IBM, and others. Their stellar successes were driven by the will to make a difference, adapting by capitalizing on opportunities in uncertain and complex emerging industries and environments, and coping by building and maintaining a robust internal environment where contributions were welcome and encouraged.

The recent unfortunate global COVID-19 pandemic crisis provides further illustration of the Z-factor in use. High Z-factor social systems more quickly adopted a vigorous *will* to overcome the pandemic and re-establish health. They quickly and effectively adapted to the changing circumstances and disruptions. Collectively and quickly they engaged in assessing the situation, causes, investing resources and removing obstacles to the rigorous discovery of the prevention and cure of the viral disease and Covid-19 pandemic, developing vaccines and multitudes of processes for rapidly adapting to the situation and managing the crisis. The will to regain public health manifested in willful action solutions to control the spread of the pandemic and finding cures for the disease. Many forms of coping initiatives were instituted to manage the emotional, human, and societal burdens afflicting so many, which included life disruptions, economic setbacks, fatigue, loss of loved ones, grieving, fear, anxiety, and negative psychological and economic impacts on persons, families, and lives.

Zeal to Succeed

Zeal is the diligent force that propels social systems to develop and synthesize levels of adaptability and copability toward achieving their *will*. It is the impelling value-based determination, fortitude, drive, self-discipline, and self-control impelling one toward intentional effort and thoughtful action. Zeal integrates the willful direction, adaptability, and copability. It capitalizes on opportunities, overcomes setbacks, and turns events either desirable or unwelcoming into strategic advantage. Zeal provides the determination and resolve for well-being. It is a powerful determinant of traversing through uncertain and complex situations while developing and maintaining internal wholeness willfully. It involves assessing, re-assessing, self-reflection, learning, determining winning strategies and executing them judiciously by proper adaptation and coping through thoughtful action guided by the will.

Z-factor synergizes the key elements of a social system's requisite abilities, resources, enthusiasm, and competencies to adapt and cope for achieving the will. It is an active and essential driver for creating, renewing, and balancing diverse factors contributing and assuring

willful success. It provides the spirit for willful positive thinking and view of the situation. *Z-factor is the driving integrative force that creates and maintains the dynamic alignment of adaptability and copability toward achieving the will.* It is the forward spirited force propelling and creating social systems' success.

Zeal involves a social system's capabilities to: (1) adapt and respond effectively to the external conditions whether favorable or unfavorable, (2) cope with internal circumstances and stresses to create and sustain robust processes and a sense of identity and well-being, and (3) pursue the will to achieve overarching goals by developing success strategies and acumen in execution. Zeal creates willful mission-driven enthusiasm for success through mutual optimization of adaptability to external conditions and copability by developing and sustaining internal capabilities, culture, and success attitudes. According to Allen (2016), maintaining a strong insurgent mission [will] is critical to long-term sustainable growth. To compete over the long term, insurgent companies need to build and sustain internal capabilities and develop scale and scope of requisite functions regardless of the size and features of a social system. Cordina (2004a, b) presents a conceptual framework at the macro-level applicable to large-scale economic prosperity of nations. His large-scale research indicates that savings and capital formation in an economy (adaptability) combined with a positive societal attitude (copability) and coherent mission-driven national policies and agenda (will) enable the zeal for achievements consistent with the overarching societal goals and accompanying prosperity.

Z-Factor

Z-factor is composed of three ingredients: the will to succeed, adaptability, and copability. The will to succeed clarifies the mission and goals to be achieved. The will manifested in a system's adaptability for exploring, identifying, preparing, and navigating through unknowns. The will drives adaptability, capitalizes on opportunities, and overcomes short or long-term challenges

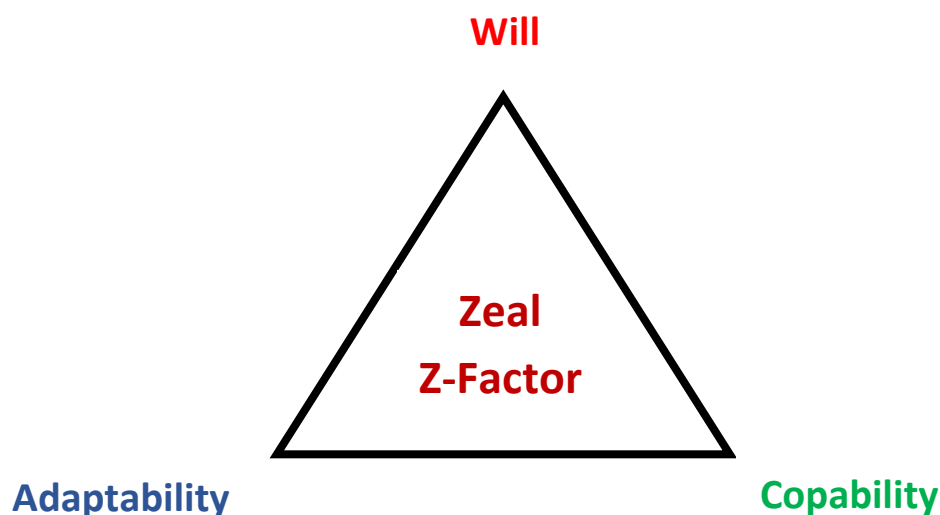


Figure 1: Zeal (Z-factor) Components: Will, Adaptability, and Copability

and setbacks even if seemingly untenable. The adaptability enables a social system to navigate through the unknowns and complexities for achieving the desirable goals and sustaining the will. Copability brings about internal harmony, hope and a sense of wholeness and well-being. It addresses accompanying internal stresses and strains and carves the path for optimism, emotional health and resolution of anxiety and fears. It integrates the internal forces into a functioning whole, prevents the internal fragmentation and lifts health and well-being of the system.

Will

The *will to succeed*, is a vital driving element of zeal. Strategy is an instrument of *will* and a rational and intuitive process to select the prudent course of action to achieve balance between external and internal conditions for achieving positive outcomes. Effective strategies are built both on the requirements for adaptation to external environment and internal management of capabilities, changes, and effective coping. Execution follows the strategy. It is grounded in adaptive, external, environmentally dynamic conditions and internal coping processes that sustain the system's sense of identity and internal well-being. The will to create meaningful success provides requisite direction, enthusiasm, and motivation to develop effective adaptive and coping strategies and their execution. Will reflects overarching purpose of the enterprise, such as:

1. Vision: The ideal future state it is seeking
2. Mission: Duties and purpose of the social system—why it exists, whom it serves, what it serves
3. Values: Principles, ethics, and conduct
4. Goals: Overall favorable results toward realizing the vision

Will drives the conjoint integration and alignment of *adaptability*, which relates to a social system's ability to direct, control, and deal with its external environment and attain environmental advantage, and *copability*, which constitutes a system's ability to create and maintain a viable internal environment, sense of identity and well-being. A zealous social system willfully prepares and synergizes these two sets of externally and internally focused processes to enthusiastically propel and drive toward success in achieving high-aspiration vision and purpose.

Adaptability

Zealous social systems are adaptable and capable of capitalizing on change, complexity, and dynamics of their situation. Piaget (1932) viewed adaptation as the equilibrium toward which the organism moves as the result of the interaction between its internal and external environments. Fromm (1941, 15-16) classified adaptation into static and dynamic. Fromm described static adaptation as:

...an adaptation to patterns that leaves the whole character structure unchanged and implies only adoption of a new habit. An example of this kind of adaptation is the change from the Chinese habit of eating [with chopsticks] to the Western habit of using fork and knife. A Chinese coming to America will adapt himself to this new pattern, but this

adaptation in itself has little effect on his personality; it does not arouse new drives or character traits.

Fromm continued describing dynamic adaptation as:

...adaptation that occurs, for example, when a boy submits to the commands of his strict and threatening father—being too afraid of him to do otherwise—and becomes a "good boy." While he adapts himself to the necessities of the situation, something happens in him. He may develop an intense hostility against his father, which he represses, since it would be too dangerous to express it or even to be aware of it. This repressed hostility, however, though not manifest, is a dynamic factor in his character structure. It may create new anxiety and thus lead to still deeper submission; it may set up a vague defiance, directed against no one in particular but rather toward life in general. This kind of adaptation creates something new in him, arouses new drives and new anxieties.

Sterman (2000) explores issues surrounding adaptive thinking in face of complexity. Tushman and Anderson (1986) focus on adaptation in face of technological discontinuities in dynamic organizational environments. Watts, Drey, Ritter, Lawrence, and Sosa (2021) explore students' adaptability during COVID-19 pandemic navigating through the uncertainty of socially, professionally, and academically high stakes during this difficult time. Avila (2021) explores adaptability in a changing, uncertain, and complex era of COVID-19 induced change and vulnerabilities.

A zealous social system willfully strives to capitalize on and favorably attain control of its environment via adaptive function. It adjusts and modifies its internal structure and processes to respond to the requirements of its external environment. Zeal provides a system's adaptability to enable it to interact with the environment in such a way as to ensure its own will to survive and prosper. This is done by changing (1) the system's relation with the external environment, (2) its internal environment of the system to meet the requirements of the external environment, (3) both external and internal environments for a fit. Adaptability may involve a plethora of approaches, and some are listed below:

1. Avoid: Taking measures to shun difficult or unproductive environments
2. Comply: Going along with the changes and making the needed internal changes to comply
3. Compromise: Negotiating and incorporating changes that are feasible
4. Collaborate: Reaching for win-win solutions where both external and internal requirements are met
5. Innovate: Developing new skills sets and approaches to creatively deal with the environment beyond what is practiced
6. Disrupt: Introducing initiatives, policies, plans, actions, and offerings that deviates and discontinues the status quo and shifts the reality of the situation
7. Control: Reaching out externally to manage the flow and intensity of changes generated
8. Pre-empt: Anticipating and making the changes prior to anticipating external requirements

9. Resist: Expending energy to undermine, bypass and reduce the direction or intensity or direction of changes
10. Oppose: Taking an adversarial position to the changes and expend resources to divert them
11. Combat: Take a hostile position to the changes and expend energy to eradicate them and win
12. Abandon: Evacuate and leave environments that are hostile, unfavorable or unproductive

Copability

Jones, Hanton, and Connaughton (2002, 2007) suggest that coping refers to cognitive, emotional and behavioral internal capabilities in response to a situation that is stressful. Copability helps develop and maintain a system's core competencies, resources, enthusiasm, and psychosocial well-being facing internal stress and fragmentation. It helps develop and preserve its sense of identity, integrity, and ability to hold its own. It brings together disparate internal parts, integrates them, creates synergies, and empowers the system and its subsystems into a functioning cohesive intelligent whole. In gestalt theory (Koffka, 1935), the notion of unity, uniformity, or good continuation captures some aspects of copability. Bradley and Calvin (1956) refer to Le Chatelier's principle of system-embedded forces that restore the system as closely as possible to its original state. Festinger (1957) identifies this internal stabilization as "dissonance reduction" which deals with any change and disruption of the internal component parts and reduces the effect of change imposed by internal stress, strain, and disharmony. Greene, Galambos, and Lee (2004) explored and studied coping along conceptualizations of conditions that practitioners thought act as buffers to life stress and sense of identity. Dutton and Dukerich (1991) explore issues of image and identity in the adaptation process. Judge, Thoresen, Pucik, and Welbourne (1999) explored coping related dispositional traits; such as, locus of control, self-efficacy, self-esteem, positive affect, openness to experience, tolerance for ambiguity, and risk aversion. Consistent with prior studies Taha, Matheson, Cronin, and Anisman (2014) in their study of coping and the H1N1 epidemic found greater incidents of intolerance of uncertainty was associated to lower levels of self-control and problem-focused coping and greater reports of H1N1-related anxiety. Additionally, individuals with a high intolerance of uncertainty were more likely to perceive a pandemic as threatening and use emotion-focused coping strategies and experience elevated levels of anxiety.

Copability involves a system's ability to deal with the change of one's own self-concept, core cognitive processes (Kolasa, 1969) and accompanying emotions. Copability is proactive in diagnosing the internal change-induced dislocations related to structure, processes, technology, values, needs, purposes, feelings of disharmonies within and among the subparts and to address them. Nicholls, Polman, Levy, and Backhouse (2008) and Nicholls (2011) found that optimism was a good predictor of task-oriented coping. Culture is a powerful determinate of coping whereas pessimism was a good predictor of distraction and disengagement oriented coping. According to Goran, LaBerge, and Srinivasan (2017) regardless of industry, an important coping factor in changing the environment is the organization's risk appetite,

enthusiasm, and whether the executives can facilitate employees to cope with changes while making big enough bets to adapt in a changing environment. The narrow, parochial mentality of workers who hesitate to share information or collaborate across functions and departments can be corrosive to organizational culture and undermine enthusiasm and effective coping.

Copability may involve a plethora of approaches, some of which are listed below.

1. Resolving: Improving enthusiasm, optimism and morale by finding solutions to the change requirements and associated internal dislocations, disharmonies, and tensions
2. Arresting: Freezing the size and level of change and its possible dysfunctional impact on internal functioning
3. Reframing: Cultivating new ways of thinking about the issues for effective response and building positive affect and culture
4. Suppressing: Holding back and setting aside dealing with the concerns until such time that they can be dealt with effectively
5. Seeking support: Acquiring help and nurturance of others to address the internal issues and maintenance of enthusiasm
6. Restructuring: Rearranging and smoothing internal processes to gain greater efficacy
7. Realigning: Rationalizing use of internal resources to assure a more harmonious and coordinated positive functioning
8. Learning: Gaining knowledge, understanding, and new insights into the nature and scope of impediments and their resolutions
9. Reassuring: Regaining self-confidence in one's self and the team to effectively resolve the issues
10. Renewing: Acquiring new skills, behaviors, attitudes, and competencies to handle the issues and further encourage enthusiasm for doing the right things the right way
11. Reconfiguring: Reassessing internal functions and dysfunctional patterns of behavior and thinking and reworking them to achieve internal efficiency, well-being toward attaining positive results
12. Harmonizing: Building internal psycho-social-emotional support and relations to reduce anxiety and to improve enthusiasm, collaboration and team performance, and positive style.

Adaptability and Copability Compared

Adaptability constitutes efforts and patterns of activities to deal with external environmental conditions, requirements, opportunities, and demands. It focuses on ways of anticipating and addressing external changes and complexities. Copability is the ability to consciously or unconsciously maintain and develop an internal environment and a sense of identity, trust, and well-being. Both have important roles in developing, enhancing and sustaining the social systems' zeal. A comparison of these two key elements of zeal is presented in Table 1.

Table 1 - Adaptability and Copability Compared

Adaptability	Copability
Provides relevancy and fit with external environment	Provides internal integration within the internal environment
Involves boundary spanning and contraction	Involves internal maintenance within.
Directed to achieve deliberate overarching purposes in the external environment	Directed to achieve conscious and unconscious sense of internal dynamics, values, enthusiasm and well-being
Determined by external environment and others	Determined by internal environment and self
Involves trans-boundary change (importing & exporting change across boundaries)	Involves intra-system changes (renewal development of competencies, their maintenance and emotional well-being)
Search is outward-directed externally	Search is inward and introspective
Temporal orientation is from future to the present	Temporal emphasis is from past to present to future
Spatial emphasis is about "there"	Spatial emphasis is about "here"
Process function is dominated by sensory and empirical thinking	Process function is dominated by intuition and feelings, morale, and speculations
Thrust is toward the external environmental change of internal environment to fit the external conditions	Thrust is toward maintenance, alignment or integration, renewal and retention of internal culture, processes, and parts as a whole

Z-Factor and Leadership

Zealous social systems possess all three abilities and attributes of Z-factor comprising of the will to succeed, adapt, and cope. The competent integration of the three reduces the risk of failure under conditions of great adversity, complexity, and discontinuous/disruptive changes. There are ample cases of Z-factor leadership throughout history. Sometimes the call for success or sheer need for survival induces a social system to acquire Z-factor mastery of aforementioned competencies and discipline. Ernest Shackleton, a polar explorer, faced disaster that struck during his Trans-Antarctic expedition (1914-1917). His ship became stuck and immobile in ice in

the Antarctic and slowly crushed. He and his crew of 27 lived on the ice for months before traversing a stormy sea of ice floes across hundreds of nautical miles. The majority of his men were then left on desolate Elephant Island to fend for themselves while Shackleton and half-a-dozen of the crew traveled hundreds of miles further to Georgia Island. Arriving on the wrong side of the island, they traversed treacherous glacier-clad mountains to seek help. It took four attempts to find a reliable ship and return to Elephant Island for his men—all of whom survived. He led his crew to safety through zealous force of will, adapting to the harsh environment and coping with psychological stress, physical fatigue, hunger, and experiences of facing death, injuries, and seemingly insurmountable odds to survive. He was zealous to assure that his crew survived the hardship by impelling a strong will to overcome the difficulties, adapt to the harsh environment, capitalizing on sporadic opportunities in the face of limited and non-existent resources, taking calculated risks and appropriate action. He helped his crew cope by staying together through most of the ordeal and functioning to the best of their abilities as a team, supporting one another physically and emotionally facing duress and in view of physical and psychological setbacks and conflicts. Plus, he took personal responsibility for the slacker in the group unable to adapt or cope, rather than foist him on his crew and weaken their will to survive (Lansing, 1959).

After famously being fired from his own company, Steve Jobs' zeal inspired him to reinvent himself. The Z-factor was at work driving him to explore new options, reassess the landscape and eventually not only reclaim leadership of Apple, but invent the I-phone cluster of products and services as well as buy the forerunner of Pixar and influence the development of animation (Catmull & Wallace, 2014). His personal zeal then carried over into the entire corporate culture of his companies. In the face of global complexity and dynamic changes, technological disruptions, shifting customer preferences, and stakeholders' changing needs and priorities, his zeal for success was paramount.

Zealous social systems lead the transformation into new forms and processes. Often, transformation follows an evolutionary life cycle of development, growth, maturity, and decline. Each cycle of change produces challenges to be met adapting and coping with new and emerging conditions. The will to succeed and capabilities for adaptation and coping are key elements for success.

Z-factor social systems are capable of bringing about renewal, leading the transformation, and creating new forms and functions aligned with their core values and purposes. Z-factor enables leadership to drive innovation and bring about major transformations. Apple and Amazon have been relentlessly zealous in constantly transforming themselves and becoming multi-faceted technology companies. These social systems transformed themselves by vacating low value environmental niches and moving to more fertile arenas. A highly-calibrated, transformative zeal results in creativity, innovation, and entrepreneurship.

Summary and Conclusion

In a complex and dynamic world, zeal is the determining factor for success and prosperity. Zealous social systems possessing the Z-factor are easily identified and admired. Yet, there is

little evidence that underlying components of zeal and their synergistic power and effects are well understood. The above provides a framework embodying some of the essential factors that contribute to zeal.

Zeal is a system's capability to anticipate and respond to changing conditions, to capitalize on opportunities as well adversity toward achieving its will by adapting to new and changing conditions while aligning and harmonizing internal resources and capabilities. Transformative zeal is facilitated by redefining and reconstituting, integrating, and focusing a social system's capabilities for achieving its willful vision. It may involve vacating impoverished niches in the environment where the resources and need for services are declining and moving to where there is value in serving evolving and new stakeholders' needs. Zeal involves diligence in constant process of renewal in response to the external and internal environmental shifts or change and constitutes pro-active, enthusiastic efforts promoting anticipatory and willful adaptation and coping.

Adaptation is basic to a social system's zeal in dealing with its external environmental events and changes. Coping is a necessary internal adjusting process for maintenance and development of the system's sense of self and identity. Will is the motivational force for ultimate success through adapting and coping. It provides efficacy for overcoming challenges and capitalizing on opportunities externally and internally.

Social system consultants and practitioners play a critical role in facilitating, educating, and enabling client systems to refocus and renew the will to succeed, build, and develop competencies for greater adaptability and copability. For example, constructive inquiry brings focus and renews the will for success. It affirms the vision, mission, and over-arching purposes. Effective strategic planning contributes to adaptive interaction with external environment opportunities and threats plus simultaneous strengthening of internal capabilities and harmonious coping. Z-factor is an important attribute of any social systems operating in dynamic complex environments. It is the key element of success and renewal as conditions change

References

- Allen, J. (2016, July 5). Keeping the Zeal of Start Up Alive as You Scale. *Harvard Business Review*. <https://hbr.org/2016/07/keeping-the-zeal-of-a-startup-as-you-scale>
- Avila, A. (2021, January 1). Essential or Expendable During the COVID-19 Pandemic? A Student-Lived Experience on Grieving the Unjust and Early Deaths of Vulnerable Populations. *American Journal of Public Health*, 111, no. 1: pp. 66-68. <https://doi.org/10.2105/AJPH.2020.306001>
- Bradley, D. F., & Calvin, M. (1955). Behavior: Imbalance in A Network. O F Chemical Transformations. University of California Radiation Laboratory Printed: for the U. S. Atomic ... UCRLA 3203 Lawrence Livermore National Laboratory Yearbook of the Society for the Advancement of General System.
- Catmull, E., & Wallace, A. (2014). *Creativity, Inc.: Overcoming the Unseen Forces That Stand in the Way of True Inspiration*. Random House. <https://doi.org/10.21095/ajmr/2015/v8/i1/88250>
- Cordina, G. (2004a). Economic Vulnerability, Zeal and Capital Formation. In L. Briguglio & E. J. Kisanga (Eds.), *Economic Vulnerability and Zeal of Small States*, Islands and Small States Institute and Commonwealth Secretariat.
- Cordina, G. (2004b). Economic Vulnerability and Economic Growth: Some Results from a Neo-Classical Growth Modelling Approach. *Journal of Economic Development*, vol. 29:2.
- Dwyer, A. L., & Cummings, A. L. (2001). Stress, self-efficacy, social support, and coping strategies in university students. *Canadian Journal of Counselling*, 35(3), 208–220.
- Dutton, J. E., & Dukerich, J. M. (1991). Keeping an eye on the mirror: Image & identity in organizational adaptation. *Academy of Management Journal*, 34, 517-554.
- Festinger, L. (1957). *A Theory of cognitive dissonance*. Palo Alto, CA: Stanford University Press.
- Fromm, E. (1941). *Escape from freedom*. New York: Rinehart and Winston.
- Frankl, V. E. (1969). *Man's Search for Meaning*. New York: Simon & Schuster.
- Frankl, V. E., Gordon, K. A., and Coscarelli, W. C. (1996), Recognizing and fostering zeal. *Nonprofit Management Leadership*, 35: 14–17. doi:10.1002/pfi.4170350906
- Goran, J., Laura LaBerge, L., & Srinivasan R. (2017). Culture in Digital Age. *McKinsey Quarterly* July. <https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/culture-for-a-digital-age?cid=other-eml-ttn-mkq-mck-oth-1712>
- Gordon, E.W., & Song, L. D. (1994). Variations in the experience of resilience. In M. C. Wang, & E. W. Gordon, (Eds.), *Educational resilience in inner-city America: Challenges and prospects* (pp. 27–43). Hillsdale, NJ: Erlbaum.
- Greene, R., Galambos, C., & Lee, Y. (2004). Resilience Theory: Theoretical and Professional Conceptualizations. *Journal of Human Behavior in the Social Environment*, Vol. 8, [Iss 4](#): 75-91. Published online: 25 Sep 2008. DOI: https://doi.org/10.1300/J137v08n04_05
- Jones, G., Hanton, S., & Connaughton, D. (2002). What is this thing called mental toughness? An investigation of elite performers. *Journal of Applied Sport Psychology*, 14, 205–218.
- Jones, G., Hanton, S., & Connaughton, D. (2007). A framework of mental toughness in the world's best performers. *The Sport Psychologist*, 21, 243–264.

- Judge, T. A., Thoresen, C. J., Pucik, V., & Welbourne, T. M. (1999). Managerial coping with organizational change: A dispositional perspective. *Journal of Applied Psychology*, 84(1), 107–122. <https://doi.org/10.1037/0021-9010.84.1.107>
- Koffka, K. (1935). *Principles of Gestalt psychology*. New York: Harcourt, Brace and World.
- Kolasa, B. J. (1969). *Introduction to behavioral science for business*. New York: John Wiley.
- Lansing, A. (1959). *Endurance: Shackleton's Incredible Voyage*. New York: Carroll & Graf Publishers, Inc.
- Nicholls, A. R. (2011). Mental Toughness and Coping in Sport. In D.F. Gucciardi, & S. Gordon, (Eds.). *Mental Toughness in Sports*. New York: Routledge Research in Sport Exercise Science (pp. 30-46)
- Nicholls, A.R., Polman, R.C.J., Levy, A.R., & Backhouse, S. H. (2008). Mental Toughness, Optimism, Pessimism, and Coping Among Athlete. *Personality and Individual Differences*, 44, pp. 1182-1192. <https://doi.org/10.1016/j.paid.2007.11.011>
- Piaget, J. (1932). *The moral judgment of the child*. New York: The Free Press, (1965 edition).
- Pike, A., Dawley, S. & Tomaney, J. (2010) Resilience, adaptation and adaptability. *Cambridge Journal of Regions, Economy and Society*, Vol. 3, Iss. 1, pp.59
<https://www.tandfonline.com/doi/full/10.1080/18387357.2020.1792633>
- Reupert, A. (2020). Change and (the need for) adaptability: the new normal. *Advances in Mental Health*, 18:2, 91-93. <https://doi.org/10.1080/18387357.2020.1792633>
- Taha, S., Matheson, K., Cronin, T. & Anisman, H. (2014). Intolerance of uncertainty, appraisals, coping, and anxiety: The case of the 2009 H1N1 pandemic. *British Journal of Health Psychology*, September, pp 592-605. <https://doi.org/10.1111/bjhp.12058>
- Watts, J., Gonzales, R., Drey J., Ritter, E., Lawrence, W., & Sosa, P. (2021). Adaptability, Change, Hope: Student Perspectives During the COVID-19 Pandemic. *American Journal of Public Health* January.
<https://ajph.aphapublications.org/doi/full/10.2105/AJPH.2020.306033>