Improving Daily Life Through Mindfulness: Moderators of the Daily Relation Between Mindfulness Meditation and Value-Directed Living

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INTRODUCTION

- Value-directed living may be one path to improved quality of life
- Mindfulness meditation (MM) is one possible means of impacting behavioral variables that may influence valued living (Hayes, Strosahl, & Wilson, 2012)
- Yet, little attention has focused on the impact of daily practice of MM on value-directed living and the relations between various ACT-proposed processes in daily life remain unclear
- This study examined relations between daily value-directed living, MM practice, experiential avoidance (EA), and cognitive fusion (CF) over the course of 2 weeks

METHOD

Participants: N = 92; F = 68; M_{age} = 20.54; SD = 4.35; Range = 17 – 42

Measures

Person-level measures.

Acceptance and action questionnaire-II (AAQ). Bond et al., 2011.

Cognitive fusion questionnaire (CFQ). Gillanders et al., 2014.

Day-level measures.

Daily valued living questionnaire (DVLQ). Four-item measure of value clarity and consistent action. Daily total = mean of 4 items (range = 1-7).

Cognitive fusion questionnaire – short form (CFQ-SF). Four items sourced from the CFQ. Daily total = mean of the 4 items (range = 1-4).

State experiential avoidance – modified (SEA). Four-item modified measure of experiential avoidance suitable for daily assessments (Kashdan, Farmer, Adams, Ferssizidis, & McKnight, 2013). Daily total = mean of the 4 items (range = 1-4).

Procedure

- Participants completed pre-intervention assessment of person-level measures.
- Learned a MM exercise (10 min versus 20 min, randomly assigned).
- Asked to practice exercise at least once per day for 14 days.
- Completed short assessments each day between 5 and 11 pm.

Statistical Procedure

- Multilevel random coefficient models examined with HLM 7.01 (Nezlek, 2011)
- Days nested w/in persons; 1036 total obs (M = 11.87 days; SD = 2.28; Range = 5-14)
- Daily predictors group-mean centered; Daily interaction terms uncentered; random error terms ≤ p = .10 retained in model

Example Model with Day-level Predictors and Person Level Moderator

Day Level: $\gamma_{ij} = \beta_{0j} + \beta_{1j}(\text{MED}) + \beta_{2j}(\text{DailyEA}) + \beta_{3j}(\text{MEDxDailyEA}) + r_{ij}$

Person Level: $\beta_{0j} = \gamma_{00} + \gamma_{01}(\text{EA}) + \mu_{0j}$

$\beta_{1j} = \gamma_{10} + \gamma_{11}(\text{EA}) + \mu_{0j}$

$\beta_{2j} = \gamma_{20} + \gamma_{21}(\text{EA}) + \mu_{0j}$

$\beta_{3j} = \gamma_{30} + \gamma_{31}(\text{EA}) + \mu_{0j}$

RESULTS

Table 1
Descriptive Statistics

Measure	N	*M*	*SD*
Day Level			
DVLQ	993	5.20	.834
SEA	996	2.87	.984
CFQ-SF	998	3.12	.871
Person Level			
AAQ	92	22.69	10.66
CFQ	92	26.63	9.87

Figure 1
Daily Relations

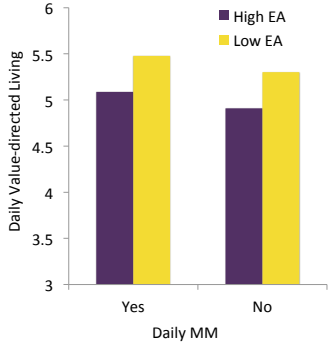


Table 2
Cognitive Fusion (CF) as a Moderator of Value-directed living and Daily Meditation

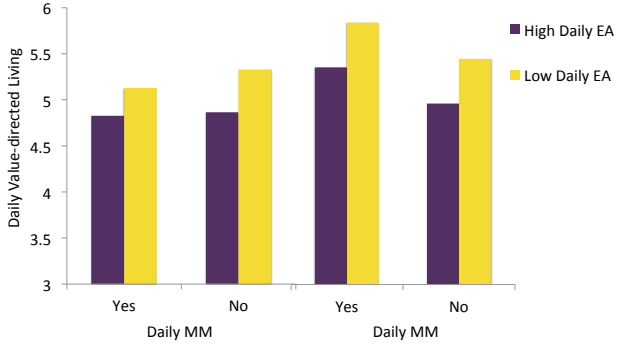
Predictor	β	*t* (df)	*p*	β	*t* (df)	*p*
	Day Level			CF Moderation: Person Level		
Intercept				-0.175	-1.544 (89)	.126
Meditation	**0.118**	**3.199 (685)**	**.001**	0.008	0.215 (773)	.829
CF	**-0.189**	**-5.185 (90)**	**< .001**	-0.034	-0.976 (773)	.330
Meditation x CF	-0.078	-1.865 (90)	.065	-0.008	-0.202 (89)	.840

Table 3
EA as a Moderator of Value-directed living and Daily Meditation

Predictor	β	*t* (df)	*p*	β	*t* (df)	*p*
	Day Level			EA Moderation: Person Level		
Intercept				-0.197	-1.807 (90)	.074
Meditation	**0.107**	**2.954 (690)**	**.003**	-0.026	-0.699 (689)	.485
EA	**-0.199**	**-5.150 (91)**	**< .001**	0.046	1.179 (90)	.241
Meditation x EA	-0.019	-0.490 (91)	.625	**-0.082**	**-2.130 (90)**	**.036**

RESULTS

Figure 2
Person-level EA as a Moderator of Daily Relations



DISCUSSION

- Daily mindfulness meditation practice and lower EA and CF are positively related to higher daily value-directed living
- Neither EA nor CF were identified as significant day-level moderators of the MM-value-directed living relation
- Person-level EA appears to be a significant mediator of day-level relations
- Individuals low in person-level EA report more value-directed living (≈ +.5 SD) on days MM was practiced compared to other groups

Targeting EA may improve response to mindfulness-based therapies and exercises, particularly when increased value-directed living is a stated goal of treatment.

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