

Potential effects of SPAN for adolescents with social anxiety incorporating pet dogs



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Introduction

- Studies estimate 1 in 3 people impacted by social anxiety, disproportionately affecting younger people (SA)¹
- Coaching interventions shown to be effective for promoting positive social participation²
- Animal-assisted interventions (AAI) can lead to increased community integration, enhanced self-esteem & improved psychological well-being³

Purpose: Investigate potential effects of brief 4-week virtual coaching program Social Participation & Navigation (SPAN; spanprogram.com) promoting social participation in adolescents with SA incorporating pet dogs

Methods

Participants: 8 adolescents ages 13-17 (15.1±1.5 years) with dogs

- 6 female; 6 White; 1 Hispanic/Latina
- >50 on Social Anxiety Scale for Adolescents (SAS-A)⁴ (52-74 & 66.8±6.8)

SPAN Questionnaire: Self-rated

3

- Confidence & involvement in social participation areas
- Confidence in SPAN-specific skills Goal Activity Participation Scale (GAPS): Self rated involvement,

confidence, & satisfaction related to goal Data Analysis: SPAN Questionnaire & GAPS

- Calculated percent of maximum possible (POMP) scores & standard deviation (SD) for pre & post measures
- Effect sizes (Cohen's D) & Wilcoxon signed-rank test to assess change pre to post
- Content analysis to identify goals, supports & challenges

Coaching Program

Four 45-60 minute virtual coaching sessions led by graduate OT student coaches working on goal development, planning & achievement

- Informed consent & SPAN pre-guestionnaire Pre
 - Building rapport, intro to SPAN web-app, discussing social participation & goal setting, developing a goal
- GAPS form, goal refinement, generic & dog specific strategies, relevant tips & topics 2
- Reviewing goal progress, revising plan, reviewing strategies
- Discuss goal progress, plan for future, GAPS form, SPAN post-questionnaire

		Results			
Scores	SPAN Pre Mean (SD)	SPAN Post Mean (SD)	Effect size (Cohen's d)	Wilcoxon signed rank (p-value)	
	Ove	rall Social Participa	ation		
Involvement	62.2 (13.1)	64.8 (12.8)	0.20	0.06	
Confidence	60.0 (14.0)	70.5 (14.0)	0.75	0.02	
		Home & Family		•	
Involvement	65.3 (19.2)	63.4 (15.3)	-0.11	0.92	
Confidence	62.2 (14.1)	70.9 (14.7)	0.61	0.05	
		School		•	
Involvement	60.0 (13.8)	61.8 (16.5)	0.12	0.67	
Confidence	56.8 (15.1)	65.7 (17.2)	0.55	0.04	
	Neig	hborhood & comm	unity		
Involvement	59.0 (16.3)	64.2 (13.7)	0.35	0.05	
Confidence	58.3 (18.1)	70.4 (15.0)	0.73	0.03	
	SPAN	Skills Confidence	Scores		
Overall	69.0 (8.2)	79.8 (7.9)	1.35	0.01	
Goal planning	69.5 (8.3)	83.5 (12.4)	1.36	0.02	
Self-regulation	65.8 (14.3)	76.7 (6.9)	1.02 0.04		
Reciprocal	72 1 (12 5)	20 0 (6 E)	0.72	0.05	

80.0 (6.5) Effect sizes- small= ≤0.49, medium= 0.5-0.79, large= 0.8-1.29, very large≥ 1.3; Wilcoxon- p ≤ 0.05 bold & italicized

0.72

...

0.05

73.1 (12.5)

communication

			100	GAPS Scores					
Type of Goal	Goals completed	Goals planned	100 90	Pre Post					
Meeting & conversing	2	2	80 70						
Managing anxiety & frustration	1	1	60 50						
Group Interaction	4	0	40 30	_					
Total	7	3	20 10	-					
Common supports:		0							
Dog (7), having close friend (7), personal strengths (6), mindfulness (4) Common challenges:			Involve	ment	Satisfactio	n	Confidence		
		Effect Size	3.31		1.55		1.38		
Schedule (7), personal challenges (6), anxiety (5), lack of confidence (4), not knowing people (4), living situation (4)		Wilcoxon (p- value)	0.01		0.01		0.03		

Discussion

- Consistent significant changes (p≤0.05) in confidence scores across all social participation domains
- Inconsistent changes across involvement scores
- Most significant changes in SPAN specific skills (overall, goal planning, self-regulation, & reciprocal communication)
- Most participants (7/8) were able to develop, plan, & execute a goal within 4 weeks
- One participant had final step of goal planned after program
- Significant changes & very large effect sizes in self-rated involvement, satisfaction, & confidence related to goals

Overall, findings in line with previous studies using similar design^{2,5}

- Inconsistent involvement scores potentially explained by busy schedule during school year, limited program duration & types of goals created (i.e., focus on community)
- Changes in confidence scores might be due to skills & strategies discussed & practiced during brief 4 week trial
- Significant changes in SPAN skills, & goal specific scores may be due to individualized approach to coaching program

Limitations & Future Directions

Limitations:

- Coaching program limited to 4 weeks
- Took place during winter months of school year
- Small sample size, lack of generalizability
- Challenges incorporating dogs within goals & strategies
- SPAN Questionnaire has limited psychometric evidence

Future Directions:

- Assess effects of longer program with larger sample •
- Assess effects of program during other times of year
- Provide dog-specific resources & strategies
- Examine psychometric measures of SPAN questionnaire further
- Examine specific influence of relationship with dog on social anxiety & participation

References

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