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IOWA STATE UNIVERSITY Extension and Outreach

This study was a collaboration of volunteers. Thank you to all who contributed!



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14 pairs of Powerful Tools for Caregivers (PTC) class leaders recruited January 2019 - March 2019



3 sites dropped due to difficulties with recruiting participants (n=1) or staffing issues (n=2)



11 pairs of class leaders delivered the PTC program between October 2019 – March 2020





Community Agency Location	Telehealth Class Dates Number of participants (n)	In-person Class Dates Number of participants (n)
California, Los Angeles	October 7 – November 11, 2019 (n=4)	August 19 – September 23, 2019 (n=9)
California, Santa Cruz	September 5 – October 10, 2019 (n=4)	February 6 – March 12, 2020 (n=11)
Florida	Unable to schedule with site	August 21 – September 25, 2019 (n=4)
Idaho	November 11 – October 16, 2019 (n=4)	November 11 – October 16, 2019 (n=10)
Iowa	October 29 – December 3, 2019 (n=4)	Cancelled due to COVID-19
Michigan	February 18 - March 24, 2020 (n=3)	July 10 - August 14, 2019 (n=4)
Minnesota	October 7 – November 11, 2020 (n=3)	July 9 - August 13, 2019 (n=5)
Nebraska	August 12 – September 16, 2019 (n=5)	August 6 – September 10, 2019 (n=10)
New Hampshire	March 4 – April 8, 2020 (n=4)	November 5 – December 17, 2019 (n=10)
Ohio	November 4 – December 19, 2020 (n=5)	November 4 – December 19, 2020 (n=9)
Ontario	January 28 – March 3, 2020 (n=5)	Cancelled due to COVID-19

Analysis

Follow-Up

Completed pre-PTC assessment (n=102)

In-person (n=63; Telehealth (n=39)

- Completed post-PTC assessment (n=65)
- Completed 6-month PTC assessment (n=41)
- Completed assessments at all three time points (n=23)



Outcome Measures at Pre, Post, and Six-month Follow-up: Telehealth n=10, In-person n=13

Assessment	Format	Pre	Post	6-month	ANOVA	ANOVA	Effect
		Mean	Mean	Mean	Main	Main	Size for
		(SD)	(SD)	(SD)	Effect	Effect	Time
					Group	Time	
CESD-R	In-person	10 (10)	7 (7)	7 (9)	F=6.633,	F=4.842,	η²=.20
	Telehealth	25 (17)	15 (13)	20 (17)	p=.019*	p=.013*	
Bakas Caregiving	In-person	54 (16)	67 (19)	59 (18)	F=0.358,	F=12.440,	η²=.36
Outcomes Scale	Telehealth	49 (9)	68 (19)	54 (16)	p=.556	p=.000+	
Caregiver Self-	In-person	79 (25)	83 (17)	83 (17)	F=0.033,	F=5.542,	η ² =.21
Efficacy	Telehealth	70 (18)	89 (13)	83 (16)	p=.857	p=.007*	
Negative Self-	In-person	3 (2)	2 (3)	3 (3)	F=2.823,	F=6.566,	η²=.23
Care Behaviors	Telehealth	6 (2)	3 (2)	4 (2)	p=.107	p=.003*	

Note. Center for Epidemiologic Studies Depression Scale Revised (CESD-R). There were no significant effects for the interaction of group and time. The main effect of group was only significant at the Pre PTC time period. Post hoc tests for main effect of time are displayed in Table 4.

Post Hoc Tests (Paired Samples t Tests) for Main Outcome Measures: Caregiver Self-Efficacy (CSE), Self-Care Behaviors (SCB), Bakas Caregiving Outcomes Scale (BCOS), and Center for Epidemiologic Studies Depression Scale Revised (CESD-R)

		t	p	Effect Size Cohen's d
Pair 1	CSE Pre - CSE Post	-4.905	.000*	708
Pair 2	CSE Pre - CSE 6-month	-2.701	.011*	477
Pair 3	CSE Post - CSE 6-month	1.306	.203	.251
Pair 4	SCB Pre - SCB Post	4.682	.000*	.669
Pair 5	SCB Pre - SCB 6-month	3.040	.005*	.521
Pair 6	SCB Post - SCB 6-month	902	.375	168
Pair 7	BCOS Pre - BCOS Post	-5.022	.000*	696
Pair 8	BCOS Pre - BCOS 6-month	-2.565	.015*	447
Pair 9	BCOS Post - BCOS 6-month	3.293	.003*	.612
Pair 10	CESD Pre - CESD Post	3.069	.004*	.438
Pair 11	CESD Pre - CESD 6-month	2.577	.016*	.478
Pair 12	CESD Post - CESD 6-month	918	.367	180

Note. *Statistical significance as determined by value less than alpha divided by 3 (0.05/3= 0.0167) for the Bonferroni correction per scale measured.