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# A Multidisciplinary Framework for Measuring and Improving Wellbeing

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# Abstract

Wellbeing is a critical multidisciplinary concept for a better future. In defining wellbeing as a balance point between resources and challenges, autonomy and intensity, as well as support and demand, we can see the dynamic nature of wellbeing. It is critical to understand the relevant realms of wellbeing for different individuals and systems. To achieve wellbeing it is important to understand all the players involved in creating and sustaining wellbeing. Incorporating theory and current research it is clear that any system to measure, understand, or increase wellbeing must contain multidisciplinary theories and findings, incorporate coresponsibility and appreciative inquiry, and include feedback loops that allow for accurate daily measurement of the challenges and resources available on any given day. The purpose of this paper is to integrate a new definition of wellbeing with theory and research from multiple disciplines to create a framework for the real world practice of measuring wellbeing.

<b>Keywords:</b>	wellbeing;	multidisci	olinary; 1	fit; app	reciative;	co-resp	ponsibility;	environment

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# 1. Introduction

There is a parable about three blind men, who are all feeling an elephant, and as they each are examining a different part of the pachyderm, they argue with each other about what an elephant really is. Despite their differing experiences, they are each correct, and there is even more to an elephant than what can be touched or seen. The same is true of wellbeing. Different fields of study use different vocabulary and models to understand the complexity of wellbeing, and they are all correct – plus there is still much more to discover. Over the past decade, there has been a growth and convergence of research on wellbeing in many disciplines including: positive psychology [1], philosophy of focusing on the common good (Ahuvia et al., 2015), the role of nutrition in wellbeing [2], economics of happiness [3], wellbeing in policy [4], neurobiology of happiness and wellbeing [5], education focused on happiness [6], and wellbeing in relation to our environment [7]. There is also evidence of incongruence between experimental research and real world practice [8]. "Wellbeing is a multi-disciplinary concept, which requires integrative, multi-disciplinary, system-wide analysis and interventions" [9]. Research demonstrates a need for an integrationist approach that considers all parties involved in wellbeing [3, 10], this includes individuals as well as institutions [11-13] and also the ecosystem we live in [9]. It is critical that more attention be placed on the wellbeing of individuals, groups, systems, and the environment. [9-11, 14, 15].

There is a significant need for a research-supported framework that is grounded in theory to measure, understand, and increase wellbeing. The proposed framework is built upon many theories including social cognitive theory [16], social exchange theory [17, 18], and the dynamic equilibrium theory of wellbeing [19]. Additional research essential to the framework design includes quantum leadership [20, 21], a systematic feedback loop [10, 22], appreciative inquiry [23-27], positive interventions as well as customized fit [28], coresponsibility [10] and the demand-control-support (DCS) model of workplace health [29]. In reference to wellbeing, Renee Baptiste warns, "The general understanding of the construct needs to be firmly grounded in theory and supported by empirical research" [48].

# 2. Defining wellbeing

Recent research has demonstrated the difference between defining wellbeing [30], and the inputs and outputs associated with high and low levels of wellbeing [3, 10, 12, 28, 31, 32]. Dodge, Daly, Huyton, and Sanders in reference [30] assert that most definitions of wellbeing have focused on the dimensions and examples of wellbeing, rather than a definition. The authors use dynamic equilibrium theory of wellbeing to create the definition of wellbeing as the balance point between the resources and the challenges of an individual. The authors stress that their new definition focuses on optimism, and allows for measurement [30]. Other theories of wellbeing from research done in the workplace refer to the need for a balance between the demands of the job, the support available, and the amount of control that an employee has [29]. Research focused on knowledge-based jobs has found for the need for balance between autonomy and intensity [9]. Boxall and Mackey assert, "No matter where a person's job is located in the occupational spectrum, excessive pressure can undermine their well-being while greater autonomy, and supportive processes, can enhance it [33]. Wellbeing is a balance point between support, resources, and autonomy with challenges, demand, and intensity, see figure 1. In order to deal with greater demand, or higher challenges, or greater intensity- it is critical to have increased support, resources,

and autonomy.

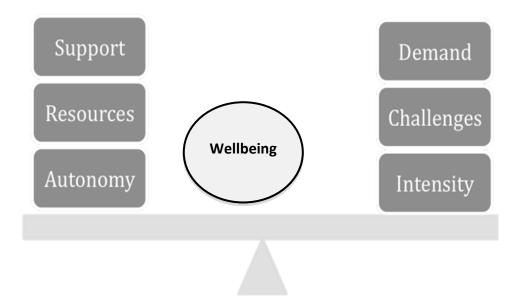


Figure 1: Defining Wellbeing

In Figure 1 Wellbeing is achieved when an individual or system finds a balance between their support, resources, and autonomy and the demand, challenges, and intensity of the task at hand. A change on one side will change the balance. In order to increase wellbeing, it is critical to know if there is need for more demand, challenge, or intensity or if an individual or system needs more support, resources, or autonomy.

In order to deal with greater demand, or higher challenges, or greater intensity- it is critical to have increased support, resources, and autonomy. Equally, it is important to understand that a lack of challenge could well lead to 'stagnation' [34] which will also affect the balance point of the see-saw. When considering both ends of the seesaw the aim for balance echoes Mihaly Csikszentmihalyi's [35] concept of 'flow' – 'the state in which people are so involved in an activity that nothing else seems to matter' [36:4], which in turn leads to increased wellbeing. Building on this concept Nakamura & Csikszentmihalyi consider both sides of the see-saw when they suggest that the optimal state of 'flow' is achieved when individuals engage in an activity that has a 'just-manageable' level of challenge [37]. This level of challenge allows the individual to still feel in control but also allows them to be absorbed in the activity – therefore experiencing flow.

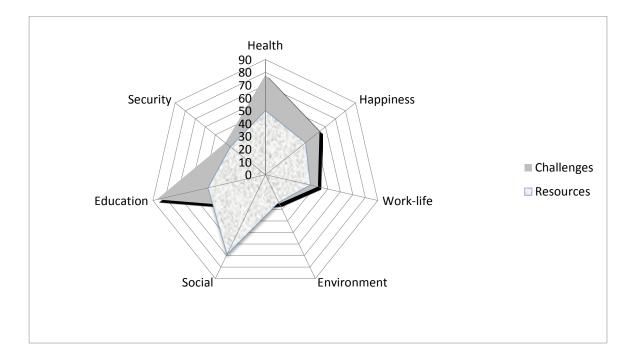
# 3. Dimensions of wellbeing

Wellbeing is a multidisciplinary construct. There are many aspects of daily life that contribute or detract from wellbeing. The Millennium Ecosystem Assessment in 2003 defines human wellbeing as, "a multidimensional concept encompassing material wealth, health, safety and security, good social relations, and freedom of choice and actions," [38]. The OECD created a Better Life Index that measures 11 different realms of wellbeing including: Housing, Income, Jobs, Community, Education, Environment, Civic Engagement, Health, Life

Satisfaction, Safety, and Work-Life Balance [39].

There is no one formula for wellbeing that will work for all people. "The degree to which a framework or tool to promote wellbeing resonates and has cultural validity with the people to whom it is meant to apply, will impact on the degree to which it is taken up [9]. Research asserts the need for cultural and organizational fit for any intervention to be successful [8, 40]. There is a need for fit with the realms of wellbeing [9], the measurements used [41], and the interventions used [28]. Researchers have found that interaction of activity and individual traits will determine the effectiveness of an intervention [8]. Different realms of wellbeing may be more important for some individuals or systems as compared to other groups and systems.

Aside from multiple realms of wellbeing, there are also many dimensions to wellbeing. Accurate measurements of wellbeing must include a variety of indicators. Indicators should include internal as well as external indicators [10], subjective as well as objective questions [42], and measurements of global as well as hedonic wellbeing [43]. "Happiness emerges from the interaction of inner and outer conditions. External conditions provide potentials for happiness and internal processes act as filters for real world experience. The two processes mutually affect each other,"[10]. It is the interaction of multiple realms of wellbeing that creates a positive upward wellbeing spiral [44]. Rather than thinking of a balance as an equilibrium in a two dimensional measurement, we must look at measuring and balancing the challenges as well as the resources in each of the realms of wellbeing – see Figure 2.



**Figure 2:** sample graphic of a measurement of both the resources and challenges for multiple realms of wellbeing

Figure 2. Demonstrate a sample graphic of a measurement of both the resources and challenges for multiple realms of wellbeing. It is clear to see where the challenges are greater than the resources available, and it is also clear to see where the resources are exceeding the challenges. It is critical to think of wellbeing measurements at

multidimensional.

#### 4. Stakeholders

Wellbeing research provides insights about how and to what extent institutions have systematic effects on indicators of individual well-being [45]. As a large portion of the adult week is spent in the work place [46, 47], employers play a large role in wellbeing [11, 29, 48]. There is mounting evidence of the benefits of promoting wellbeing in the workplace [11, 14, 48]. Helliwell and Huang [46] found that for, "union members, trust in management is as important as income in explaining life satisfaction, while for non-members it is twice as important". Several job characteristics are significantly correlated with trust in management, these include: variety of tasks, time available, freedom from conflicting demands, making one's own decisions, and a sense of job security [46]. A study found that the strategy of reorganizing work-places to facilitate employee participation and control offers a potential means of improving employee health and wellbeing [29]. Employers and managers have a direct influence over wellbeing because they influence the resources, support, and autonomy as well as the challenges, demands, and intensity of systems that involve employees, businesses, countries, and ecosystems.

Another critical aspect of wellbeing is the environment. The health and wellbeing of the planet has a direct connection to the wellbeing of all plants and animals, including humans. Many researchers advocate for considering the ecological economics prospective [7, 9, 10] and for increasing the importance of the environment and environmental wellbeing [9]. Research has found the importance of natural settings to human wellbeing [7]. Any assessment of human wellbeing must also consider the wellbeing of the planet.

Many researchers have stressed that the greatest happiness principle deserves a more prominent place in policy making [32, 45, 49]. Many have argued that the role of the government should be to maximize happiness and wellbeing [32, 45, 49]. Some governments, such as Bhutan are actively promoting policy to focus on wellbeing [9, 10]. Research has demonstrated that governmental decisions that influence Housing, Income, Jobs, Community, Education, Environment, Civic Engagement, Health, Life Satisfaction, Safety, or Work-Life Balance also influence individual wellbeing [4, 9, 13, 31, 45].

Research demonstrates a need for an integrationist approach that considers all parties involved in wellbeing [3, 10], this includes individuals, institutions, employers, governments, [11-13], and also the ecosystem we live in [9, 15]. "Wellbeing is both conceptually and empirically a very different thing when examined from the scale of an individual, of a local community, of a nation, of a region, or from a global perspective," [9]. A multidisciplinary framework for wellbeing is critical for employees and employers, politicians, educators, citizens, and our planet, and it is dependent upon co-responsibility [10].

# 5. Multidisciplinary wellbeing framework

While many can agree that happiness and wellbeing are good principles and goals [50], there is a lack of system or framework that includes multidisciplinary insight [9]. The proposed multi-disciplinary wellbeing framework is based on social cognitive theory, social exchange theory, and dynamic equilibrium theory. Bandura argued

that development involves Triadic reciprocal determinism that involves environment, behavior, as well as cognition [16]. Social cognitive theory asserted that three main factors, self, environment, and behaviors influence people. Homans in [17] defined social exchange as the exchange of activity, tangible or intangible, and more or less rewarding or costly, between at least two persons. Social behavior and the forms of social organization produced by social interaction involve examining how A's behavior reinforced B's behavior (in a two party relation between actors A and B), and how B's behavior reinforced A's behavior in return [18]. Dynamic equilibrium theory of wellbeing proposes that life events influence SWB over and above the effects of personality. In a dynamic equilibrium model, each person is regarded as having "normal" equilibrium levels of life events and subjective wellbeing (SWB), predictable on the basis of age and personality. Only when events deviate from their equilibrium levels does SWB change [19]. These three theories all propose that individual wellbeing is dependent upon a dynamic relationship with the people around them, their environment, and their self.

There are four stages of the proposed multidisciplinary wellbeing framework, see Figure 3. First there is discovery, which involves measurement of wellbeing, in this stage it is critical that this measurement includes the challenges and resources for multiple branches of wellbeing. Second, there is evaluation of the measurements; this evaluation should involve multiple stakeholders from the individual to the collective. Next stakeholders participate in design, where positive researched based interventions are selected based on the needs of the system as well as the cultural fit of the interventions. Finally there is action; individuals and groups take co-responsibility for changing patterns and behavior in order to maximize personal and global wellbeing.

# 6. Strengths of framework

The benefits of the proposed wellbeing framework include a multidisciplinary perspective, appreciative approach, customized fit, and co-responsibility. This framework takes what was intended as a theory based definition into the realms of practice. The framework combines research from psychology, leadership, quantum theory, appreciative inquiry, cognitive neuroscience, and wellbeing research. The proposed wellbeing framework also responds to the criticism of the Families Commission [51] that the Dodge et al definition seemed 'fraught with operational problems'. The proposed framework uses aspects of appreciative inquiry such as the discovery and design stages of the cycle [24]. The framework encourages positive framing and focus on the positive. While there is structure to the framework, it is flexible enough to allow for customized fit [28]. Finally, unlike many programs to increase wellbeing, the responsibility for change is not only on the individual or only on leadership, there is a feature of co-responsibility [10] in measuring, understanding, and improving wellbeing.

This framework in figure 3 depicts 4 different stages, as well as key concepts for effective measurement and improvement of wellbeing. Regular measurement is followed by an evaluation of the findings in which all stakeholders are involved. Then wellbeing options are selected for the individual as well as the organization. Finally action is taken to improve wellbeing.

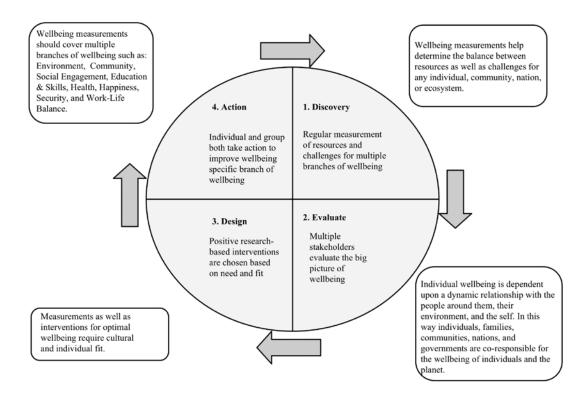


Figure 3: Multidisciplinary Framework to Measure Wellbeing

### 7. Conclusion

The purpose of this study was to integrate a new definition of wellbeing with theory and research from multiple disciplines to create a framework for the practice of measuring wellbeing. Wellbeing is a complex balance between the resources, support, and autonomy of an individual with the challenges, demands, and intensity they face. It is critical that there be enough on both sides of the equation so that stagnation does not occur. Wellbeing itself is a multi-dimensional concept that includes many different subjective realms; these include health, happiness, work-life, skills, social connections, environment, and security. There is no one formula for wellbeing, for any intervention to be successful it is critical to have an element of fit. The measurements as well as solutions need to be customized for the individual or group. Multiple stakeholders are responsible for wellbeing, these includes an individual, their employer, their community, their government, and the global stakeholder, humanity. This is a demonstration of entanglement, as all stakeholders are co-responsible for their own wellbeing and the wellbeing of others.

More research is needed to improve the framework into a useable protocol. Limitations to this framework include a lack of examples of groups such as governments of businesses working collaboratively and collectively with individuals to understand and improve wellbeing. More research is needed to understand how to create an accurate combination of metrics to assess wellbeing. One problem to be addressed is how to create

individual fit with regard to measurements and interventions while also creating generalized results. It is critical to define research supported measurements as well as interventions for each of the different areas of wellbeing as well as each of the subareas. More research is needed to understand how a multidisciplinary theoretical framework influences wellbeing outcomes.

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