Reviewer's report

Title: The Relationship between Social Capital in Hospitals and Physician Job Satisfaction

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Reviewer: F agnew

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This study aims to examine the relationship between physician job satisfaction and social capital in German hospitals. Social capital, defined as the existence of a common value base, trust, and reciprocity, was measured by a 6-item scale, while job satisfaction was measured by a single item. The results suggest that social capital represents a significant predictor of job satisfaction of physicians, after controlling for socio-demographic factors and subjective workload.

The topic is interesting and the study has its own strengths (e.g., it applies statistical techniques that incorporate multiple independent variables, entered in a hierarchical fashion, where each subset of variables is followed by another block of variables entered into the regression model). Yet, I have some points to make which I hope that the authors will find of help.

MAJOR COMPULSORY REVISIONS

Introduction

1) In the introduction, the authors describe the various factors that may affect physician job satisfaction (e.g., workload, growing patients’ needs, autonomy, salary, vocational training). However, a formal definition of job satisfaction is missing. The authors should provide such a definition.

2) The authors should update their literature review on physician social capital, including some additional recent references (e.g., Salvatore, 2006; DiCicco-Bloom et al., 2007; Waisel, 2005).

3) A critical review on the relationship between social capital in hospitals and physician job satisfaction should be added.

4) The gap in the knowledge base should be identified and a description of how the present study might contribute to the existing body of knowledge should be given.

Methods

5) A description of sampling criteria (inclusion/ exclusion criteria) and the sampling method used should be presented.

6) The total number of physicians who responded to the poll (N= 277) should be clearly stated in the Abstract, while in the Methods section the authors should clarify whether all 277 physicians provided complete questionnaires (which is unusual). Moreover, the authors should note that the reported response rate (i.e.,
62.2%) does not refer to that of the physicians (a notion that is repeated on page 13) but to that of the employees participating in the whole CoBI project. Thus, the response rate corresponding to the present study should be presented, instead.

7) Ethical issues (e.g., informed consent obtained, ethical approval granted) should be presented in the Methods section.

8) Details regarding the psychometric properties (reliability and validity) of the instruments used to measure job satisfaction and social capital should be reported.

9) In measuring job satisfaction, the authors used a single item, covering satisfaction from working conditions, colleagues, working time, etc. The authors should justify their choice and decision, given that literature reviews (e.g., van Saane et al., 2003) suggest that multi-item, multi-dimensional instruments measuring job satisfaction are preferable. Such instruments (e.g., Measure of Job Satisfaction, Traynor & Wade, 1993) meet psychometric quality criteria (internal consistency reliability, convergent validity) while they include most of the factors (e.g., professional support, prospects and training, financial rewards) that are considered necessary for good content validity.

Results

10) Regarding collinearity diagnostics, the magnitude of the intercorrelations among variables, is just one of the indicators for this problem. However, multicollinearity can exist even when none of the correlation coefficients is very large. Thus, the authors should examine presenting additional indicators such as the tolerance of the variables and the variance inflation factor.

11) In order for a multiple linear regression analysis to be appropriate, it is important to conduct a search focused on residuals to look for evidence that the necessary assumptions are not violated. For example, if the assumptions of linearity and homogeneity of variance are met, there should be no relationship between the predicted and residual values, and the residuals should be randomly distributed in a band about the horizontal straight line through zero. If the assumption of normality is met, then the cumulative probability plot of the residuals (observed vs expected under the assumption of normality) should result in a straight line. Thus, the authors should report results on the possible violation of assumptions.

Discussion

12) The authors should present research findings of other investigators that fail to support or provide support to their own findings.

13) Regarding the implications of the present research for practice, the authors should consider suggesting interventions implemented or designed not only on the individual level (physicians/leaders) but also on the organizational level. For example, hospital settings should be designed so that there is ample interaction and cooperation among health professionals, emphasizing trust, reciprocity, alliances, bonding, and shared understanding, while promoting organizational justice and conflict resolution.
Tables and Figures
14) Tables 1 and 2 may be redundant and their content could be included in the text.
15) Regarding Table 3, the reported percentages should be corrected. For example, the percentage that corresponds to visceral and vascular surgery should be 20.6, while that corresponding to neurology should be 14.4.
16) Table 5: Since gender is a nominal variable, Pearson correlation coefficient between this variable and the rest of them is not the appropriate statistic.
17) Table 6: The column named “non-standard. coefficients” should change to “unstandardized coefficients”. Moreover, the R2 changes should be corrected: .093 should change to .091, and .185 should change to .186. Finally, the title of this table should change from “…stepwise multivariate..” to “…hierarchical multiple….”.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:
'I declare that I have no competing interests' below