

Extended Abstract

Well-being Oriented Policy Making: Synergies between the Capability Approach and System Dynamics

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Governments worldwide are increasingly using well-being as a guiding concept for policy-making, drawing on both theoretical and empirical insights from well-being science. Notable applications include well-being indices like the United Nations Human Development Reports, which have shifted policy focus from purely economic measures to broader well-being perspectives. However, most policy applications of well-being science are limited to monitoring, goal setting, and evaluation, with few practical methods for addressing specific well-being issues.

The increasing emphasis on well-being in policy-making necessitates robust frameworks and methodologies to support the development and preliminary assessment of well-being science-based policies. Despite this focus, practical methods for such policies remain scarce. This paper explores the potential of merging the Capability Approach (CA) with System Dynamics (SD) to address this gap.

Well-being-oriented policy-making is challenging due to the tightly coupled nature of well-being dimensions, diverse stakeholder interests, and the complex effects of interventions. Efforts to improve one aspect of well-being may lead to unintended consequences for other aspects or societal groups. Current analytical techniques are insufficient for formulating well-being-oriented policies that address contemporary issues such as congestion, troubled neighborhoods, or pandemic responses. This paper identifies synergies between the CA and SD methodologies to support policy formulation and evaluation.

The Capability Approach (CA), introduced by Amartya Sen, provides a theoretical foundation for understanding well-being by focusing on the freedoms individuals have to achieve what they value. This approach is highly relevant for policy-making aimed at enhancing well-being. However, the application of CA in policy formulation, especially concerning the temporal dynamics of well-being, is limited due to the complex interactions among its elements. System Dynamics (SD), on the other hand, is a methodology used to understand and analyze complex systems and their temporal behaviors, making it a valuable tool for studying well-being issues. Integrating these two approaches can provide both theoretical and practical benefits, facilitating well-being-oriented policy-making.

The Capability Approach (CA)

The CA conceptualizes well-being as the freedom to achieve valued states of being and doing, focusing on capabilities (the opportunities to achieve) and functionings (the realized achievements). This framework evaluates individual well-being and social arrangements, offering a normative basis for policy design aimed at enhancing individual freedoms. Policy applications of the CA should increase the opportunities for valued functionings through enhancing capabilities, improving conversion factors (the means to convert resources into capabilities), or altering structural constraints (social, cultural, legal factors).

Integrating CA and SD

The integration of CA and SD offers several advantages:

1. **Dynamic Complexity:** SD provides tools to model and simulate the complex interactions and temporal dynamics of CA components, enhancing the understanding of how well-being problems develop and identifying effective policies.
2. **Feedback Loops:** SD emphasizes feedback mechanisms, crucial for understanding and influencing the interdependent nature of well-being components. This can help in identifying reinforcing or balancing feedback effects, essential for policy design.
3. **Participatory Approach:** Both CA and SD value stakeholder involvement. SD's participatory techniques align well with CA's emphasis on inclusion, ensuring that policy formulations consider diverse perspectives and are grounded in real-world contexts.

Example Model

The paper presents a generic framework and an example model combining CA and SD to illustrate their synergies. The model focuses on mobility, employment, and competence, demonstrating how SD can be used to simulate the accumulation, feedback, and delays in well-being components. For instance, increasing mobility resources (e.g., public transport) can enhance employment opportunities, which in turn can improve competencies, creating a virtuous cycle of well-being improvements.

Procedure for Application

To facilitate the practical application of the integrated CA-SD approach, the paper outlines a step-by-step procedure:

1. **Define Well-being Dimensions:** Establish a shared understanding of well-being and select relevant dimensions.
2. **Identify Problems:** Define gaps between actual and desired states of well-being.
3. **Model Development:** Use SD techniques to develop a dynamic hypothesis of the problem, incorporating CA components.
4. **Policy Goals:** Set well-being goals based on the dynamic model.
5. **Formulate Interventions:** Develop policy interventions to achieve the set goals.
6. **Evaluate Policies:** Use the SD model to simulate and evaluate the effectiveness of policy options.
7. **Decision-making:** Choose the most effective policy interventions based on simulation results and stakeholder input.

Conclusion

Integrating CA and SD provides a framework for well-being-oriented policy-making, addressing the complexity and temporal dynamics of well-being issues. This approach facilitates the development of effective policies that enhance individual freedoms and well-being. Future research should focus on testing and refining this integrated approach, ensuring its practical applicability across various well-being challenges.