How Theory-Driven Web-Based Wellness Planning Influences Attitudes & Behavior: An Action Research Case Study

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Compelling evidence for the study

- US Healthcare spending will be $3.5 trillion by 2016
- 83% is spent on chronic conditions
- ACA incentivizes employers to offer WPW
- Participation in WPW programs is low, 7 – 20%
- 74% of adults use the Internet; 57% are searching for health information
- Pilot study participants asked for a wellness website

Research Questions:

How does web-based wellness planning:
1. impact self-perceived person-driven wellness1?
2. influence decisions, actions and perceptions about wellness?
3. shape attitudes about workplace wellness?

1. How does exposure to more than one web-based planning tool affect preferences for future wellness planning?

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1The individual being actively and systematically involved in a continuous, holistic process of moving towards a balanced, integrated, optimum self within the environment where the individual is located (Dunn, 1959; Maslow, 1943; Rachele et al., 2013; Steven et al., 1996; Travis & Ryan, 2004).
Where did these research questions come from?

**Employee participants in the pilot study**

→ PAR

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**Literature Basis for Research**

- Wellness
  - rooted in Humanistic Psychology
  - "Dimensions" of wellness
- Web-based interventions¹
  - web-based health interventions → better outcomes and engagement
  - theoretical basis
  - use of more than one intervention (i.e. Facebook, Twitter, Texting)
  - interventions customized/specific to the user
- *Stages of change*
- *Integral Theory*

¹74% of adults use the Internet & 57% are searching for health information (Keckley & Hoffman, 2010).

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**Stages of Change**

Pre-Contemplate → Contemplate → Prepare → Act → Maintain

| (6 months) | (30 days) | (< 6 mo) | (> 6 mo) |
Integral Theory Components: Quadrants

4-Quadrant Wellness = Person-driven Holistic Wellness
Body Quadrant

Your physical body – both outer and inner body. Includes activities such as sleeping, eating, and nutrition, aerobic training and strength training.

4-Quadrant Wellness = Person-driven Holistic Wellness

Mind Quadrant

Your inner-self including Thoughts, feelings, sensations. Includes activities such as Identifying a life purpose or Vision, meditating, creative Endeavors, and life long learning.

4-Quadrant Wellness = Person-driven Holistic Wellness

Spirit Quadrant

Shared values between You and others. Includes Activities such as attending Yoga classes, religious Services, meditation Groups, therapeutic or Support groups.

4-Quadrant Wellness = Person-driven Holistic Wellness
Community Quadrant

4-Quadrant Wellness = Person-driven Holistic Wellness

Your environment. Includes activities such as attending workplace wellness programs, career coaching, measuring health and wellness activities using a FitBit.

Integral Theory + Stages of Change

Integral Theory ➔ WHAT
Stages of Change ➔ WHEN
Processes of Change ➔ HOW

Action Research Case Study

Action Research:
• Iterative process involving phases of change
• A “living, emergent process” (Reason & Bradbury, 2006)
• Adapting solutions to fit the context (Stringer, 2014)

Case Study:
• Answers “how” or “why” questions
• Uses multiple sources of evidence
• A group of “similarly situated” individuals
Embedded Case Study Using the Yin (2009, 2014) Case Study Process

**Context** = My Circle of Balance Website

- CASE = CoB website users who are employed by a technology company that offers WPW
- Site users who have attended WPW programs at work
- Site users who have NOT attended WPW programs at work

**Yin's real-world context**

Yin: boundaries b/t phenomenon & real-world context may not be clearly evident

Internet use; Website requested during pilot; case is technology employees

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**CIRCLE OF BALANCE**

**Welcome**

Explore the possibilities for improving your health and wellness

Welcome to Circle of Balance, a new and interactive workplace wellness site dedicated to providing professionals with sustainable, actionable strategies and tools to help them achieve a healthy, balanced lifestyle. Our content will take you on a journey of body, mind, and spirit, leading to healthier, happier, and more productive individuals and workplaces. We provide an effective platform for developing your wellness by allowing you to record and balance all of your activities and gain insight into your daily wellbeing. While this site will provide many personal benefits to you, it also gives you the opportunity to contribute to research aimed at improving workplace wellness. By registering as a member, you can access exclusive content, research papers, and much more. Whether you're looking for ways to improve your own health or are interested in learning more about workplace wellness for your company, Circle of Balance is the place to be.

**Proven Theories**

- Integral Theory
- Change Management
- Wellness Theory
- Workplace Wellness Theory

**My Circle of Balance**

- **Plan Name**: [New Name]
- **My Vision for my life in 10 - 20 years**:
- **I would like to anonymously share my vision with others.**

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[MyCircleofBalance.com](http://www.mycircleofbalance.com)

1Internet use; Website requested during pilot; case is technology employees
Rate your level of satisfaction with the following aspects of your life:

### MIND
<table>
<thead>
<tr>
<th>Aspect</th>
<th>Low Satisfaction</th>
<th>Somewhat Satisfied</th>
<th>Highly Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Balance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relaxation/Stress Relief</td>
<td></td>
<td></td>
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<tr>
<td>Life Long Learning</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Personal Growth</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spirituality</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### BODY
<table>
<thead>
<tr>
<th>Aspect</th>
<th>Low Satisfaction</th>
<th>Somewhat Satisfied</th>
<th>Highly Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>My General Health</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity/Movement/Fitness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immune System</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Nutritious/Diet</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Strength, Flexibility &amp; Endurance</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SPIRIT
<table>
<thead>
<tr>
<th>Aspect</th>
<th>Low Satisfaction</th>
<th>Somewhat Satisfied</th>
<th>Highly Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support System</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service/Community</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends/Family</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### COMMUNITY
<table>
<thead>
<tr>
<th>Aspect</th>
<th>Low Satisfaction</th>
<th>Somewhat Satisfied</th>
<th>Highly Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fun &amp; Recreation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Money/Finances</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Where you have low satisfaction:

#### Emotional Balance
- Activities to Consider:
  - Acupuncture
  - Art Therapy
  - Aromatherapy: Wellness
  - Pilates
  - Yoga
  - Bike riding
  - Walking

#### Relaxation/Stress Relief
- Activities to Consider:
  - Meditation
  - Yoga
  - Tai Chi
  - Deep Breathing
  - Progressive Muscle Relaxation

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5/31/2015
Ethical Considerations

- General informed consent; user verifies s/he is ≥ 18 years of age
- Anonymity
- Specific informed consent
- No users [who agree to informed consent] will be excluded from becoming users on the website, though only employees of IT companies may become case study participants
- September 23, 2014 – January 22, 2015
Outcomes of the study:

Themes (Qualitative Research) + Information (Quantitative Research)

- Website user interviews
- Registration data
- Website usage data
- Social Media Ratings
- WPW Survey

STUDY PARTICIPANTS
Individuals who provided data for this research

<table>
<thead>
<tr>
<th>Primary Source</th>
<th>Secondary Source</th>
<th>Number of interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Media</td>
<td>Facebook</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Twitter</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Coll Linkedin F</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Coll Linkedin I</td>
<td>228</td>
</tr>
<tr>
<td>WPW survey respondents [sent to 308 contacts]</td>
<td>Researcher’s Linked In</td>
<td>124</td>
</tr>
<tr>
<td>Coll website [includes 30 registered website users, 12 of which were also case study members]</td>
<td>Google Analytics</td>
<td>307 [308^]</td>
</tr>
<tr>
<td>Total number of interactions</td>
<td>-</td>
<td>721</td>
</tr>
</tbody>
</table>

^Numbers represent individual study participants, yet 1 participant may appear in more than one source
^Includes 12 case study members, individual semi-structured interviews

Data sources supporting the themes

- WRD = Website registration data
- WPD = Wellness plan data
- WUD = Website usage data (Google Analytics)
- SMR = Social Media ratings
- WPS = WPW survey generated through Linked In
- INM = Interviews, multiple, text from at least 4 interviews

<table>
<thead>
<tr>
<th>RQ</th>
<th>Theme</th>
<th>WRD</th>
<th>WPD</th>
<th>WUD</th>
<th>SMR</th>
<th>WPS</th>
<th>INM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2, 3</td>
<td>Connection beyond the self</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1</td>
<td>Primacy of physicality</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Receptivity</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Remote relationship with WPW</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4</td>
<td>Test Well assessment data</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>[Finding only]</td>
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</tr>
</tbody>
</table>
THEMES

- Connecting beyond the self
- Primacy of Physicality
- Minimization of spirit and community
- Receptivity
- Remote Relationship with WPW
- Individual awareness, interests, & priorities (time)

*Connections noted by interviewees include: family, friends, WPW activities, others at work, organizational membership, knowledge, nature, and spirituality/God

Primacy of Physicality: Individual

Overemphasis on the physical body
Primacy of Physicality: Individual & WP

Receptivity: Interviewees’ changes to wellness definitions after using the CoB website

<table>
<thead>
<tr>
<th>Wellness Component</th>
<th>Included before website use</th>
<th>Added after website use</th>
<th>Included after website use</th>
<th>% including component before website use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body</td>
<td>12 [100%]</td>
<td>0</td>
<td>12</td>
<td>100%</td>
</tr>
<tr>
<td>Mind</td>
<td>11 [92%]</td>
<td>1</td>
<td>12</td>
<td>100%</td>
</tr>
<tr>
<td>Spirit</td>
<td>3 [25%]</td>
<td>4</td>
<td>7</td>
<td>58%</td>
</tr>
<tr>
<td>Community</td>
<td>2 [17%]</td>
<td>2</td>
<td>4</td>
<td>33%</td>
</tr>
</tbody>
</table>
How does exposure to more than one web-based planning tool affect the user?

- Gap between:
  - contemplation phase (planning) & currently doing (action)
  - CoB ➔ Planning or preparing physical activity
  - TestWell ➔ Actively doing physical activity
- Assessment results identified a stage of change delay

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Action Research Concept Map

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Action Research Concept Map
Contributions to practice

1. Individual wellness planning:
   - Learn Page
   - Satisfaction Rating Report
   - Potential for self-care

2. WPW Program: Employers need to:
   - Increase communication
   - Ask for individual input
   - Involve employee families
   - Use employee connections

3. Technology:
   - Reminders or messaging
   - Coaching & human connection
   - Brief training videos
   - Increase social media

Final Recommendations

- Lack of wholeness in individual and organizational wellness
- Individuals become aware that they want whole wellness
- WPW participants & nonparticipants want the same things
- CoB may be used to:
  - Increase awareness and contemplate change about wellness
  - Move from contemplation to preparation [visualization]
- CoB wellness tool is ideal for:
  - people who show up to use it
  - organizations wanting to move employees to a higher level of wellness
- CoB provides individual and group level data allowing for:
  - WPW activities to be matched to stage of change
  - A greater likelihood for individuals to achieve sustainable change

Web-based wellness resources

- My Circle of Balance Website:  www.mycircleofbalance.com
- Free APP:
  - http://circleofbalancenj.com/conditions-search/
- Mind-Body Skills Groups Resources:
  - http://www.biomedcentral.com/1472-6920/14/198
Thank you for attending!

Questions?

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