A Cognitive Field Approach to Extension and Monitoring: NPK Versus KASA

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Introduction

The problem facing Extension is the lack of a sound, useful and appropriate behavior model that allows for purposeful behavior intervention through selected behavior determinants, which are the direct causes of behavior change and can simultaneously serve as criteria of change and thus for ongoing monitoring.

The Model

The assumptions of the above model are that

- the various behavior determinants occur at different positions on the independent/dependent continuum, and that the more dependent or intervening they are, the more useful they are for predicting behavior;
- the effect of most behavior determinants (independent variables) become manifested in decision making or adoption behavior via the mentioned intervening variables,
- the identified variables or behavior determinants (NPK) are of an intervening nature and the immediate precursors of behavior. (Some of the KASA variables do not meet this requirement.)
- any significant influence emanating from the various more independent variables is encapsulated in the identified intervening variables (NPK)
- the mediating or intervening variables can be associated with forces of change (Lewin, 1951), whereby positive forces or driving forces lead to change, while negative or restraining forces oppose or prevent change.

Results and Conclusions

Evidence supporting the appropriateness and usefulness of the model is the close correlation between the identified mediating variables (needs, perceptions and knowledge) and adoption behavior, which appears to be stronger than in the case of more independent variables. The phenomenon of intervening variables could be the key to explaining some inconsequent and contradicting research findings regarding behavior determinants.
For purposeful or promotional intervention, the model provides an effective framework for analyzing adoption behavior, a focus for extension inputs (message formulation) and criteria for meaningful monitoring. The model, although making provision for the complexity, uniqueness and situation specificity of human behavior, is useful in analyzing adoption behavior. The model was found to be very useful for adoption behavior analysis.