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Virtual Wellness Workshop for Medical Students: Effects on Healthy Lifestyle Behavior

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Abstract

Introduction: Medical students experience high levels of stress, burnout, depression, suicidal ideation, and compassion fatigue. Mindfulness interventions in this population have demonstrated improvement in psychological outcomes. However, it is unclear if these improvements are maintained. Evaluation of changes in lifestyle behaviors may provide insight into factors that sustain improvements. Specific aims of this study were to (1) assess feasibility and acceptability of an innovative, virtual program involving experiential learning, social support, and motivational interviewing; and (2) evaluate preliminary healthy lifestyle behaviors and psychological outcomes from preprogram to postprogram and 4-week follow-up.

Methods: We used a mixed-methods approach to investigate feasibility, acceptability, and effects of the virtual program using validated measures and open-ended questions. Participants were 20 first- and second-year medical students at one Midwestern US medical college who participated between October 2020 and December 2020. Participants were enrolled in one of two groups for the 8-week program via Webex. Participants completed surveys at preprogram, postprogram, and 4-week follow-up. They also completed weekly home practice assessments.

Results: Nineteen of 20 participants completed the program (95% retention rate). All participants attended six or more sessions. Repeated measures analysis of variance revealed that participants had significant improvements in healthy lifestyle behaviors, burnout, self-compassion, and stress across time. Results were supported by qualitative themes of increased social support, wellness skills, and overall positive experiences.

Conclusion: Findings suggest that the virtual program was feasible and acceptable to medical students, and improved healthy lifestyle behaviors and psychological outcomes that were maintained or increased at 4-week follow-up.

Introduction

Medical students experience high levels of stress, burnout, depression, suicidal ideation, and compassion fatigue.[1-5] Medical students' mental health tends to decline over time in medical school and may diminish their ability to provide compassionate care.[4,6-9]

Some medical schools have implemented wellness programs to reduce deleterious effects of medical

eduation.[10-13] Such programs often focus on stress management skills and mindfulness.[8,14-17] Evaluations of these programs have demonstrated significant pre/post improvements in depression, stress, anxiety, compassion, resilience, empathy, self-compassion, and burnout.[13,18-21]

However, it is unclear if these immediate psychological benefits are sustained. There is also a lack of research evaluating effects of such programs on habitual healthy lifestyle behavior. Healthy lifestyle behaviors include health responsibility, physical activity, nutrition, spiritual growth, interpersonal relations, and stress management. These may be key factors influencing maintenance of skills and sustaining benefits. Therefore, we developed a new intervention, the Self-compassion, Yoga, and Mindfulness for Burnout: Integrating Online Sessions and Interpersonal Support (SYMBIOSIS) program. Specific aims of our study of this program were to (1) assess feasibility and acceptability of the virtual SYMBIOSIS program for medical students, and (2) evaluate preliminary healthy lifestyle behaviors and psychological outcomes from preprogram to postprogram and 4-week follow-up.

Methods

We recruited medical students (n=20) at a Midwestern US medical college through email. Participants completed an online screening survey and consent form. Participants were enrolled into one of two groups based on availability and compensated with $30 Amazon e-gift cards. Affiliated institutions provided institutional review board approval.

We developed the innovative program, SYMBIOSIS (outlined in Table 1) utilizing established models, evidence-based interventions, and focus group data collected from medical students.[13,20-24] The program was optional and not affiliated with the medical school. Structure of sessions included teaching, experiential learning, social support, and motivational interviewing. The program consisted of 8 weekly, 50-minute synchronous virtual sessions via Webex. Two groups ran consecutively between October 2020 and December 2020. Sessions were cofacilitated by two clinical psychology doctoral trainees. Both facilitators were also certified yoga teachers.

Participants completed the online surveys at preprogram, postprogram, and 4-week follow-up. All surveys measured the following constructs utilizing validated measures (Table 4): healthy lifestyle behaviors (subscales: health responsibility, physical activity, nutrition, spiritual growth, interpersonal relations, stress management),[25] self-compassion,[26-27] burnout,[28] stress,[29-31] and mindfulness.[32-33] The preprogram survey included demographic questions. The postprogram survey included 5-point Likert-scaled and open-ended questions to assess feasibility and acceptability.[34-35] Both cofacilitators completed a treatment fidelity checklist (14 adapted items) after each session.[36]

Adequate treatment fidelity was assumed if at least 80% of intervention items were included in each session.[36] Feasibility was assessed with enrollment, retention, and attendance rates. Feasibility and acceptability results included averaged quantitative scores and themed qualitative responses (two independent raters). Repeated measures analyses of variance were conducted for all outcome measures. Significant main effects were evaluated with pairwise comparisons with Bonferroni correction. We used Mauchly's test to evaluate each measure. For measures violating sphericity, we adjusted degrees of freedom using Greenhouse-Geisser correction.

Results

Twenty participants enrolled, with 10 in each group; 19 participants completed program. Participant demographics are shown Table 2. Treatment fidelity results met the cutoff for fidelity adherence (96% agreement).

Full recruitment (n=20) was met within 4 days. All participants who completed the intervention (n=19) attended at least six of eight sessions (average attendance rate=90%; retention rate=95%). Participants rated the program content as “Very easy to use,” and the overall program as “Very helpful,” “Very valuable,” and participants were “Very satisfied” (0=not at all, 5=extremely).

Qualitive responses are shown in Table 3. Themes regarding the most appreciated aspects of program included peer/social support; scheduled time dedicated to wellness; developing coping and mindfulness skills; and facilitators were calm, knowledgeable, and created a safe space. Themes regarding least appreciated parts of program included group setting/structure/timing concerns, lack of time/other responsibilities, and virtual format. All participants reported an overall positive experience.

Table 4 summarizes main outcome data. Participants reported significant improvements in healthy lifestyle behaviors (pre/post: $P<.01$, $d=.65$; pre-follow-up: $P<.001$, $d=.87$), self-compassion (pre/post: $P<.01$, $d=.59$; pre-follow-up: $P<.01$, $d=.92$), burnout (pre/post: $P<.05$, $d=.67$; pre-follow-up: $P<.01$, $d=.75$), and perceived stress (pre-follow-up: $P<.01$, $d=1.13$). No changes in mindfulness were observed.

Conclusions

Results indicated the SYMBIOSIS virtual program was both feasible and acceptable to medical students. Compared to similar studies, we obtained stronger feasibility results.[35,37] Our retention and attendance rates mirror rates in well-funded, integrated, in-person programs.[38] This is promising for medical schools interested in smaller-scale virtual programs that are effective, accessible, and affordable.

The program demonstrated significant improvements in healthy lifestyle behaviors (health responsibility, nutrition, spiritual growth, interpersonal support, stress management), self-compassion, burnout, and stress. The program did not target improving nutrition, spiritual growth, or health responsibility, yet participants also reported significant improvements in these areas. All improvements occurred pre/post and continued to improve at 4-week follow-up. Given that effects sizes improved to a greater extent at follow-up, this suggests that participants continued to utilize and benefit from the program after conclusion. This may be due to the program’s focus on integrating practical, routine wellness practices into daily life across time and improvements in healthy lifestyle behaviors. Results were comparable to similar trials and meta-analytic findings, with several of our effect sizes being larger.[12-13,21,35,39-44] This is notable given that our program was virtual, not part of curriculum or for credit, and conducted by a research group not affiliated with the medical school.

Our study demonstrates positive outcomes within a virtual format, which has meaningful implications. Virtual formats increase accessibility for decentralized programs with students in several geographical areas. It also allows opportunity for cross-medical school interventions. The program structure could easily accommodate booster sessions over time, specifically targeting times of increased risk of stress and burnout.

Limitations include small sample size, participants from one university, self-selection, lack of control group, and potential history effects from the COVID-19 pandemic. These factors limit causal inferences and generalizability of results.

Lower levels of stress and burnout are correlated with better quality of life, mental health, job performance, patient care, and fewer medical errors.[14,45-52] Our study supports that programs like SYMBIOSIS may benefit medical students personally and professionally.

These findings suggest that an 8-week virtual wellness intervention was acceptable, feasible, and also improved healthy lifestyle behaviors, self-compassion, burnout, and stress in medical students at postprogram and continued to improve at 4-week follow-up. In future research, it will be important to investigate effects of

SYMBIOSIS on academic performance and clinical skill acquisition. Additionally, exploration of specific components and longer-term effects of the SYMBIOSIS program are warranted.

Tables and Figures

Table 1. SYMBIOSIS Program Agenda and Topics

Session/ week #	Topic	Main activities and session structure	Recommended home practice
Preprogram survey ($5)			
1	Introduction, mindfulness, and self-care	-Icebreaker (favorite body posture) -Introduction -Mindfulness activity (breathing space) -Psychoeducation on mindfulness -Reasons for joining group (values)/peer discussion/support -Recommended home practice assignment -5-minute restorative closing	Daily breathing space activity
2	Mindfulness vs Relaxation	-Mindful movement and breathing (yoga/mindful activity) -Brief peer support/check-in -Psychoeducation on mindfulness vs. relaxation -Mindfulness activity (senses) -Relaxation skill (deep breathing) -Recommended home practice assignment -5-minute restorative closing	Daily mindfulness activity; relaxation activity as needed
3	Self-compassion	-Mindful movement and breathing (with self-compassion emphasis) -Brief peer support/check-in -Psychoeducation on self-compassion -Self-compassion activity (letter activity) -Recommended home practice assignment -5-minute restorative closing	Daily mindful self-compassion activity; finish part one and two of the self-compassion letter activity
4	Social support	-Mindful movement and breathing -Brief peer support/check-in -Psychoeducation on importance of meaningful social relationships (with peers and personal) -Peer discussion on challenges and tips on social support -Practice vulnerable, deep, compassionate connection (Mavis Tsai connection questions activity) -Recommended home practice assignment -5-minute restorative closing	One meaningful, deep social connection a day; optional: Watch Mavis Tsai Tedtalk
5	Yoga	-Brief peer support/check-in -Gentle yoga practice with emphasis on mindfulness and self-compassion (chair yoga modification option) -Psychoeducation on benefits and types of yoga -Recommended home practice assignment -5-minute restorative closing	Daily yoga or mindful movement
6	Values and mentorship	-Mindful movement and breathing -Brief peer support/check-in -Psychoeducation on values -Values identification activity -Psychoeducation on importance of mentorship as medical student -Peer discussion on tips and challenges -Recommended home practice assignment -5-minute restorative closing	Practice value-directed behaviors daily; optional: online values card sort activity
7	Practical use of skills	-Mindful movement and breathing -Everyday mindfulness (formal vs. informal practices) -Brief peer support/check-in (mindful listening) -Practical relaxation (preventative and responsive relaxation skills) -Mindfulness and self-compassion in the clinic -Recommended home practice assignment -5-minute restorative closing	Continue regular practice and integration of skills
8	Coping skills, maintaining, and conclusion	-Mindful movement and breathing -Review individual coping skills -Peer support/check-in -Personal valued-action statements -Peer discussion on lessons learned and how to maintain (reminder about self-compassion letter activity) -5-minute restorative closing	Continue regular practice of skills; seek support and further education as necessary; refer to handout with recommendations and online materials
Postprogram survey ($10)			
4-week follow-up survey ($15)			

Abbreviation: SYMBIOSIS, Self-compassion, Yoga, and Mindfulness for Burnout: Integrating Online Sessions and Interpersonal Support .
Program was newly developed in an unpublished study by clinical health psychologists utilizing established models, evidence-based interventions (Acceptance and Commitment Therapy, Mindfulness-Based Stress Reduction), yoga, and focus group data collected from medical students and medical school administrators.[24]
Structure of sessions included teaching, experiential learning, social support, and motivational interviewing

Table 2. Participants' Characteristics (N = 19)

	N	%	Mean (SD), Range
Age (years)			**23 (1.42), 22-27**
Gender			
Female, cisgender	15	78.9	
Male, cisgender	4	21.1	
Race/Ethnicity			
White/Caucasian	10	52.6	
Asian/Asian-American/Pacific Islander/West Asian	6	31.6	
Biracial (Asian and Caucasian)	2	10.5	
African-American/Black/African	1	5.3	
Year in medical school			
M1	13	68.4	
M2	6	31.6	
Mindfulness experience			
No previous experience	0	0.0	
Aware of mindfulness, but never practiced	5	26.3	
Novice, limited experience	9	47.4	
Intermediate	4	21.1	
Advanced	1	5.3	
Expert, many years of study and regular practice	0	0.0	

Table 3. Themes and Representative Quotes From Qualitative Questions at Postprogram (N=19)

Question	Theme	Quotes
What was the best part about this program?	Connecting with peers and social support	*"I think the best part was being in a group of my peers who had similar stressors and could relate on a deeper level."*
		"Being able to form very genuine, supportive (but professional) connections with peers and hear fellow medical students express similar frustrations/difficulties with stress and mental wellness, as well as shared relief from learned wellness exercises. I found it especially useful to hear what practices others found beneficial, as they were often suggestions for incorporating wellness that I would not have given much attention to otherwise. I also liked the small group, with great attention from and availability of instructors to guide our programs/learning."
		"Having a check-in at each session where we talked about our weeks and how we were coping. It was really cool to hear that people had been incorporating the skills from the program into their struggles towards the end of it."
		"The best part of the program was getting to know some new faces as well as getting to know some of my classmates better in a different light. The program definitely changed my perspective on some of my classmates in a good way. Another thing that was great was the different tools we were taught to give ourselves some peace in times of stress, like when we are frustrated about someone, we can breathe in compassion for ourselves then breathe out compassion for the other person and that helps with mental attitude."
		"Talking to other people about struggles with wellness really helped me understand where I need to improve. I loved the journaling activity that we did."
		"The ability to take part in a more inclusive and meaningful experience with my peers and get to understand more about each others values and understanding of wellness. I also liked learning wellness skills and then trying to make a habit of using them by having small low-pressure assignments, as opposed to just feeling like it was a one time experience that I would be more likely to not continue doing."
	Scheduled time dedicated to wellness	*"Having the dedicated time to focus on mindfulness skills, and to have a dedicated group to complete the tasks with."*
		"Having a space every week that was dedicated to being introspective and mindful. Setting aside a time every week was helpful and helped me be consistent. Learning a variety of skills that can help me personally and maybe professionally past med school."
		"The best part of the program was having a set time every week to come together with peers and work on wellness strategies."
	Developing coping and mindfulness skills	*"Learning how to apply and use the numerous amount of wellness techniques that are available."*
		"I enjoyed learning about all of the different types of wellnesses and which ones worked/didn't work for me. I feel like I learned a lot about how to take time for myself throughout the day to better myself and the work that do. All of the material that we learned can also be continued going forward if we so choose. I also really liked getting to know the other M1 students better and the M2s as well."
What was the worst part about this program?	Group setting, structure, and timing concerns	*"I struggle with sharing how I feel in group settings. I also tend to let myself spiral when I hear other people talking about the stressful things going on in their lives. But at the same time, I am very grateful for the social aspect of it!!"*
		"The surveys, and also any part of the program that felt like lecturing. I think it may have been more helpful in those situations to have students review the written material individually and come ready to discuss, have questions answered, put methods to practice, etc. (reversed classroom style)."
		"There were some skills I knew that definitely would not work for me, but each person is different! We just have to spend some time figuring out what works for us, which takes time. I can be lazy about that but this program has definitely motivated me more to spending more time on figuring out effective self-care methods for me."
	Lack of time/ motivation difficulties	*"The time commitment was hard with school but honestly it wasn't bad and it was worth my time."*
		"This was nothing to do with the organizers, but it was hard to focus on wellness with so many deadlines looming."
		"Sometimes it was really hard to motivate myself to go. That being said, I always enjoyed the program while I was there!"
	Virtual format	*"...it was definitely much more difficult for me to get involved using an online format and took some time to get used to feeling comfortable speaking. At the same time, it was also interesting to recognize that as a weakness of mine and figure out how to be more comfortable in that format."*
		"I really have nothing bad to say about the program itself. The only downside was the virtual environment which seemed to hinder some of communications sometimes. Even with being virtual I think we did a good job of connecting and communication though."
	Nothing	*"Nothing."*
		"Honestly, I can't think of a worst part from this program."

Table 3, Continued

Question	Theme	Quotes
Overall, what was your experience of the program?	Learned skills to improve wellness/ positive experience	*"This program overall was truly an amazing experience and I got a lot more out of these experiences than expected. [Facilitator 1] was very knowledgeable in wellness and did a phenomenal job in not only explaining the techniques of wellness but also how they are able to be implemented into everyday life."*
		"Overall, I'd say that my experience with this program was great! I had a lot of fun and learned a lot about how to take care of myself mentally and emotionally."
		"I really enjoyed it. Checking in with myself and my classmates was helpful and learning skills was also very useful long term. I liked the emphasis on how to incorporate these skills into daily life after the program ends."
		"I really enjoyed it and think it would be a worthwhile experience for medical students to have, especially if they have not had any background in wellness or it has been awhile since taking part in something like that. I realized that while I had learned some of these skills in the past I had kind of put them aside once I graduated undergraduate and to be reminded of how important they are and how to apply it to life as a medical student/beyond was really interesting."
	General positive/ great/ helpful experience	*"Very positive!"*
		"I thought the program was wonderful and incredibly helpful."
		"A great experience. I would do it again without hesitation."
	Appreciated dedicated time and social support/ positive experience	*"Great! The dedicated weekly time was extremely important to helping me get started with incorporating wellness into my routine, and the ability to (sometimes force myself to) learn and practice different methods of mental wellness while guided by an instructor was invaluable. Having a small group with lots of attention from instructors kept me accountable to showing up and prioritizing mental wellness."*
		"It was great to be able to learn about coping skills while being with a group of students who are struggling in a similar way. It also was a way for us to have social connections. I also felt supported and was able to check in with myself and others- which set me up for a better week. I thought it would be really weird virtual but I actually really liked it because I was able to be vulnerable when I wanted to be and had the ability to turn off the camera and enjoy restorative moments by myself and in my space. I am very sad that the program is over."
Any additional comments/ suggestions/ feedback about the program or facilitators?	Facilitators were calm and knowledgeable and created comfortable/ safe space	*"[Facilitator 1] was an AMAZING group facilitator. She made the whole difference by making us feel comfortable and loved. She really is a wonderful facilitator and will only continue to shine as she grows in her career."*
		"I think [Facilitator 1] did a good job of allowing wait time and asking questions for us. She was gentle and informative about the topics and skills and allowed us to soak it in."
		"The facilitators were both so wonderful and I greatly appreciate their time and care for each member of the group."
		"[Facilitator 1] is a pleasant and kind person who did a good job setting a tone of respect in the group. This allowed others to feel more comfortable opening up."
	More time spent on experientials	*"I thought [Facilitator 1] was super friendly and approachable! She was a great facilitator. I feel like the program could maybe spend more time trying various activities during the session as opposed to talking about the various options."*
	Provide more information to increase accessibility	*"More information on the available resources and process for finding a therapist, should that be a direction our path in mental wellness takes us. This may be very valuable information to understand as future physicians understanding where we fit in the process for patients finding a therapist, and being able to give patient education on what to expect, as well as to understand what the process would look like for ourselves."*
	Modify specific aspects of program	*"I appreciated the 5 minutes at the end of each session, but I don't feel that they were necessary for my experience. 5 minutes wasn't enough time for me to do things that I really wanted to do and I felt that I "wasted" it much of the time just waiting for the time to end so I could move on to something else. I think a better way to have handled it would have been to have us do closing statements and then recommend we spend the last 10-15 minutes of the hour taking time for ourselves."*
		"I think it would be great to split the groups up even more, especially if the program were to be held online again. I have found in classwork that chatting with a group of 4 virtually is actually quite doable."

Table 4. Means, Standard Deviations, and Repeated Measures ANOVA for Each Outcome Measure (N=19)

Construct (Measure) Subscales	Pre		Post		Follow-Up		Repeated Measures ANOVA				
	$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD	df_{time}	df_{error}	F	*P*	η^2 partial
Self-Compassion (SCS-SF)[a]	3.02	0.64	3.34	0.43	3.53	0.45	1.50	27.01	15.25	.000***	0.46
Kindness[a]	3.08	0.61	3.39	0.52	3.76	0.59	1.50	26.91	11.95	.001**	0.40
Judgment	3.05	0.94	2.68	0.65	2.61	0.68	2.00	36.00	4.68	.016*	0.21
Common humanity[a]	3.21	1.05	3.50	0.55	3.71	0.67	1.42	25.64	4.00	.043*	0.18
Isolation	3.45	0.80	2.92	0.73	2.66	0.58	2.00	36.00	10.67	.000***	0.37
Mindfulness	3.82	0.79	3.82	0.65	3.87	0.62	2.00	36.00	0.13	.877	0.01
Overidentified	3.50	0.87	3.08	0.67	2.92	0.63	2.00	36.00	12.86	.000***	0.42
Burnout (BMS)	3.49	0.80	2.98	0.71	2.97	0.56	2.00	36.00	7.79	.002**	0.30
Mindfulness (FFMQ-15)	40.21	7.22	42.05	5.42	42.47	5.02	2.00	36.00	3.92	.029*	0.18
Observe	9.84	1.83	10.74	1.93	10.84	2.22	2.00	36.00	2.80	.074	0.13
Describe	10.74	2.77	10.95	3.01	11.00	2.73	2.00	36.00	0.18	.832	0.01
Awareness	37	2.03	10.00	1.76	9.63	1.64	2.00	36.00	0.90	.417	0.05
Nonjudgment	11.21	2.68	11.95	2.12	12.00	2.21	2.00	36.00	1.76	.187	0.09
Nonreactivity	8.89	2.51	9.16	1.95	9.84	1.86	2.00	36.00	0.20	.152	0.10
Stress (PSS-10)	21.16	5.22	18.00	5.39	15.58	4.62	2.00	36.00	11.69	.000***	0.39
Healthy Lifestyle Behaviors (HPLP-II)	2.50	0.25	2.72	0.41	2.78	0.38	2.00	36.00	16.09	.000***	0.47
Health responsibility	2.03	0.48	2.46	0.61	2.39	0.66	2.00	36.00	9.53	.000***	0.35
Physical activity	2.55	0.63	2.56	0.64	2.63	0.69	2.00	36.00	0.53	.592	0.03
Nutrition	2.36	0.29	2.47	0.48	2.58	0.44	2.00	36.00	4.66	.016*	0.21
Spiritual growth	2.71	0.39	2.98	0.52	3.06	0.48	2.00	36.00	13.60	.000***	0.43
Interpersonal relations	2.96	0.39	3.16	0.40	3.18	0.37	2.00	36.00	4.70	.015*	0.21
Stress management	2.36	0.46	2.64	0.53	2.78	0.57	2.00	36.00	17.16	.000***	0.49

Table 4, Continued

Post-hoc pairwise comparisons[b]	Post - pre				Follow-up - Pre				Follow-up - Post			
	x̄ Diff	SE	*P*	d	x̄ Diff	SE	*P*	d	x̄ Diff	SE	*P*	d
Self-compassion (SCS-SF)	0.32**	0.09	.005	0.59	0.51**	0.12	.001	0.92	0.19+	0.07	.051	0.43
Kindness	0.32*	0.12	.042	0.55	0.68**	0.18	.003	1.13	0.37*	0.12	.020	0.67
Judgment	-0.37	0.17	.133	0.46	-0.45+	0.18	.059	0.54	- 0.08	0.12	1.00	0.11
Common humanity	0.29	0.18	.379	0.35	0.50	0.22	.106	0.57	0.21	0.12	.264	0.34
Isolation	-0.53*	0.17	.021	0.69	-0.79**	0.20	.002	1.13	- 0.26	0.15	.288	0.39
Over-identified	-0.42**	0.12	.009	0.54	-0.58**	0.12	.001	0.76	- 0.16	0.11	.488	0.25
Burnout (BMS)	-0.52*	0.17	.022	0.67	-0.53**	0.15	.009	0.75	- 0.01	0.13	1.00	0.02
Mindfulness (FFMQ-15)	1.84	1.02	.264	0.29	2.26	0.90	.063	0.36	0.42	0.61	1.00	0.08
Stress (PSS-10)	-3.16	1.28	.072	0.60	-5.58**	1.22	.001	1.13	-2.42+	0.94	.056	0.48
Healthy Lifestyle Behaviors (HPLP-II)	0.22**	0.06	.007	0.65	0.28***	0.04	.000	0.87	0.06	0.04	.565	0.15
Health responsibility	0.43**	0.09	.001	0.78	0.36*	0.11	.014	0.62	- 0.07	0.13	1.00	0.11
Nutrition	0.11	0.08	.534	0.28	0.22*	0.08	.034	0.59	0.11	0.06	.218	0.24
Spiritual growth	0.26*	0.08	.011	0.59	0.35***	0.07	.000	0.80	0.09	0.06	.526	0.16
Interpersonal support	0.19	0.09	.163	0.51	0.22**	0.06	.004	0.58	0.02	0.08	1.00	0.05
Stress management	0.28**	0.07	.002	0.56	0.42***	0.08	.000	0.81	0.15	0.07	.158	0.25

***=significance at *P*<.001 level; **=significance at *P*<.01 level; *=significance at *P*<.05 level. Abbreviations. SCS-SF=Self-Compassion Scale-Short Form; BMS=Burnout Measure-Short Version; PSS-10=Perceived Stress Scale-10; FFMQ-15=Five Facet Mindfulness Questionnaire-15; HPLP-II=Health Promoting Lifestyle Profile-II. [a] =reported Greenhouse-Geisser corrected within-subjects tests because the sphericity was violated (*P*<.05 on the Mauchly's test of sphericity). [b]=Post-hoc pairwise comparisons for significant ANOVAs with Bonferroni corrections (N=19).

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