Faculty and Organizational Health: A focus on Energy and Joy

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ADFM “Joy in Practice” webinar series
July 26, 2017
Content

• Faculty and Organizational Health
  – Strategic and operational rationale
• Background and Current Initiatives
• Evidence-based Improvements
  – Integrating across all three academic missions
• Vision of the future
  – Strengthening the focus on the 4th Quadruple aim
Goal

• Stress – Wellness – Vitality
  – Changing the paradigm
• Releasing & Motivating Human Capital
• Vitality - Promoters and Barriers
• Translationary research
  – Epidemiology to full-scale interventions
• MSU-CHM Application
• Conclusion
Leadership Reflections on Faculty Vitality

College of Human Medicine’ Vitality Initiative
Michigan State University

1. **Survey** All Faculty and Academic Staff
   (Including Clinicians, Basic Scientists, Academic Specialists, Non-Prefix Community Based)
2. Conduct Additional **Focus Groups** with Faculty
3. Develop **Toolkits** for Chairs
4. Build Connections Across Campuses with Affiliated Programs and Partners
5. Design **Faculty Development** Programs for Chairs
6. **Disseminate** through Scholarly Presentations and Publication in Future

**Challenges**
- Decision Making Process
- Inclusiveness, Timeliness and Transparency
- Dispersion Across State
- Unique needs of Basic Science and Clinical Departments
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- Rigor
- Outcome focus
- Fundable
- Impact
Vitality – the “New” Paradigm
Vitality – the “New” Paradigm

- Time
- Talent
- Energy
- Motivation
- Alignment
The Biology of “Non-Stress”
Stress at Work

• +50% U.S. Physicians signs of “burnout” (Dyrbye et al, NAM Perspective. 2017)

• 46% of US Workforce stressed to the point of burnout (Washington Business Group on Health)

• Increases faster in MDs, vs other workers: +9% 2011 – 2014 (Dyrbye et al, NAM Perspective. 2017)

• One in four US Workers suffers from stress-related mental disorders (The Property and Causality Insurance Edition of Best’s Review)
Costs of Low Vitality

• Stress-related disorders costs the US 42 Billion/year
  – 50% due to repeated and frequent healthcare use

• $150 Billion/year lost due to productivity losses, poor decision-making; absenteeism, stress-related disorders, substance abuse

Higher TNF-α predict > “Near-misses” In Emergency Medicine Residents in Trauma 1 center
Paradigm Shift – From Stress to Vitality

Challenge
Control, Positive Expectancy
Skills Utilization

Threat
Low Control & Predictability

Copyright
Göran Lande, Clairy Wiholm, Bengt B. Arnetz
Ratio: s-Cortisol/s-DHEA-s

Mean +/- S.E.M.

F_2, time, = 9.20, p = .0001
Performance capacity

Yerkes-Dodson Law (1908)
Inverted U-shaped relationship

Hans Selye’s GAS

CEOS Recovery Model

Homeostasis

Arnetz et al. 2004
Real-life Application
Interaction between chronic and acute stressors

Heart Rate Reactivity at Work

Acute work stress

low

high

Chronic work stress = +1 SD
Chronic work stress = -1 SD

Stress Hampers Cognitive Performance

$t_1$, group = 3.80, $p = .02$
Stress and Performance Management

Higher scores = Higher Vitality

F\textsubscript{2}, time = 1.31, p = .27. F\textsubscript{2}, time x group = 3.72, p = .02
Mental Energy

Mental Energy (Mean)

grouped into reh/livst vs controls
- intervention
- Healthy reference

Assessment Period

Mental Energy (0-100%)
Human capital → Productive power

Formula: Time + Talent + Energy + Engagement
Productive HR Power

Human capital $\rightarrow$ Productive power

Formula: Time + Talent + Energy + Engagement

Motivation
• Average company loses 21% of its productive power
• Best quartile companies: 50% less loss
• Best quartile: 40% more productive power than average of all other companies

• Time losers: Structural and Behavioral Organizational Drag

Source: Eric Garton, HBR, January 30, 2017
• Best quartile companies: 29% boost in productivity
• Best companies: 16% - top tier talent vs 14% in the rest of companies
• Critical: Management deployment and teams towards critical organizational: Roles – Mission - Initiatives

Source: Eric Garton, HBR, January 30, 2017
Talent Energy

• Single largest source of Productive Power
• Most energetic employee – “Inspired” – 2x productive vs “satisfied employee” and 50% more productive than “engaged”

Source: Eric Garton, HBR, January 30, 2017
HR Steps to Mobilize Energy

• Eradicate factors that steal time
• Work culture that balance performance - enhancing goals: Accountability and Autonomy
• Inspirational leadership
  – link to broader organizational mission

Source: Eric Garton, HBR, January 30, 2017
Motivation – Critical Ingredients

- **Goal** – “Do your best”, not stretch goals
  - Intrinsic motivators vs External incentives
- **Talent + effectivity ≠ Likable**
  - “Talentless people are often quite good at faking competence” (p.3)
- **Challenging work vs Dull**
  - Job design – person drivers and fit
- **Feedback** – performance gaps and success
  - Risk; demoralizing, overly focused on one side

Source: Tomas Chamorro-Premuzic, Lewis Garrad, HBR, Febr 02, 2017
Spotify - Leadership for Millennials

- Music, Video, Podcast streaming
- 3$ Billion + in revenue
- 50 million paying subscriber
- Balancing:
  - Autonomy vs Accountability
  - Innovation vs Proven Routine
  - Alignment without excessive control
Spotify – Organizing for Agility

Spotify

• Squad
  n ≈ 8

Guild

Higher level communities of interest, e.g., leadership

Chapter

Core function: QI, Agility, Web Develop
Formal leader: Players-Coach
Mentor and Coach.
Leader define problems – Squad solves it

 Tribe

- Squad
  n ≈ 8

- Squad
  n ≈ 8

- Squad
  n ≈ 8

- Squad
  n ≈ 8

Self-organizing. No formal leader

What

How

Whom

Internal and Customer reviews
Post-mortem – Success & Failures

Broad performance feed-back
Frequency: one to multiple/year

Own development and growth process

Michael Mankins, Eric Garton
HBR, February 9, 2017
Principles of Spotify Organization

- Alignment enables Autonomy
- Aligning on Objectives & Goals
  - Focus on pre-release & partial release
- Autonomy without Sub optimizing
- Good citizen in the ecosystem
Spotify Decision Process

- Test and Learn
- Data, Experimentation, Dialogue to address challenges
- Decoupling – failure has limited “blast radius”

Alignment with autonomy & accountability
Data-driven Assessment & Intervention
Workers engaged in “other” activities 2 hr/day

- 44.7% "wasted" on Internet surfing
- 23.4% talk to co-workers, friends
- 33.2% too little work!
- 23% "wasted" time due to management disinterest

• Real loss: 2.09 hrs/day (employers estimate 56.4 min)
• $ 759 Billions/Year

Source: salary.com, AOL 2005, 10,044 respondents. USA
Productivity and Retention Challenges

Key determinants: Productivity & Retention

Organizational Climate – Stress - Vitality

Source: B Arnetz, T Lucas, J Arnetz, JOEM, 2010
Cutting Resources: Impact on Workload

- 20% staff reduction

Year

Profession
- Other
- Physician
- Certified nurses

Group x time, n.s.
Percentage of staff above 70% in Mental Energy (=Healthy) vs time

P<0.05 for group, time, and time x group interactions, GLM
Changes in Employee Capacity between Two Assessments by Departments

Changes in Mental Energy between 1 & 2. Mean.
Higher Efficiency in High Performing Dept.

Less Exhaustion in High Performing Dept.

### Odds-ratio for organizational improvement
1-year improvement vs no change/worsening

<table>
<thead>
<tr>
<th>Dependent</th>
<th>Independent</th>
<th>OR</th>
<th>95% C.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>Skills develop</td>
<td>7.8</td>
<td>3.2;18.9</td>
</tr>
<tr>
<td></td>
<td>Perform feedbk</td>
<td>2.7</td>
<td>1.1;6.8</td>
</tr>
<tr>
<td>Skills Development</td>
<td>Particip mngt</td>
<td>5.2</td>
<td>1.8;15.1</td>
</tr>
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</table>

Wallin, L. Knowledge utilization in Swedish neonatal nursing. Dis. 1272. 2003 Uppsala
Organizational Health Impact on Biomarkers

Linear Regression with 95.00% Mean Prediction Interval

\[ d_{test} = -1.09 + 0.07 \times dfocus \]

\[ r\text{-square} = 0.26 \]
Determinants of Mental Energy

Arnetz et al. JOEM, 2014
Aligning Human Capital
Health and Efficiency Effects

Efficiency
Self-rated & Tracket

Prolactin

TSH

Self-rated Work Load (Stress)

Sustainable Effects
+3, 6 months after active intervention

Profit +6,000 $/employee/year
Employee Health

Comparison to other Family Medicine Departments - Means

Engagement  Change Motivation  Work Exhaustion  Work Climate  Organizational Energy  Work Intensity

Academic FM Sample 1  Academic FM Sample 2  Academic FM Sample 3
Organizational Health

Comparison with other Family Medicine Departments -Means

- Means

Management Feedback
Participatory Management
Leadership
Efficiency
Competency Development

Academic FM Sample 1
Academic FM Sample 2
Academic FM Sample 3

Target Value
Dynamic Zone
Comfort Zone
Critical Zone

Academic FM Sample 1
Academic FM Sample 2
Academic FM Sample 3
Self-rated Energy
IT/Media employees in transition

Self-rated Energy

Assessment Period

Percent

50 55 60 65 70 75 80

1 2 3

Group
Intervention
Control

2-way ANOVA, p<0.01
Group-based Stress Regulation
Group-based Health Regulation
Group-based Dynamic Focus Regulation
QWC Enhancement Areas
Mean Values

- Legacy Clinic MDs 2002
- Legacy Clinic MDs 2005
- Legacy Clinic MDs 2003
- Target Value

Higher Values = Desirable except for Work Tempo where range is between 35-40 and Work-related exhaustion < 30

Source: Dunn, Arnetz, Christensen, Homer.
Family Medicine and Primary Care
QI Initiatives

• Quality Improvement Survey
• 2015 - 2016
Job Security

- Faculty:
  - Fall 2015: 40%
  - Winter 2016: *80%

- Staff:
  - Fall 2015: 20%
  - Winter 2016: *100%

*Significant difference
Dynamic Focus

Fall 2015
Winter 2016
Work-Related Exhaustion

Faculty

Staff

Fall 2015

Winter 2016/2017
Mental Energy

Faculty

Staff

Fall 2015  Winter 2016/2017
Employee Health

Comparison to other Family Medicine Departments
- % Scoring in the Dynamic Zone

- Engagement
- Change Motivation
- Work Exhaustion
- Work Climate
- Organizational Energy
- Work Intensity

Academic FM Sample 1
Academic FM Sample 2
Academic FM Sample 3
Organizational Health

Comparison with other Family Medicine Departments
-% Scoring in the Dynamic Zone

- Goals
- Management Feedback
- Participatory Management
- Leadership
- Efficiency
- Competency Development

Academic FM Sample 1
Academic FM Sample 2
Academic FM Sample 3
## Organizational Health & Quality of Care

<table>
<thead>
<tr>
<th>Organizational Health</th>
<th>Quality of Care</th>
<th>Overall</th>
<th>Top Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goals</td>
<td></td>
<td>.517***</td>
<td>.638***</td>
</tr>
<tr>
<td>Management Feedback</td>
<td></td>
<td>.228</td>
<td>.249*</td>
</tr>
<tr>
<td>Participatory Management</td>
<td></td>
<td>.558***</td>
<td>.594***</td>
</tr>
<tr>
<td>Leadership</td>
<td></td>
<td>.188</td>
<td>.292*</td>
</tr>
<tr>
<td>Efficiency</td>
<td></td>
<td>.681***</td>
<td>.704***</td>
</tr>
<tr>
<td>Competency Development</td>
<td></td>
<td>.436***</td>
<td>.414***</td>
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</table>

* p <= .05
** p <= .01
*** p <= .001
Effect of Dynamic Focus on Quality of Care

<table>
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<th>Top Quality Care</th>
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<tbody>
<tr>
<td></td>
<td>Standardized Beta</td>
<td>Standardized Beta</td>
</tr>
<tr>
<td>Dynamic Focus</td>
<td>.601***</td>
<td>.680***</td>
</tr>
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* p <= .05  
** p <= .01  
*** p <= .001
Determinants of Energy

• Organizational factors:
  – Efficiency
  – Goals
  – Work climate
• Faculty
  • Resilience
  • Reenergizing strategies
    – Lifestyle
The mission of the MSU Department of Family Medicine is to promote the health and vitality of patients, families and communities.

We do this by engaging our community partners in:
- High quality, innovative primary care
- Community-engaged research
- Advancing population health
- Training the current and future health care workforce
Quality Improvement Areas
Comparison

- Faculty Change
- Staff Motivation
- Faculty Goals
- Staff Efficiency
- Faculty Efficiency
- Staff Efficiency

Fall 2015
Winter 2016/2017
Modeling Enhanced Vitality and Performance in Faculty

**Non-Malleable Control Variables**
- External Factors: Reform, Funding etc.
- Sociodemographics
- Basic vs Clinical Sci
- Appointment system
- Geographic location

**Malleable Organizational Variables**
- Organizational Culture: Climate/Leadership/Feedback
- Communication
- Performance Matrix: Expectations/Goals/Recognition/Transparency
- Mentoring
- Resources

**Institution-wide Factors**
- Team MSU: High Performance
- Organizational Efficiency

**Faculty-focused**
- Skills Set
- Self-efficacy
- Organizational engagement
- Success belief system
- Professional Growth
- Global Satisfaction

**Outcome Variables**
- Faculty Vitality
- Faculty Performance

**Institution-wide Factors**
- Resources
Quality – Work – Competence
Theoretical Platform

Quality

HC Personnel Vitality

Information Technologies

External Microfactors

Skills

Internal Microfactors

Health

Service management
Design of Efficient and Customer-focused Services

Source: Arnetz, Ellström and Gustafsson