Organizational social capital and health

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Organizational social capital (OSC)

- “collaborative capabilities of the company based on trust and justice” (*TSK, 2010*)
- “overall binding factor acting as a connecting matrix between the different people and their jobs”
- measured by 3 dimensions
  - vertical trust
  - justice
  - social community
OSC-scale

● **vertical trust**
  1. *does the management trust the employees to do their work well?*
  2. *can you trust the information that comes from the management?*

● **justice**
  3. *are conflicts resolved in a fair way?*
  4. *is the work distributed fairly?*

● **social community**
  5. *is there good co-operation between the colleagues at work?*
  6. *do you feel part of a community at your place of work?*  
   *(is there a good atmosphere between you and your colleagues?)*

● **scale: 0-100 (0-24)**
OSC and health

● individual level
  ● “classical” approach
  ● individual perception of OSC
  ● risk estimates (OR, RR, cross-sectional, longitudinal, …)

● group level
  ● organization
  ● work units
OSC and health
Individual level

- self rated health (Oksanen et al., 2008; Suzuki et al., 2010)
- well-being and health in staff (Kouvonen et al., 2008)
- emotional exhaustion in clinicians (Driller et al., 2010) and hospital nurses (Kowalski et al., 2010)
- hypertension (Oksanen et al 2012)
- depressive symptoms (Jung et al 2012)
- depression (Kim et al 2012)
OSC in nursing homes

● 239 (81% participation) nurses, geriatric helpers in nursing homes

● relation between OSC (0-100)
  ● ‘gossip and slander’ (12-m exposure)
  ● ‘quarrels and conflicts’ (12-m exposure)
  ● sick leave (in last 12 months)
  ● poor work ability (WAI < 37)
OSC in nursing homes

- multivariate logistic regression analysis
- corrected for
  - age
  - gender
  - physical work load
  - emotional work demands
  - job insecurity
  - full/part time work
  - shift work
  - job task
<table>
<thead>
<tr>
<th>considered outcome</th>
<th>n</th>
<th>OR</th>
<th>(95%CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>gossip and slander</td>
<td>235</td>
<td>0.96</td>
<td>(0.94-0.98)***</td>
</tr>
<tr>
<td>quarrels and conflicts</td>
<td>235</td>
<td>0.98</td>
<td>(0.96-1.00)*</td>
</tr>
<tr>
<td>sick leave</td>
<td>236</td>
<td>0.98</td>
<td>(0.96-1.00)*</td>
</tr>
<tr>
<td>poor work ability</td>
<td>236</td>
<td>0.98</td>
<td>(0.95-1.00)*</td>
</tr>
</tbody>
</table>
OSC in public sector

- 1238 employees (81% participation)
- OSC (0-100) and good work ability (WAI $\geq$ 37)
- multivariate logistic regression analysis
- corrected for age, gender, job task and need for recovery
OR for **good** WAI in public sector

\( (n=1223) \)

<table>
<thead>
<tr>
<th></th>
<th>OR</th>
<th>(95% CI)</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSC (0-100)</td>
<td>1.02</td>
<td>(1.01-1.04)</td>
<td>&lt;0.000</td>
</tr>
<tr>
<td>NFR score (0-11)</td>
<td>0.75</td>
<td>(0.71-0.79)</td>
<td>&lt;0.000</td>
</tr>
<tr>
<td>age</td>
<td>0.98</td>
<td>(0.96-1.00)</td>
<td>0.022</td>
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</table>
WAI and OSC

The chart compares the mean OSC scores for poor or moderate work ability and good work ability. The mean OSC for poor or moderate work ability is 59.0, and for good work ability, it is 68.7.
<table>
<thead>
<tr>
<th></th>
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<th>(95% CI)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSC 0-49</td>
<td>1.55</td>
<td>(0.90-2.67)</td>
<td>0.116</td>
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<tr>
<td>OSC 50-59</td>
<td>3.08</td>
<td>(1.60-5.93)</td>
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<tr>
<td>OSC 60-69</td>
<td>2.44</td>
<td>(1.40-4.25)</td>
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<tr>
<td>OSC 70-79</td>
<td>2.14</td>
<td>(1.06-4.30)</td>
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<tr>
<td>OSC 80-89</td>
<td>4.92</td>
<td>(1.63-14.85)</td>
<td>0.005</td>
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<tr>
<td>NFR score (0-11)</td>
<td>0.75</td>
<td>(0.71-0.79)</td>
<td>&lt;0.000</td>
</tr>
<tr>
<td>age (yrs.)</td>
<td>0.98</td>
<td>(0.96-1.00)</td>
<td>0.013</td>
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</table>
OSC and musculoskeletal complaints

- car-assembly company
- 2287 employees
- OSC (0-24) and 12-month prevalence musculoskeletal complaints
- multivariate logistic regression analysis
- corrected for age, gender, quantitative work demands, tempo, social support from superior, shift schedule, department
## OSC (0-24) and MSC

<table>
<thead>
<tr>
<th>Body Part</th>
<th>OR</th>
<th>(95% CI)</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>neck</td>
<td>0.92</td>
<td>(0.89-0.95)</td>
<td>&lt;0.000</td>
</tr>
<tr>
<td>shoulder</td>
<td>0.90</td>
<td>(0.87-0.93)</td>
<td>&lt;0.000</td>
</tr>
<tr>
<td>elbow</td>
<td>0.91</td>
<td>(0.87-0.95)</td>
<td>&lt;0.000</td>
</tr>
<tr>
<td>pols</td>
<td>0.92</td>
<td>(0.88-0.96)</td>
<td>&lt;0.000</td>
</tr>
<tr>
<td>upper back</td>
<td>0.93</td>
<td>(0.89-0.97)</td>
<td>&lt;0.000</td>
</tr>
<tr>
<td>lower back</td>
<td>0.93</td>
<td>(0.90-0.95)</td>
<td>&lt;0.000</td>
</tr>
<tr>
<td>hip</td>
<td>0.92</td>
<td>(0.87-0.96)</td>
<td>0.001</td>
</tr>
<tr>
<td>knee</td>
<td>0.94</td>
<td>(0.91-0.97)</td>
<td>&lt;0.000</td>
</tr>
<tr>
<td>foot</td>
<td>0.93</td>
<td>(0.88-0.97)</td>
<td>0.002</td>
</tr>
</tbody>
</table>
OSC and health
Group level

• OSC = by definition group aspect
Social capital and the prevalence of cardiovascular disease among nurses in Chinese hospitals

Jian Li & TS Kristensen, 2011.

2,854 nurses in 12 hospitals
OSC in nursing homes
Group level

- 239 nurses; geriatric helpers
- 11 nursing homes / work units

- gossip and slander
- quarrels and conflicts
- sick leave
- poor Work Ability
Gossip and slander

\[ r = -0.639 \]
\[ p = 0.034 \]
\[ R^2 \text{ Linear} = 0.408 \]
Quarrels and conflicts

% quarrels and conflicts

mean OSC

r = -0.818
p = 0.002
R² Linear = 0.454
Sick leave prevalence

![Graph showing the relationship between sickness absence and mean OSC](image)

- $r = -0.706$
- $p = 0.015$
- $R^2$ Linear = 0.498
Poor work ability

\[
\text{mean OSC} \quad \text{vs} \quad \% \text{poor work ability}
\]

- \(r = -0.818\)
- \(p = 0.002\)
- \(R^2 \text{ Linear} = 0.669\)
Conclusions

- OSC important aspect for health and well-being at work
- further (follow-up) studies necessary
- group level studies
- challenge: key for improvement with management (quality of leadership)
- asset: OSC important for production, quality and turnover