Moderating the stressor to strain relationship in multidisciplinary secondary health care: A multi-level analyses

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Introduction

• The study aims to provide information to health care providers and policy makers in understanding the relationship between stressors in secondary health care and individual health care professionals’ strain reactions.

• I will attempt to achieve this aim by examining the potential buffering properties of individual health professional, multi-professional group and contextual factors in a continuum of secondary health care settings in moderating the stressor-strain relationship.

Introduction

• The purpose of the study is to examine the impact that three groups of factors – individual, group and contextual, have on the relationship between the stress in hospitals and the strain on individual health care professionals.

Introduction - the job stressors

• Organisational support
• Role ambiguity
• Role clarity
• Role conflict
• Role stress
• Stressful events
• Workload
• Work pressure
• Physical comfort
Introduction – the moderators

The three groups of moderating factors are:

- **Contextual factors** – criticality along the continuum of secondary health care in terms of:
  - timeliness of output and
  - tolerance to error.

- **Individual factors** –
  - Professional background
  - Academic background
  - Years of experience
  - Continuing professional development

- **Group level factors** –
  - Leadership clarity
  - Leadership style
  - Team climate: group cohesion, collaboration, communication, collective efficacy

Introduction – Physical, Psychological and Behavioural strain reactions

The strain reactions on individual health care professionals can be measured in terms of:

- Physical and psychological well-being
  - Job satisfaction
  - Burn-out
  - Absenteeism
Hypothesis 2: Leadership clarity and style as Unit-level Predictors

- Hypothesis 2a: In a Unit, leadership clarity will moderate the relationship between stressors and strain. Health care professionals exposed to various types of stressors show lower levels of strain in Units with clear leadership than those where there is no clarity of leadership.

The Moderator Model (Baron & Kenny, 1986)

The moderator model has three causal paths that feed into the dependent variable:
- The impact of Stressors as predictors - Path A
- The impact of the various moderators in the model e.g., leadership style and clarity; team climate and factors; criticality; individual differences; professional differences - Path B
- The interaction of predictor-moderator – Path C
The Moderator Model
(Baron & Kenny, 1986)

The moderator hypothesis is supported if:
• the interaction i.e. Path C is significant.
• There may also be significant main effects for the predictor and the moderator i.e. Paths A and B. But these are not directly relevant conceptually to testing the moderator hypothesis.
• It is desirable that the moderator variable is uncorrelated with both predictor and criterion (dependent variable) to provide a clearly interpretable interaction term.
• Moderators and predictors are at the same level in that they are causal variables antecedent or exogenous to certain criterion effects.
• Moderators unlike mediators always function as independent variables.

Hierarchical linear modelling

• A multiple regression analysis method in which the researcher, not a computer program, determines the order that the variables are entered into and removed from the regression equation. Perhaps the researcher has experience that leads him/her to believe certain variables should be included in the model and in what order.
• Typically when regression is used without qualification, the type of regression is assumed to be linear regression. This is the method of finding a linear model for the dependent variable based on the independent variable(s).

Research Setting
A four-level Analytic Approach

• Health Care Professionals working in Secondary Health Care in Malta -
• A four-level analytic approach is adopted namely individual health care professionals coming from different disciplines nested within units, which in turn are nested within departments, which in turn are nested within organisations.
• Multi-level random coefficient models will be used to test hypothesis to look for cross-level moderation effects (Bliese & Britt, 2001)

Units of analysis

- Organisations - hospital
- Departments
- Units
- Individual Health Care Professionals
Strain-stressor relationship

Leadership

- Leadership makes a difference in the stressor-strain relationship
- Leadership impacts team climate
- Leadership impacts cohesion i.e. the extent to which individuals in team/unit react to each other
- Leadership impacts on individuals i.e.
  - Leader-member exchange
  - Transformational leadership

Conclusion

- Next step in research would be the relationship between strain and performance outcomes