Promoting well-being via an internet intervention

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Overview

1. **Background**
   - Well-being
   - Internet Interventions
2. **Study Design**
3. **Results**
4. **What does it mean?**
5. **Next steps**
Benefits of Well-being

- Numerous studies indicating the benefits of well-being
  - e.g. enhanced work productivity, social support, social interactions, prosocial behaviour; strengthened immune system, greater longevity, less stress...

(Lyubomirsky, King & Diener, 2005)
Enhancing Well-being

- Less demonstrating whether well-being can be sustained or enhanced at a population level
  - e.g. practising gratitude, committing acts of kindness, visualising best possible future selves, processing positive life experiences

(Lyubomirsky, 2006; Lyubomirsky, Sheldon & Schkade, 2005)
Early Australian Research

- Build on early Australian interventions
- E.g. “Must fool brain” intervention
MUST... FOOL...
BRAIN... INTO... BEING
...HAPPY...

I HEARD
THAT.

DAMMIT!
The Current Study

- Can well-being be enhanced via intentional activity?
- Can this type of well-being intervention be delivered via the web?
Health Promotion

- Aims to deliver efficacious, accessible, sustainable interventions

- Traditional delivery (e.g. Mass media or group programs in schools/work place/sport)
  - Not always accessible or sustainable
  - Often address general determinants of health
  - Behaviour change more likely to occur if targeted at individual (de Vries & Brug, 1999)
The Internet

- Has the potential to address these issues of efficacy, accessibility, sustainability & delivery at an individual level

(de Vries & Brug, 1999; Evers, 2006)
The Internet

- Household access
  - 62% USA
  - 60% Australia (9.1 million people)
  - 60% UK
  - ??% Croatia

(ABS, 2006; Evers, 2006; Fox, 2006)
Internet Interventions

Illness treatment & prevention
- E.g. anxiety
- depression
- panic disorder
- PTSD
- phobias
- OCD
- eating disorders
- encopresis
- tinnitus
- headaches

Health Behaviours
- E.g. physical activity
- nutrition / diet
- smoking cessation
- alcohol use

Wellness Promotion
- 1 online study
Well-being Internet Intervention

Seligman, Steen, Park & Peterson (2005)

- N = 577 adults
- Randomised placebo controlled trial
- Assessment x 6 (pre-, post-, 1-week, 1-month, 3-month, 6-month follow-up)
- 1-week intervention (5 active interventions, 1 placebo control)
- Measures:
  - Happiness (Steen Happiness Index)
  - Depression (CES-D)
Well-being Internet Intervention

1. Using signature strengths in a new way
2. Three good things (daily gratitude)
3. Gratitude visit
4. Identifying signature strengths
5. Identifying a time when you are at your best
6. Earliest memories (placebo control)

Increase in happiness and decrease in depression at:
post-, 1-week, 1-month, 3-month, 6-month follow-up
Well-being Internet Intervention

- Demonstrates the potential for Internet mental health promotion

- Limitations & Issues
  - Questionable ‘Internet Intervention’ (i.e. email of text based-instructions)
  - Confound – human contact
Aim & Design

- Develop and test the efficacy of a positive psychology Internet intervention to enhance the well-being of adult Australians
- A randomised controlled trial
- 3 (group) x 3 (time)
Study Design

- Self-register online
- Pre-treatment Assessment
- Random Assignment
- Post Assessment
- Follow-up Assessment (3 months)
  - Strengths
  - Problem Solving
  - Placebo Control
Measures

- Satisfaction with Life Scale (Diener, Emmons, Larsen & Griffith, 1985)
- Positive & Negative Affect Scale (Watson, Clark & Tellegen, 1988)
- Personal Wellbeing Index (International Wellbeing Group, 2006)
- Depression Anxiety Stress Scale (Lovibond & Lovibond, 1995)
- Orientations to Happiness (Peterson, Park & Seligman, 2005)
Groups

1. Strengths:
   - Identify & use personal strengths (e.g. curiosity, gratitude)
   - 3 self-guided sessions, 3 weeks
   - Interactive, personalised information and activities
   - Recommended offline activities/practice

2. Problem Solving:
   - Identify & use personal problem solving skills (6-steps)
   - Same format as strengths intervention

3. Placebo Control:
   - Reading information about problem solving
   - 3 self-guided sessions, 3 weeks
Strengths Intervention

- Example web pages
Question 1: What skills or activities have you learned easily or enjoy doing?
For example, playing the guitar, teaching, solving the sudoku, selling on ebay, being a parent, organising a dinner party, reading the financial section of the newspaper, playing tennis.

Question 2: What are you doing when you feel most comfortable and at ease with yourself?
For example, at home with my family, when I am writing my monthly work report, playing tennis, when I am painting, spending time with friends, going to a party, when I am helping others, walking the dog.

Question 3: What aspects of your life are you most proud of?
For example, my work team, my children, having good friends, maintaining a regular exercise routine, my charity work, getting a bonus from work, travelling overseas.

In the next section we will begin to classify and prioritise your signature strengths.
1. Love of learning
2. Curiosity and interest in the world
3. Creativity, ingenuity, and originality
4. Appreciation of beauty & excellence
5. Gratitude
6. Capacity to love and be loved
7. Honesty, authenticity, and genuineness
8. Hope, optimism, and future-mindedness
9. Playfulness
10. Judgment, critical thinking, and open-mindedness
11. Perspective (wisdom)
12. Social intelligence
13. Fairness, equity, and justice
14. Kindness and generosity
15. Citizenship, teamwork, and loyalty
16. Forgiveness and mercy
17. Bravery
18. Industry, diligence, and perseverance
19. Modesty and humility
20. Leadership
21. Zest, enthusiasm, and energy
22. Self-control and self-regulation
23. Caution, prudence, and discretion
24. Spirituality, sense of purpose, and faith

Roll your mouse over any of the signature strengths to read a more detailed description of its meaning.

Using your mouse, click and drag the items to arrange them in the list, with those most like you at the top, and least like you at the bottom.

If you find it difficult to rank all 24 strengths, then just focus on the top 10 strengths as these are the ones will use in the next session.

Your answers will automatically save when you click the next button.
Well done! You have completed the first session. To help consolidate the work you have done online, we ask that you complete an offline activity prior to commencing the next session.

**Offline Activity**

Your offline activity is to ask a family member / friend if you can share what you have learnt from this session. Only share as much or as little information as you feel comfortable with. To get the conversation started you may want to ask them some questions like:

- What do they consider to be their own personal strengths?
- Which of the signature strengths are most relevant for them?
- What do they think are your personal strengths?
- How do you both use your strengths in your daily life?

Remember, to keep the conversation focused on strengths, not weaknesses!

[Click here](#) to view/print the Strength Table (with Signature Strengths explanations).

[Click here](#) to view/print your answers to the questions at the start of this session.
On the next screen you will be asked to list two ways you can use and develop each of your chosen strengths further. You might choose to apply your strength to a challenge you are currently facing, or to a new activity. There are no right or wrong answers - just pick challenges/activities that fit well with you and use your signature strength.

Below is an example response for the Step 2 activity.

<table>
<thead>
<tr>
<th>The ways that I will develop my strengths are:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Love of Learning</td>
</tr>
<tr>
<td>- Listen to my favourite weekend radio news program.</td>
</tr>
<tr>
<td>- Set aside dedicated time to do more research on a work project that is not going as well as I hoped.</td>
</tr>
<tr>
<td>The ability to love and be loved</td>
</tr>
<tr>
<td>- At the end of a phone call to my children, tell them that I love them.</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Revisit the full list of [Signature Strengths](#) and their definitions.
Participant Characteristics (N=160)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>M=37 (SD=11.2) Range 18-62yrs</td>
</tr>
<tr>
<td>Sex</td>
<td>83% female</td>
</tr>
<tr>
<td>Employment</td>
<td>80% employed</td>
</tr>
<tr>
<td></td>
<td>16% students</td>
</tr>
<tr>
<td>Education</td>
<td>76% with tertiary degree</td>
</tr>
<tr>
<td>Marital status</td>
<td>57% married/defacto</td>
</tr>
<tr>
<td></td>
<td>33% single</td>
</tr>
<tr>
<td>Family</td>
<td>58% have children</td>
</tr>
</tbody>
</table>
Study Results

- Intention to treat analysis (Gross & Fogg, 2004)
- Repeated measures MANOVAs & ANOVAs
A significant interaction between group and time, Wilks Lambda = .93, $F(4, 312) = 2.81$, $p = .02$, partial eta squared = .03
Chart 1: Mean PWI-A score by group

Strengths
Problem Solving
Information Only

Time
Pre
Post
3-month

PWI score
68
69
70
71
72
73
74
SWLS & PANAS & DASS

- No significant change
The strengths intervention appears to increase the cognitive component of well-being (PWI-A) over time.

Replicates happiness results (Steen Happiness Index) of Seligman, Steen, Park & Petersen (2005).

Why the PWI-A?
- What do PANAS, SWLS & PWI-A measure?
- Global vs domain specific
- Or does the study just need more power?
What does it mean?

Depression, Anxiety, Stress (DASS):
- Does **not** replicate previous findings
- No difference with PS intervention either
- All low to start with (floor effect?)
Limitations

- Small sample size
- High attrition rate (83%)
- Measure of well-being (i.e. SWB not PWB or combined measure)
Summary

Enough evidence to warrant further investigation of internet interventions
What Next?

- **Study 2**
  - Strengths
  - Strengths plus e-coach
  - Mindfulness

- **Factors that impact on attrition/adherence**
  - e.g. human support via email

- **Look at including PWB/SWB measures**
  - E.g. 7-types of happiness
SEVEN TYPES of ORDINARY HAPPINESS

SECRET HAPPINESS WHICH IS STEADY BUT BEAUTIFULLY DELICATE

Three minutes of happiness borrowed from a dog.

TRADITIONAL LYING DOWN HAPPINESS

The happiness which comes from staring at a rock.

HAPPINESS BLENDED WITH A MYSTERIOUS SADNESS

The strange happiness associated with seeing a meteorite or shooting star.

Diffuse, residual happiness resulting from rhythmic domestic tasks such as washing the dishes.
“To live is the rarest thing in the world. Most people exist, that is all”

Oscar Wilde

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