Internalization of Distinctive Religious Practices is Associated with Increased Well-Being

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The relationship between religiosity and well-being is... positive. (Green & Elliott, 2010; McCullough & Willoughby, 2009; Ano & Vasconcelles, 2005; Smith, McCullough, & Poll, 2003; Winker, Stock, Okun, & Haring, 1985) paradoxical. (Diener, Tay, & Myers, 2011; Mochon, Norton, & Ariely, 2011)
measure: importance of personal religious belief (Blaine & Crocker, 1995)

relatedness

competence  ↔  autonomy

internalization

increased autonomy in religious practice

increased well-being
increasing autonomy with perceived competence within relationships

What regulates and motivates behavior?
**introjection**: behaviors is under the control of fear, guilt, shame, or social pressure; **controlled regulation**

**identification**: behavior is incorporated into the self; **autonomous regulation**
prayer, share my faith, turn to God, attend church

Pray, share my faith, turn to God, attend church

<table>
<thead>
<tr>
<th></th>
<th>Introduction (6 Q) α = .69</th>
<th>Identification (6 Q) α = .83</th>
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</thead>
<tbody>
<tr>
<td>Negative health outcomes</td>
<td>.20*</td>
<td>-.31**</td>
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<tr>
<td>Self-esteem</td>
<td>-.25***</td>
<td>.38***</td>
</tr>
<tr>
<td>Identity integration</td>
<td>-.22***</td>
<td>.34***</td>
</tr>
<tr>
<td>Self-actualization</td>
<td>-.27***</td>
<td>.40***</td>
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</tbody>
</table>

What religious practices are most likely to support internalization (via autonomy, competence, and relatedness)?
Properties of Candidate Religious Practices

repeated, meaningful, integrated with self, relational promote and require mindfulness, effortful and costly

Evidence:

• **frequent repeated behaviors boost well-being**
  *(Mochon, Norton, & Ariely, 2008)*

• **experimental interventions to increase well-being**
  *(Aaker, Rudd, & Mogilner, 2011; Lyubomirsky, Sheldon, & Schkade, 2005)*

• **family rituals—meaningful, repeated family activities** *(Fiese, et al., 2002; Fiese, Foley, & Spagnola, 2006)*

• **costly signaling: high cost religious activities boost prosociality and cooperation**
  *(Xygalatas, et al., 2013; Bulbulia, 2004; Sosis & Bressler, 2003; Sosis, 2000)*
A candidate religious practice: Sabbath keeping

“...intentional periods of time set aside to restore equilibrium to the mind, spirit, and body where a person may use his or her religious belief system to reflect on life’s personal and spiritual meaning.”

The Regulation of Sabbath Keeping
controlled or autonomous regulation?

*Scribner’s Popular History of the United States* (Vol. 2, p. 424, 1898)
The Regulation of Sabbath Keeping
controlled or autonomous regulation?

Hypothesis

Religious behaviors do not always improve or impair well-being directly; but rather through the regulation of behavior.

Thus, even if two believers perform the same religious behaviors, they may experience them differently depending on whether the regulation is more introjected or more identified.
models of Sabbath-keeping

1

Life Segmentation

create boundaries between work life and other aspects of life

but...

...segmentation may not be complete
...segmentation may become a set of introjected rules

models of Sabbath-keeping

Prescribed Meaning

reflecting on counter-cultural habits of time keeping, thus imputing positive personal meaning to undervalued aspects of life

but...

...the Sabbath may be used to engage in activities for themselves, but not as part of a religious community...Sabbath-keeping may become a means to an end leading to guilt, shame, and feelings of hypocrisy

models of Sabbath-keeping

3

Integrated Sabbath

the Sabbath becomes a part of one’s self and one’s daily life and behavior

because...

...the Sabbath is fully internalized
...in a relational context

3 predictions...

...among Sabbath-keepers, it should be possible to identify particular experiences of Sabbath-keeping associated with each of the models.

...those Sabbath-keepers with the highest degree of internalization should have the highest levels of subjective well-being.

...Sabbath keeping should be more strongly and uniquely related to well-being than less distinctive religious practices that do not directly promote autonomy, competence, and relatedness support.
347 subjects
young adults in transition (Arnett & Jensen, 2002)

47 items
Sabbath-keeping experiences

213 subjects
Christian Religious Internalization Scale

+ Oxford Happiness Scale
(Hill & Argyle, 2002)

Subjective Well-Being Scale
(Lyubomirsky & Lepper, 1999)

frequency of participation in Sabbath and secular activities on Saturday
predictions...

...among Sabbath-keepers, it should be possible to identify particular experiences of Sabbath-keeping associated with each of the models.

...those Sabbath-keepers with the highest degree of internalization should have the highest levels of subjective well-being.

...Sabbath keeping should be more strongly and uniquely related to well-being than low-cost religious practices
factor analysis best practices
(Bandalos & Boehm-Kaufman, 2009; Costello & Osborne, 2005)

conducted using the *fa* function using *psych* package (v. 1.3.2) in R 3.0.1
• principal axis factoring
• direct oblimin rotation
• multiple robust heuristics for number of factors
  (scree plot; parallel analysis; MAP test; ICLUST)
• test a range of solutions; identify the best solution
  • 5 items loading greater than 0.5 on each factor
  • minimize cross-loading
  • remove low- and non-loading items
    • multiple measures of internal consistency
      (Cronbach’s *α*, Revelle’s *β*, and McDonald’s *ω*)
Incomplete Segmentation
($\alpha = .84; \beta = .74; \omega_h = .76$)

(0.717) If I didn’t keep the Sabbath, I would get a lot more done.
(0.708) I find it stressful to be forced to take a break on Sabbath from what I need to get done.
(0.662) Keeping the Sabbath prevents me from doing what needs to be done.
(0.637) Even when I keep the Sabbath, I keep thinking about all of the other things that I need to get done.
(0.614) Following Sabbath rules brings more stress to me.
(0.598) Sabbath is very stressful.
(0.569) I keep the Sabbath because other people are watching what I do.
Sabbath-Keepering Experiences

Prescribed Meaning

\((\alpha = .91; \beta = .73; \omega h = .84)\)

\((0.817)\) When I have real Sabbath rest, I cope better with the stresses of the week.
\((0.749)\) Keeping the Sabbath helps me redefine what is important to me.
\((0.748)\) Keeping the Sabbath helps me understand what is important to me.
\((0.711)\) Keeping the Sabbath reduces my stress.
\((0.710)\) I am healthier because I keep the Sabbath.
\((0.685)\) The Sabbath is an opportunity to reconnect with friends that I’ve missed throughout the week.
\((0.576)\) I use the Sabbath to spend time with people who are important to me.
Sabbath-Keeping Experiences

3

Integrated Sabbath
$(\alpha = .87; \beta = .79; \omega h = .77)$

(0.739) Keeping the Sabbath is part of who I am, not what I do.
(0.693) Nobody makes me keep the Sabbath – it is just a part of how I live.
(0.644) I apply what I learn on Sabbath to how I live during the rest of the week.
(0.633) Keeping the Sabbath is a way of life, not just something that happens once a week.
(0.589) Keeping the Sabbath helps me to discover more about who I am.
(0.568) Keeping the Sabbath is an intentional act on my part.
(0.423) I grow the most as a person because of how I spend my Sabbaths.
predictions...

...among Sabbath-keepers, it should be possible to identify particular experiences of Sabbath-keeping associated with each of the models.

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...Sabbath keeping should be more strongly and uniquely related to well-being than less distinctive religious practices that do not directly promote autonomy, competence, and relatedness support
Sabbath keeping: setting aside one day a week for religious observance

<table>
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<th>scales</th>
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<tr>
<td>r = -0.51</td>
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<td>r = -0.56</td>
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<tr>
<td>r = 0.68</td>
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<tr>
<th></th>
<th>incomplete segmentation (7 Q)</th>
<th>prescribed meaning (7 Q)</th>
<th>integrated Sabbath (7 Q)</th>
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<tr>
<td>Oxford Happiness</td>
<td>-.37***</td>
<td>.39***</td>
<td>.40***</td>
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<td>Subjective Happiness</td>
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<td>.27***</td>
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<tr>
<td>CRIS identification</td>
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<td>CRIS introjection</td>
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<td>-.23**</td>
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<td>secular behaviors</td>
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<td>-.27***</td>
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difference in BIC between best-fitting and second best-fitting models was 117.53, very strong evidence for this solution by Raftery’s 1995 benchmarks

Locations of all 347 subjects in factor space by cluster

- introjected Sabbath keepers
- identified Sabbath keepers
- integrated Sabbath keepers

factor-cluster analysis allows exploration of how individuals map onto a factor space (Gorman & Primavera, 1983; Dolcinar & Grü, 2008)

clustering conducted using the Mclust function in the mclust (v. 4.1) package in R 3.0.1
Time Awakening Sabbath Morning

Time Awakening Weekdays

Time Awakening Sunday/Holidays

Introjected Sabbath-Keepers

Identified Sabbath-Keepers

Integrated Sabbath-Keepers

Frequency of secular behaviors

Frequency of religious behaviors
predictions...

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...those Sabbath-keepers with the highest degree of internalization should have the highest levels of subjective well-being.

...Sabbath keeping should be more strongly and uniquely related to well-being than less distinctive religious practices that do not directly promote autonomy, competence, and relatedness support.
conducted using the function mediation in the MBESS (v. 1.3.2) package in R 3.0.1

**Mediation Effect of Christian Identification on Well-Being ~ Sabbath Identification**

Max possible $c = 18.73$

<table>
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<tr>
<th>B</th>
<th>t</th>
<th>p</th>
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</thead>
<tbody>
<tr>
<td>CRIS:</td>
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<tr>
<td>Identification</td>
<td>3.21</td>
<td>2.28</td>
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<tr>
<td>Sabbath</td>
<td>8.52</td>
<td>7.42</td>
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<tr>
<td>Keeping</td>
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<tr>
<td>Internalization</td>
<td>8.52</td>
<td>7.42</td>
</tr>
<tr>
<td>$B' = 6.72$</td>
<td>4.85</td>
<td>&lt; .001</td>
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</table>

- $R^2 = .226$; bootstrapped 95% CI [.128, .324]
- Indirect effect/total effect = .211
  - Bootstrapped 95% CI [.056, .407]
  - $\kappa^2 = .089$
  - Bootstrapped 95% CI [.024, .160]
  - Small to medium effect size
conducted using the function *mediation* in the MBESS (v. 1.3.2) package in R 3.0.1

R² = .218; bootstrapped 95% CI [.121, .315]

indirect effect/total effect = .069
bootstrapped 95% CI [-.008, .163]

κ² = .035
bootstrapped 95% CI [.002, .077]
trivial to small effect size
findings...

...self-reported Sabbath-keeping experiences fit into the three Self-Determination Theory-based models proposed by Diddams, Surdyk, & Daniels (2004).

...a factor-cluster approach on these Sabbath keeping experiences sorts young adult Sabbath-keepers into 3 groups differing in internalization and autonomous regulation.

...higher levels of Sabbath-keeping internalization are related to higher levels of subjective well-being.

...the relationship of Sabbath-keeping internalization to well-being is only weakly mediated by internalization of typical Christian behaviors (but Sabbath-keeping internalization moderately mediates internalization of typical Christian behaviors).
implications...

...internalization of religion is better understood with respect to those practices that are directly involved in autonomy, competence, and relatedness support for believers.

...identification of those distinctive religious practices that facilitate internalization for particular groups of adherents is an important part of understanding the relationship between religious practice and well-being.

...when internalization of distinctive practices does not occur, a likely outcome is disaffiliation.
...the Seventh-day Adventist church should target the internalization of distinctive Adventist practices in order to nurture well-being and thereby improve retention (different approaches may be necessary for children raised in the church and adult converts).

...we should consider the degree to which current Sabbath-keeping practices at the community and family level either support or thwart autonomy, competence, and relatedness, and thereby reduce well-being.

If thou turn away thy foot from the Sabbath, [from] doing thy pleasure on my holy day; and call the Sabbath a delight, the holy of the Lord honorable; and shalt honor him, not doing thine own ways, nor finding thine own pleasure, nor speaking [thine own] words: Then shalt thou delight thyself in the Lord; and I will cause thee to ride upon the high places of the earth, and feed thee with the heritage of Jacob thy father: for the mouth of the Lord hath spoken.

Isaiah 58:13-14
Acknowledgements

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