ENGAGE. MODEL. PRACTICE.

Comparing Effects of In-Person & Remote Supervision on RBT Treatment Integrity

K-Now Behavioral Solutions

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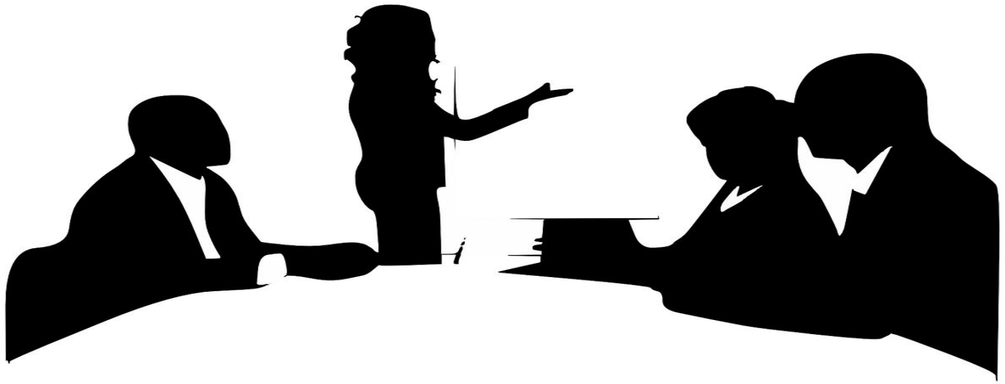
Be In The Know



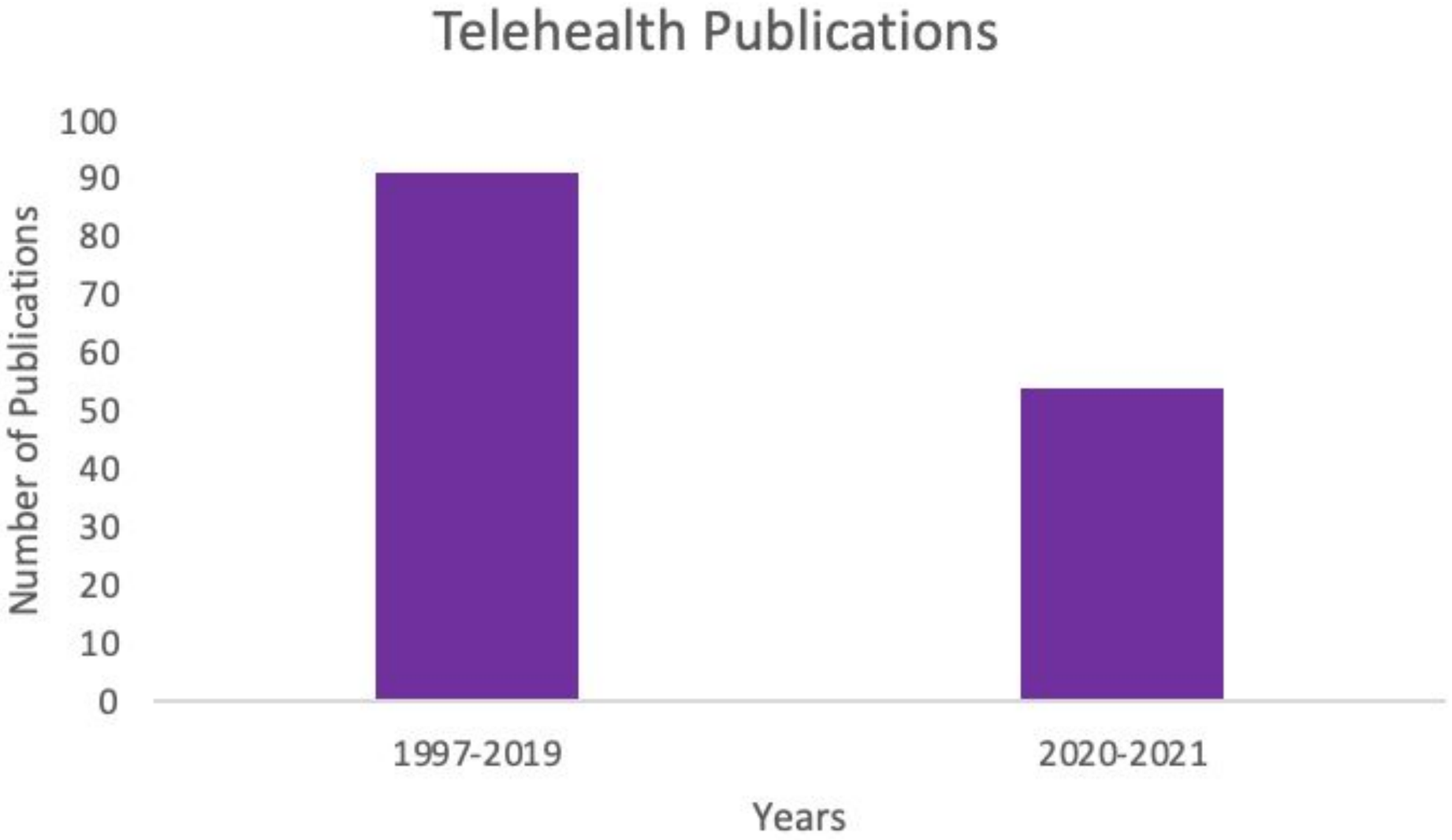
1. Identify pre-Covid and Covid telehealth research.
2. Identify barriers related to ABA-based telehealth services.
3. Compare in-person and remote supervision on Registered. Behavior Technician (RBT) Treatment Integrity (TI).
4. Pinpoint areas of need for future telehealth research.

Objectives.

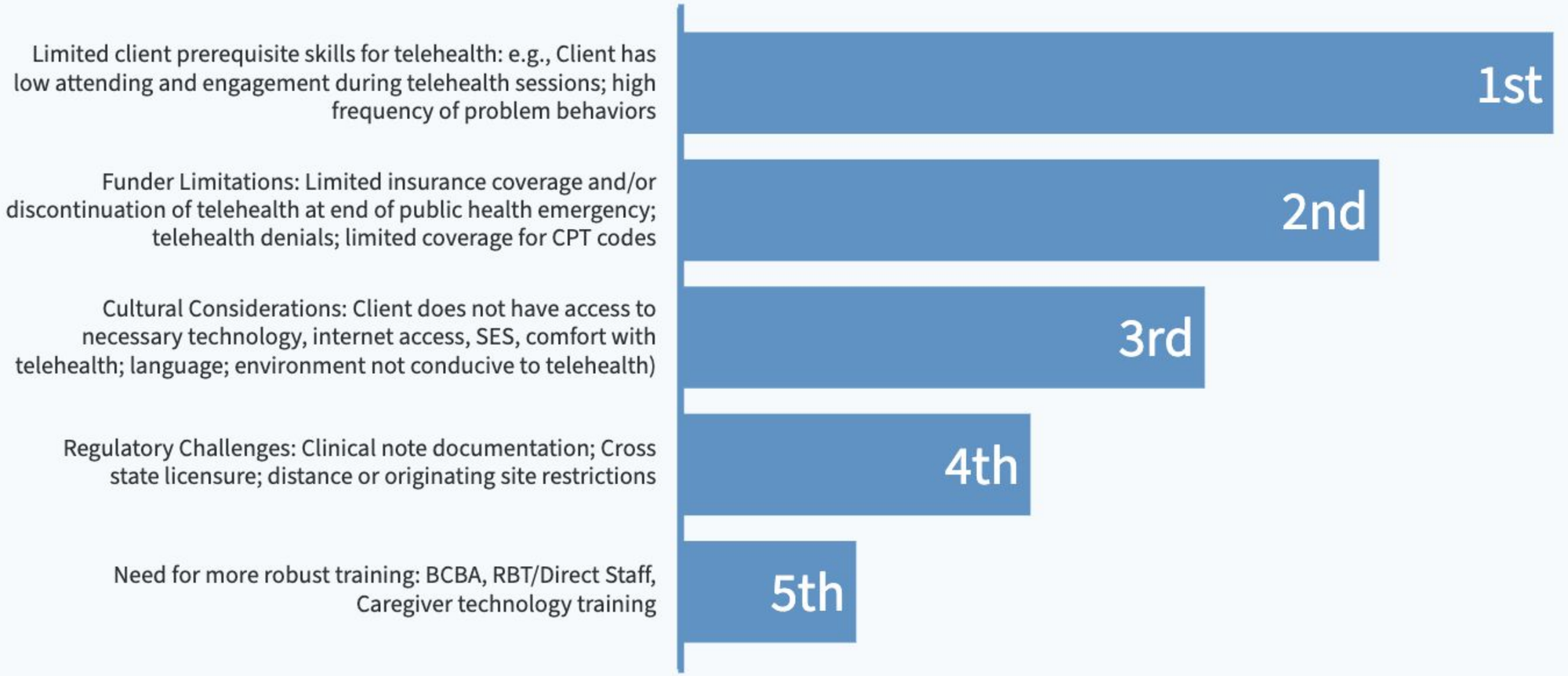
What is Telehealth?

Telehealth is the use of telecommunication technologies to support ABA-based services provided from a distance.

Review of Literature.



Rank the following barriers from 1 (complex) to 5 (not at all)



Barriers.

Barriers.


LICENSED
LICENSED


RESEARCH
EXAMINE
PROBE
SCAN
SCIENCE
KNOWLEDGE
EXPERIMENTATION


TRAINING
COACHING
TEACHING
KNOWLEDGE
DEVELOPMENT
LEARN
EXPERIENCE
SKILLS
&
DEVELOPMENT


INSURANCE

Current Study.

What are the comparative effects of in-person and remote supervision of RBT treatment integrity?

Table 1

RBT Demographics

	Group	*Gender*	*Certification Date*	*Location*
RBT 1	1	Female	Oct 2017	New Mexico
RBT 2	2	Female	Oct 2017	New Mexico
RBT 3	3	Female	Oct 2017	Nevada
RBT 4	4	Female	July 2018	Nevada
RBT 5	5	Female	Aug 2018	New Mexico

Methods.

Table 2

Child Demographics

Group		Age	Gender	Location	Behavior
Child 1	1	6	Female	New Mexico	Vocal Refusal
Child 2	2	6	Female	New Mexico	Vocal Refusal
Child 3	3	2	Male	Nevada	Tantrum
Child 4	4	5	Male	Nevada	Elopement
Child 5	5	6	Male	New Mexico	Inapp Vocal Response

Methods.

ABA-based Therapy Sessions Group Information

	Length	Setting
Group 1	10 minutes	Child Bedroom
Group 2	15 minutes	Child Bedroom
Group 3	5 minutes	Child Bedroom
Group 4	8 minutes	Living Room
Group 5	15 minutes	Living Room

Methods.

Dependent Variable.

Preference Assessment	
	Task
1	Collect material (date sheet and perferred items)
2	Sit across or beside table/client.
3	Place two items in from of client.
4	Give direction "pick one" or "which one do you want?"
5	If child reaches for both items, block access to items, and repeat direction, "pick one" or "which one do you want?"
6	Allow acces to chosen item. If chosen item and not an edible, allow 60 seconds of acce
7	Block access to remaining item.
8	If child refuses to make a selection, then mo pair of tangibles/edibles.
9	Set up next array of items.
10	Block visual of next array
11	Remove current item if chosen item is tangi

Mand Score Sheet	
Supervisor: _____RBT: _____ Client: _____Session Number_____Date:_____Time:_____-_____	
	Task
1	Arrange environment to elicit target behavior.
	Engage child in an interaction.
2	Establish shared attention.
3	Wait for learner to initiate request or display interest in item/activity.
	Provide verbal prompt "what do you want?"
4	Present verbal model.
	Expand response ("i want ball") and provide requested material if child repeats correctly or correct approximation.
	Provide another model if child does not repeat or repeat incorrectly then provide item.
5	Provide material and pair label to teach mand if learner continues to reach for item but does not provide verbal mand.

Design.

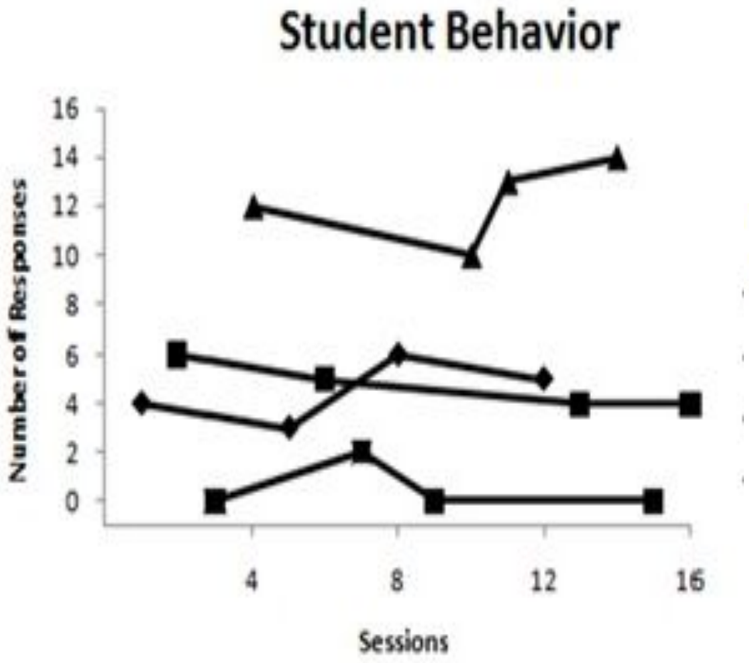


Table 12

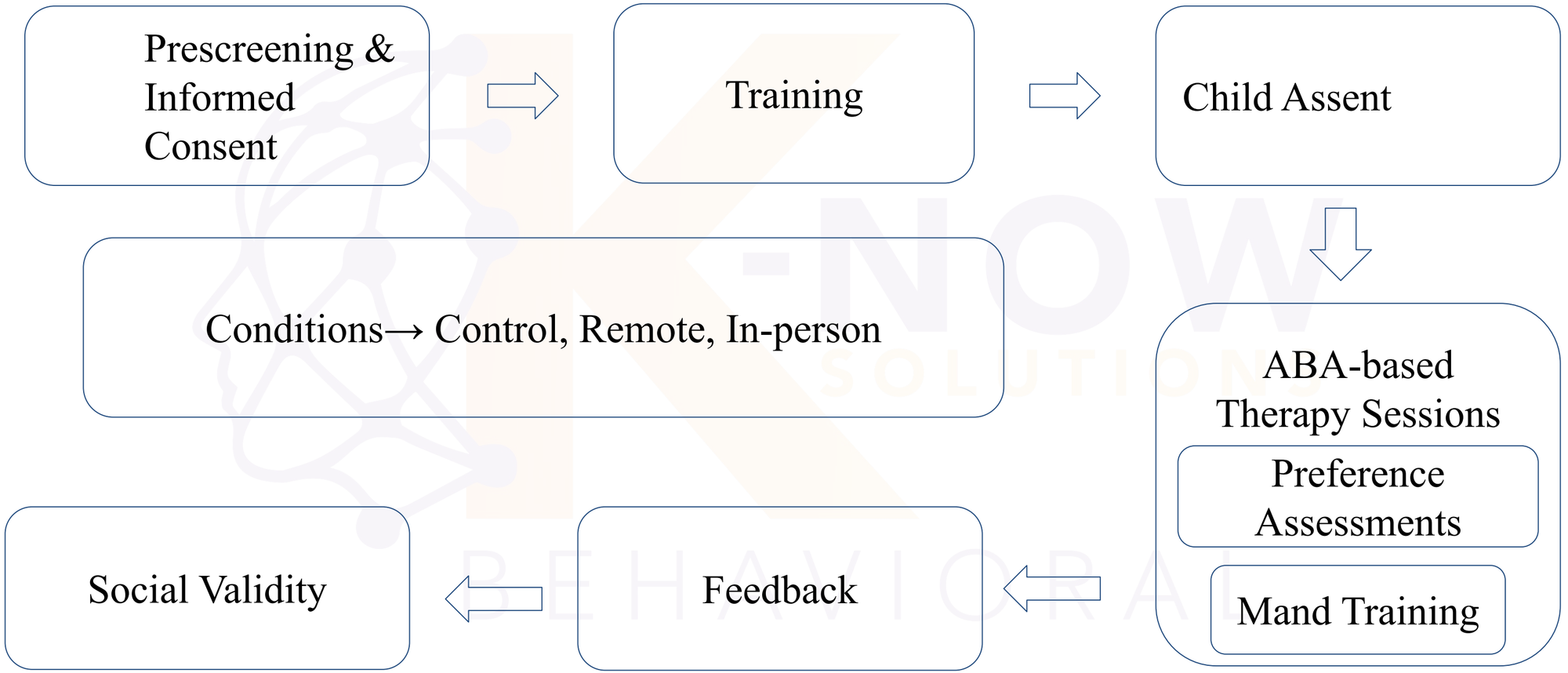
Random Assignments

Group 1	Group 2	Group 3	Group 4	Group 5
Control	Control	Control	Control	Control
In-person	Remote	In-person	Remote	Remote
In-person	In-person	In-person	In-person	In-person
Remote	Remote	Remote	In-person	Control
Control	Control	Control	Remote	In-person
Remote	In-person	Remote	In-person	Remote
Remote	Control	Remote	Remote	In-person
Control	In-person	In-person	Control	Control
In-person	Remote	Control	Remote	In-person
Remote		In-person	In-person	Remote
In-person		Remote	In-person	Control
Control		Remote	Remote	
		In-person	Control	
		Control		

Barlow, D. H., & Hayes, S. C. (1979). Alternating treatments design: One strategy for comparing the effects of two treatments in a single subject. *Journal of Applied Behavior Analysis, 12,* 199-210.

Hains, A. H., & Baer, D. M. (1989). Interaction effects in multielement designs: inevitable, desirable, and ignorable. *Journal of Applied Behavior Analysis, 22*(1), 57-69.

Procedures.


Prescreening & Informed Consent
Training
Child Assent
Conditions→ Control, Remote, In-person
ABA-based Therapy Sessions
Preference Assessments
Mand Training
Feedback
Social Validity

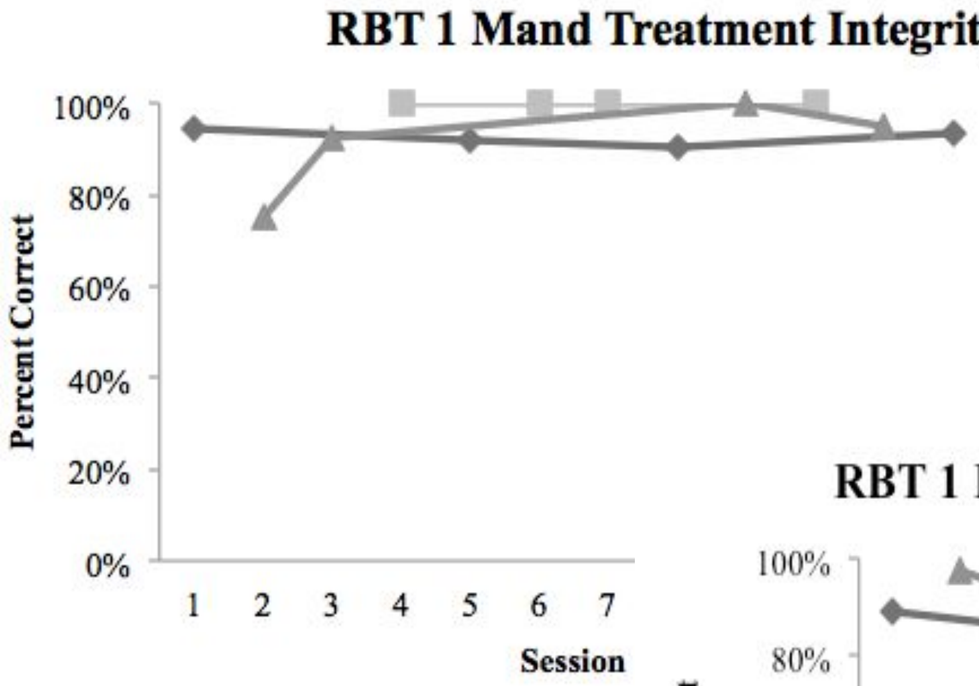
RBT 1

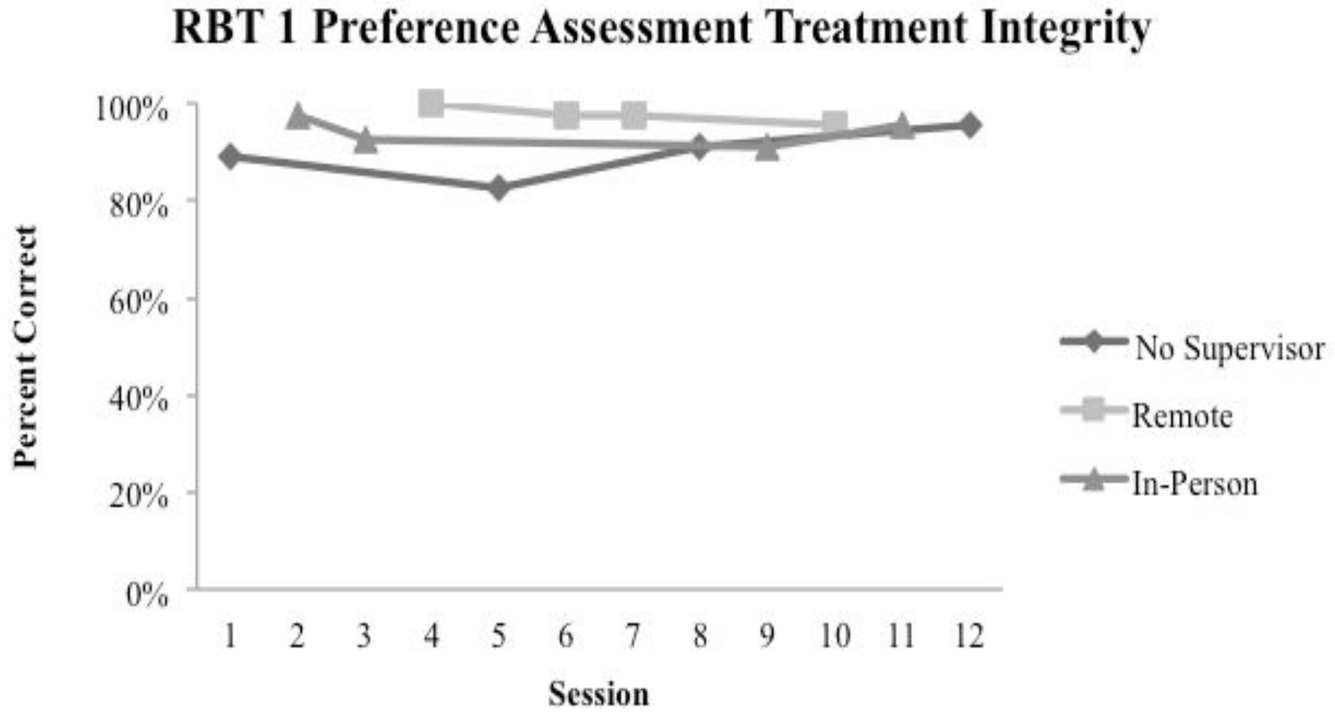
RBT 1 Averages, Maximum and Minimum Scores

	Average	Max	Min
Mand Training			
Control	92.51%	94.24%	90.32%
Remote	100%	100%	100%
In-person	90.58%	100%	75%
Preference Assessment			
Control	89.63%	95.65%	82.61%
Remote	97.73%	100%	95.45%
In-person	94.19%	97.97%	90.91%

Results.

Results.


RBT 1 Mand Treatment Integrity
100%
80%
60%
40%
20%
0%
Percent Correct
1
2
3
4
5
6
7
Session
No Supervision
Remote


RBT 1 Preference Assessment Treatment Integrity
100%
80%
60%
40%
20%
0%
Percent Correct
1
2
3
4
5
6
7
8
9
10
11
12
Session
No Supervisor
Remote
In-Person

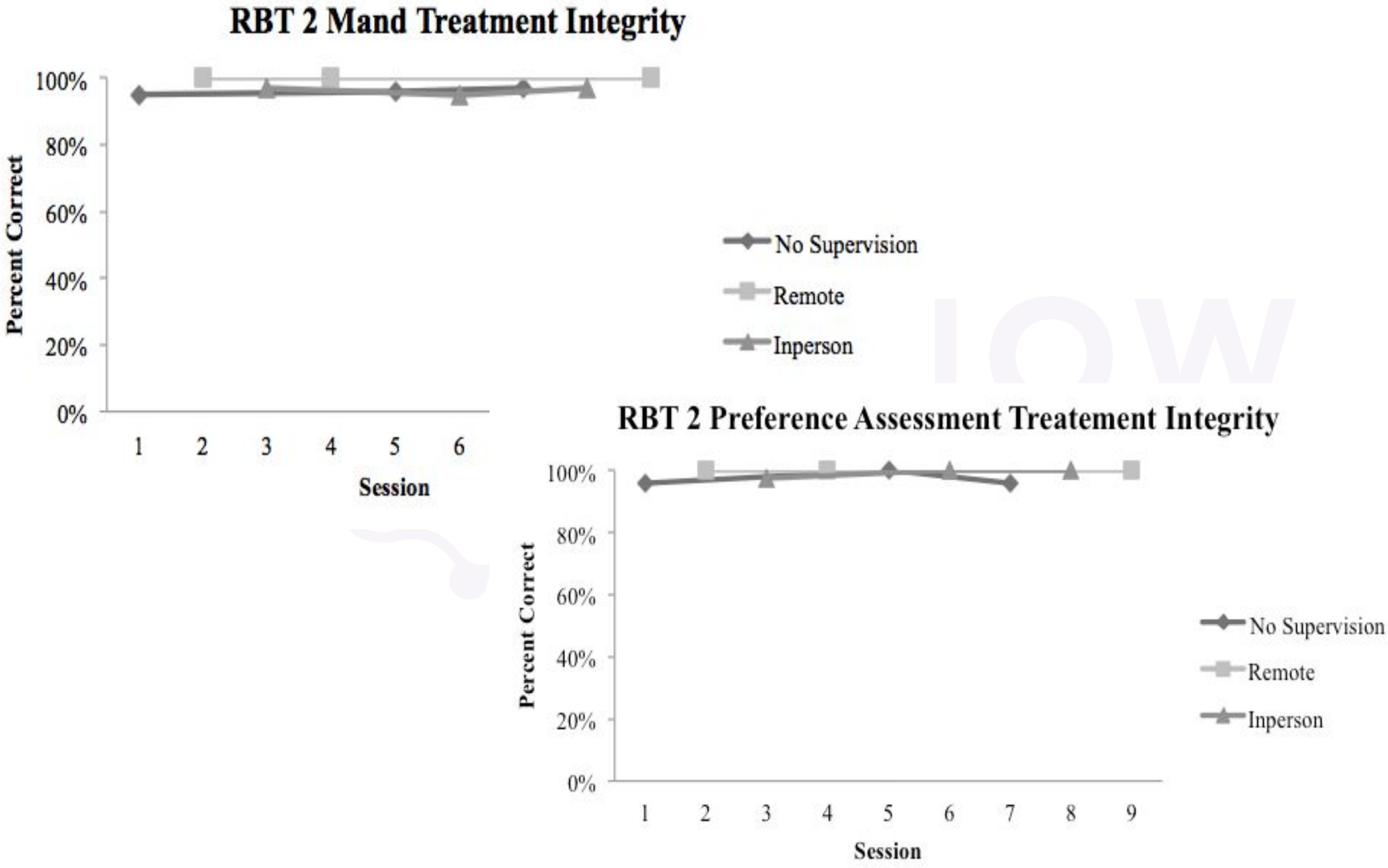
RBT 2

RBT 2 Averages, Maximum and Minimum Scores

	Average	Max	Min
Mand Training			
Control	95.85%	96.88%	95%
Remote	100%	100%	100%
In-person	96.18%%	96.97%	94.95%
Preference Assessment			
Control	97.10%	100%	95.65%
Remote	100%	100%	100%
In-person	99.12%	100%	97.37%

Results.

Results.


RBT 2 Mand Treatment Integrity
100%
80%
60%
40%
20%
0%
Percent Correct
1
2
3
4
5
6
Session
No Supervision
Remote
Inperson
RBT 2 Preference Assessment Treatement Integrity
100%
80%
60%
40%
20%
0%
Percent Correct
1
2
3
4
5
6
7
8
9
Session
No Supervision
Remote
Inperson

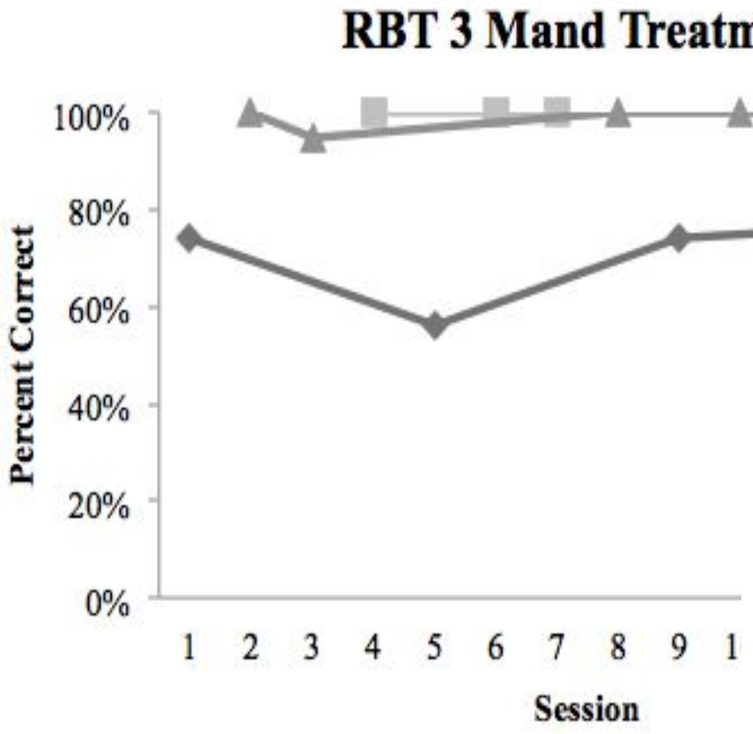
RBT 3

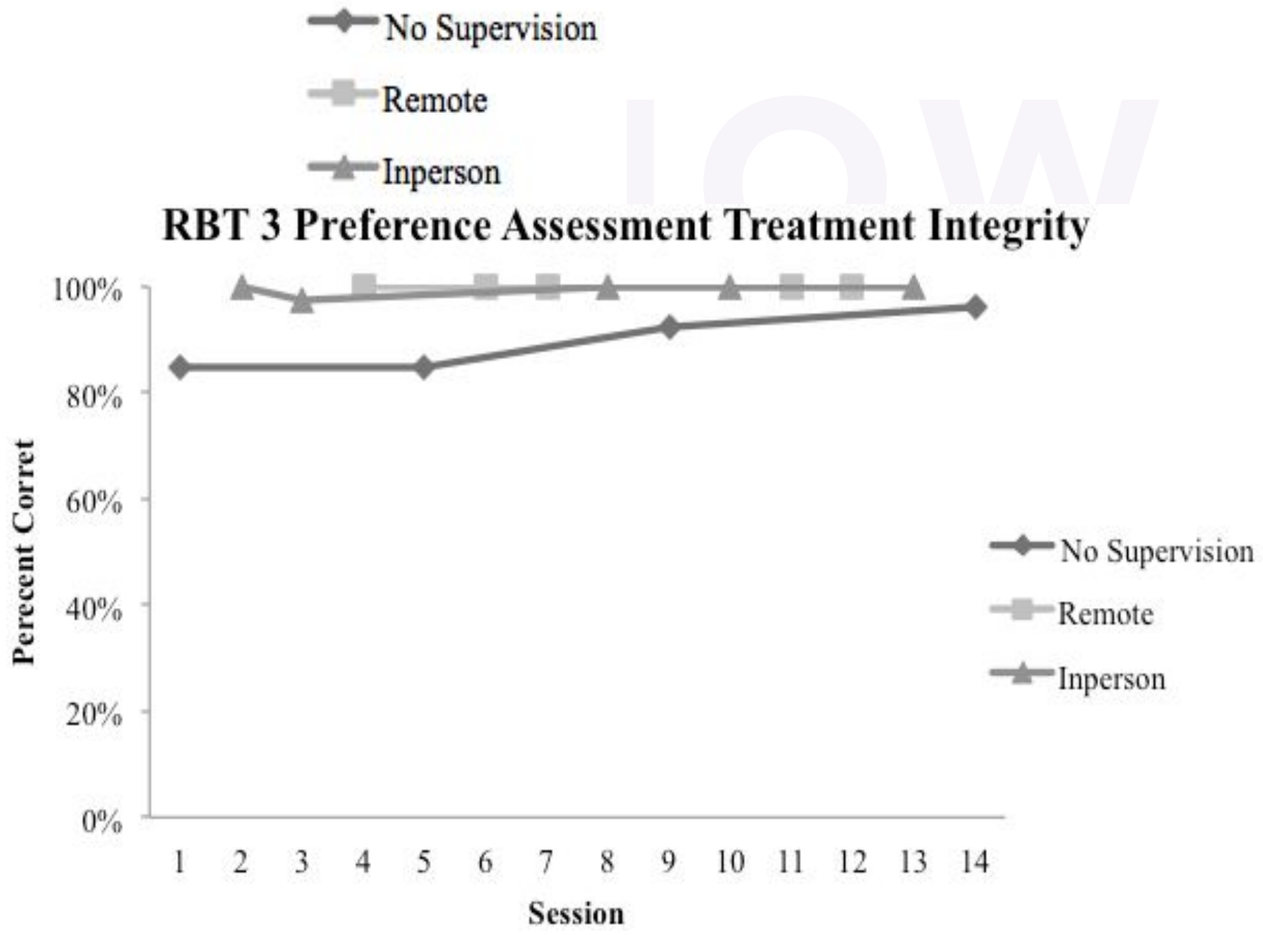
RBT 3 Average, Maximum and Minimum Scores

	Average	Max	Min
Mand Training			
Control	71%	78%	56%
Remote	100%	100%	100%
In-person	99%	100%	94.95%
Preference Assessment			
Control	89%	96.15%	84.62%
Remote	100%	100%	100%
In-person	99%	100%	97.37%

Results.

Results.


RBT 3 Mand Treatment Integrity
100%
80%
60%
40%
20%
0%
Percent Correct
1 2 3 4 5 6 7 8 9 1
Session


No Supervision
Remote
Inperson
RBT 3 Preference Assessment Treatment Integrity
100%
80%
60%
40%
20%
0%
Perecent Corret
1 2 3 4 5 6 7 8 9 10 11 12 13 14
Session
No Supervision
Remote
Inperson

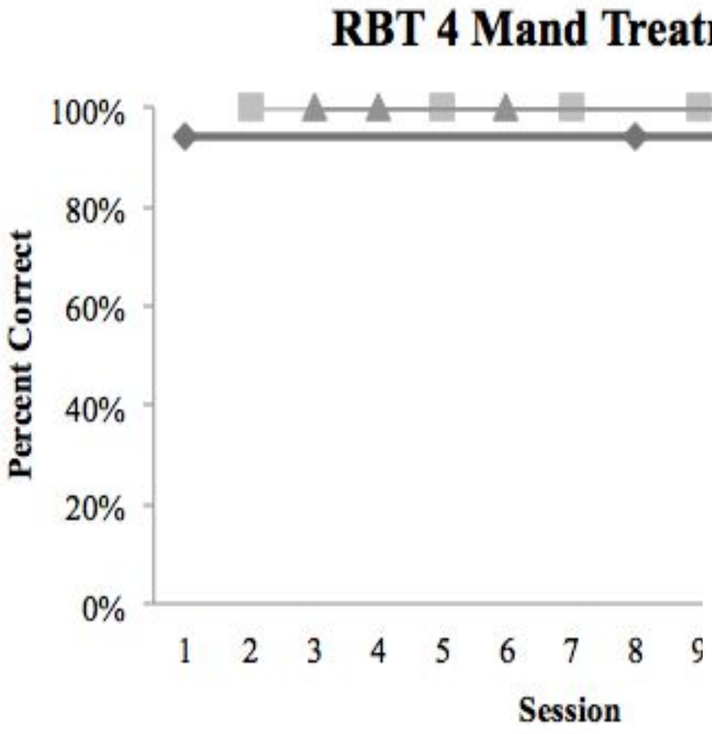
RBT 4

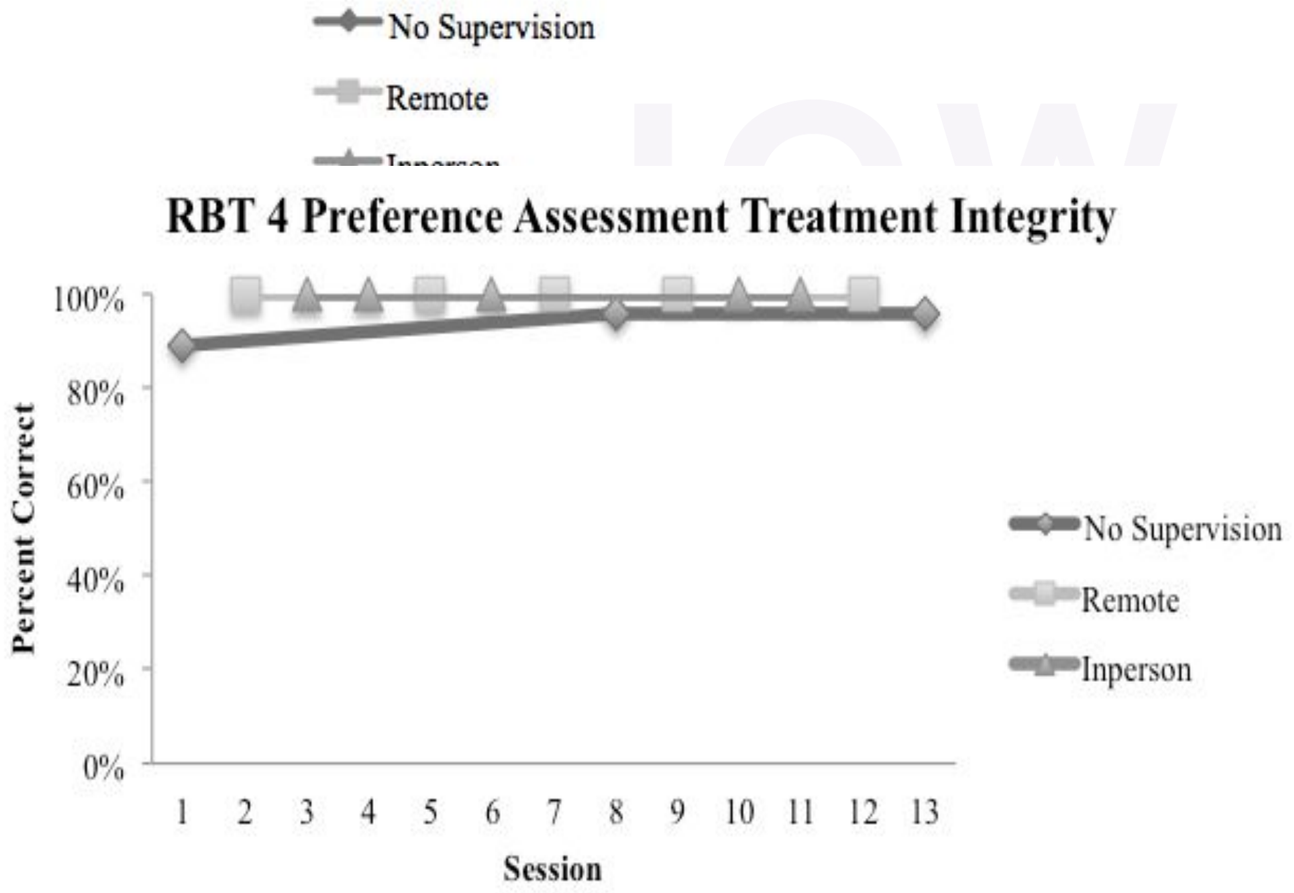
RBT 4 Average, Maximum and Minimum Scores

	Average	Max	Min
Mand Training			
Control	71%	78%	56%
Remote	100%	100%	100%
In-person	99%	100%	94.95%
Preference Assessment			
Control	93%	95.65%	89.13%
Remote	100%	100%	100%
In-person	100%	100%	100%

Results.

Results.


RBT 4 Mand Treatment Integrity
100%
80%
60%
40%
20%
0%
Percent Correct
1 2 3 4 5 6 7 8 9
Session


No Supervision
Remote
Inperson
RBT 4 Preference Assessment Treatment Integrity
100%
80%
60%
40%
20%
0%
Percent Correct
1 2 3 4 5 6 7 8 9 10 11 12 13
Session
No Supervision
Remote
Inperson

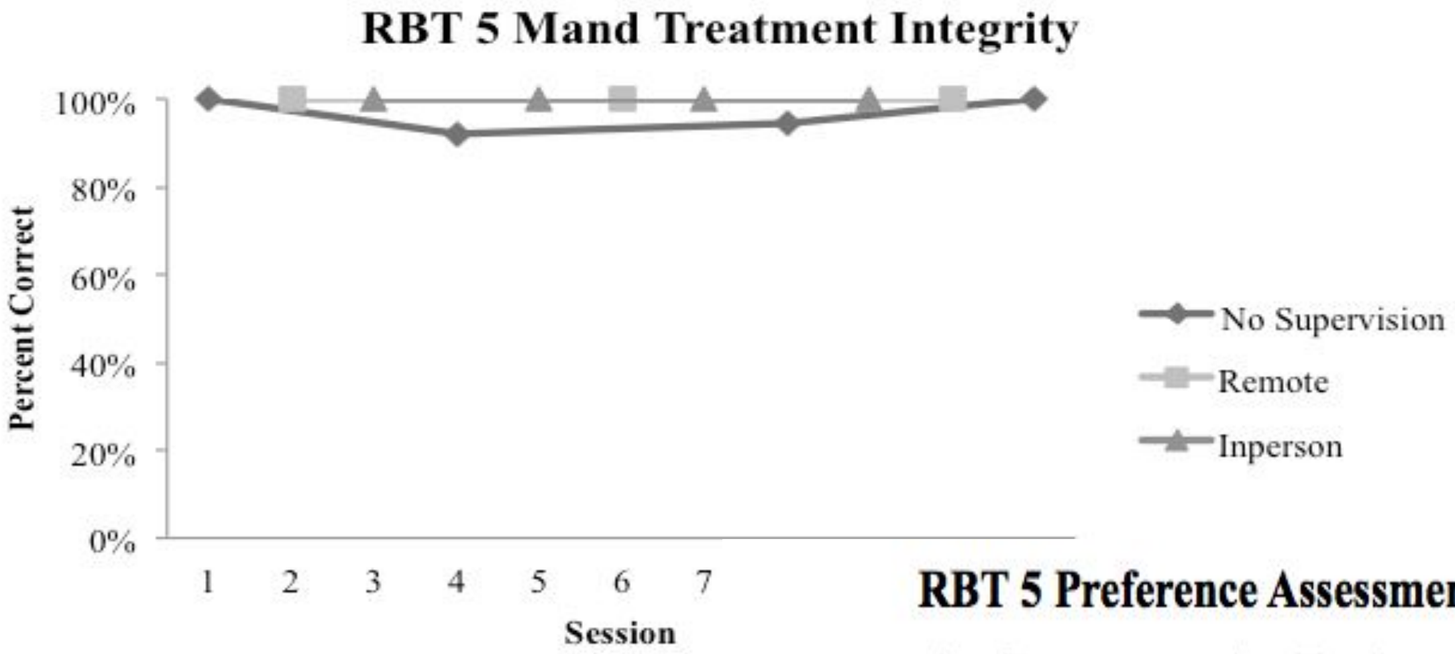
RBT 5

RBT 5 Average, Maximum and Minimum Scores

	Average	Max	Min
Mand Training			
Control	97%	100%	92.11%
Remote	100%	100%	100%
In-person	100%	100%	100%
Preference Assessment			
Control	98%	100%	97.06%
Remote	100%	100%	100%
In-person	99%	100%	95.12%

Results.

Results.


RBT 5 Mand Treatment Integrity
100%
80%
60%
40%
20%
0%
Percent Correct
1
2
3
4
5
6
7
Session
No Supervision
Remote
Inperson

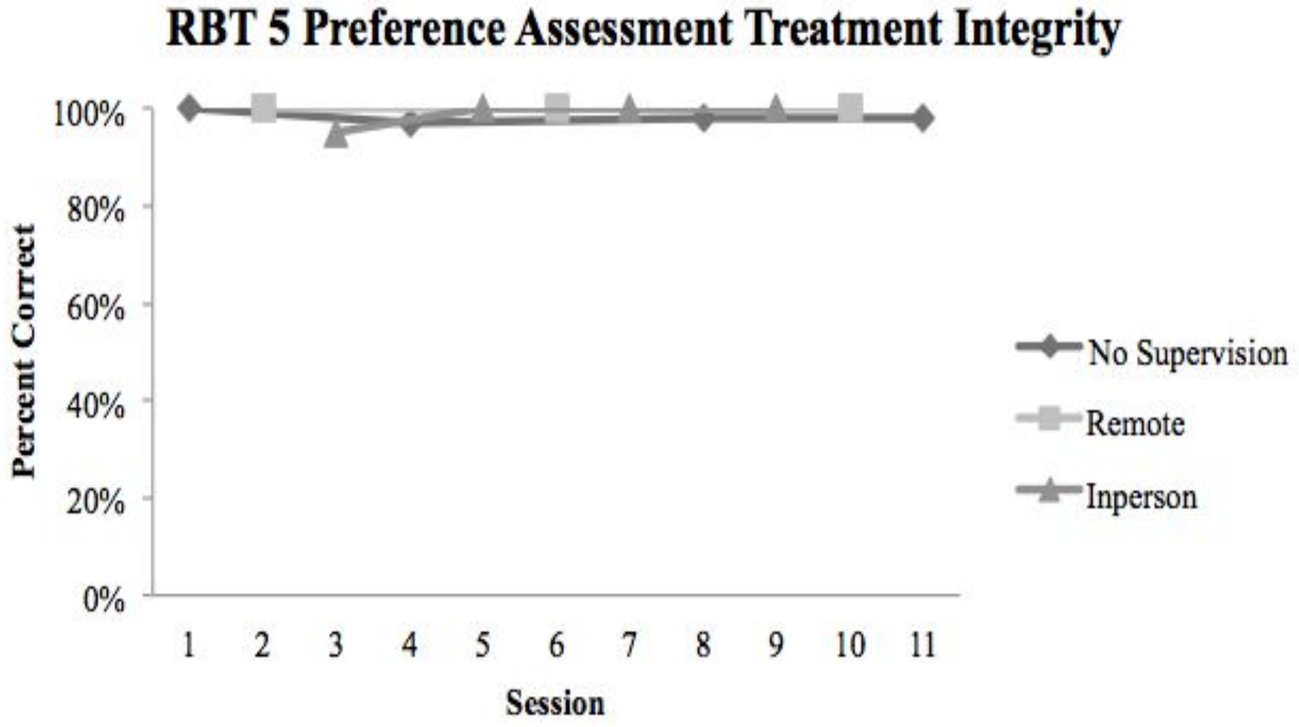

RBT 5 Preference Assessment Treatment Integrity
100%
80%
60%
40%
20%
0%
Percent Correct
1
2
3
4
5
6
7
8
9
10
11
Session
No Supervision
Remote
Inperson

Table 5

RBT Mand Treatment Integrity Averages

	Control	Remote	*In-person*
RBT 1	92.51%	100%	90.58%
RBT 2	95.84%	100%	96.18%
RBT 3	71%	100%	99%
RBT 4	94%	100%	100%
RBT 5	97%	100%	100%

Table 6

RBT Preference Assessment Treatment Integrity Averages

	Control	Remote	*In-person*
RBT 1	89.63%	97.73%	94.19%
RBT 2	97.10%	100%	99.12%
RBT 3	89%	100%	99%
RBT 4	93%	100%	100%
RBT 5	98%	100%	99%

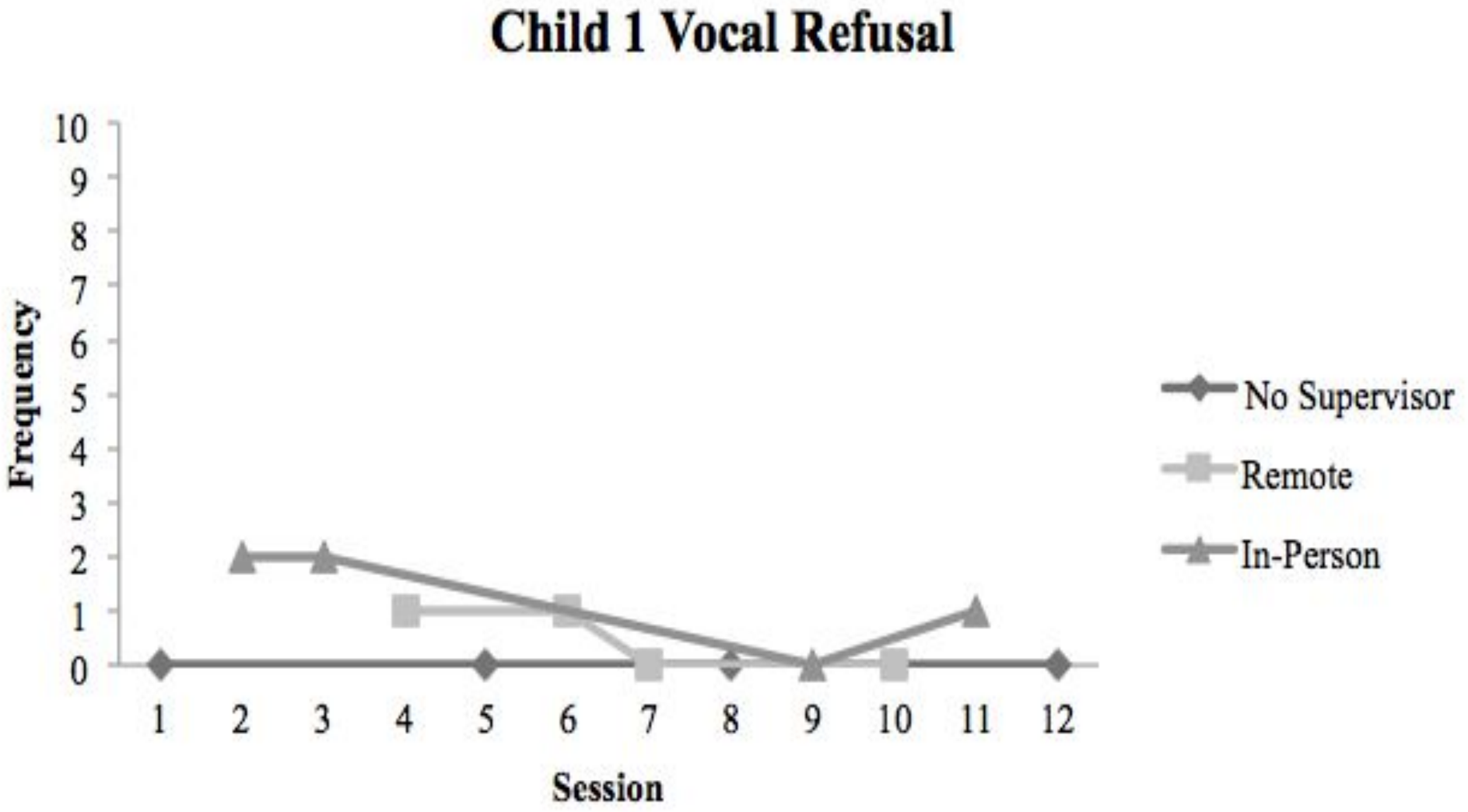
Results.

RBT Social Validity Results

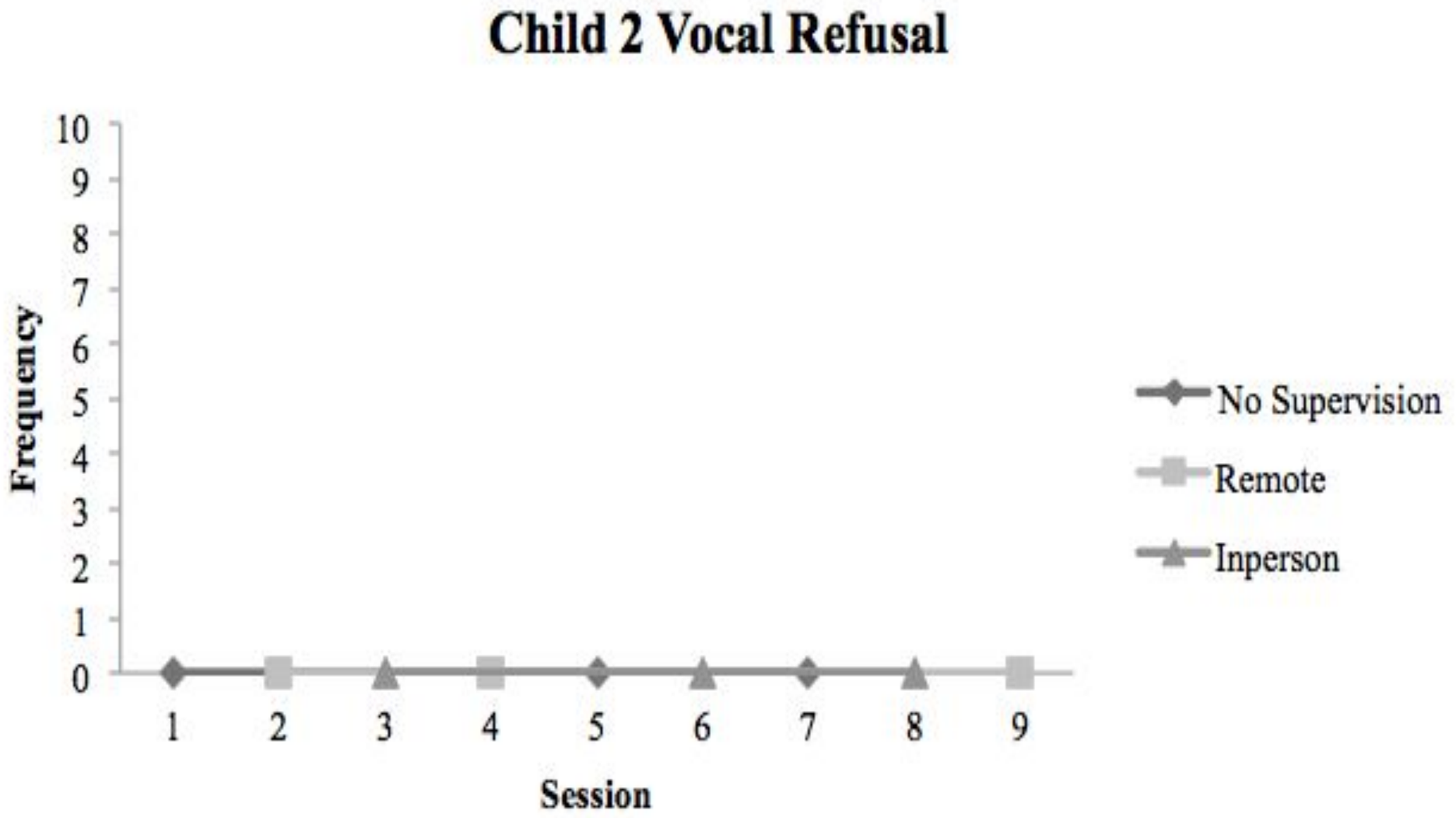
Question	Average Score
Remote Feedback	
Feedback approach is effective	4.25
Feedback approach altered future performance	4
Recommend feedback in the future	4.25
Feedback provided in a timely manner	4.25
Feedback individualized	4.5
In-person Feedback	
Feedback approach is effective	4.5
Feedback approach altered future performance	4.25
Recommend feedback in the future	4.5
Feedback provided in a timely manner	4.5
Feedback individualized	5

Results.

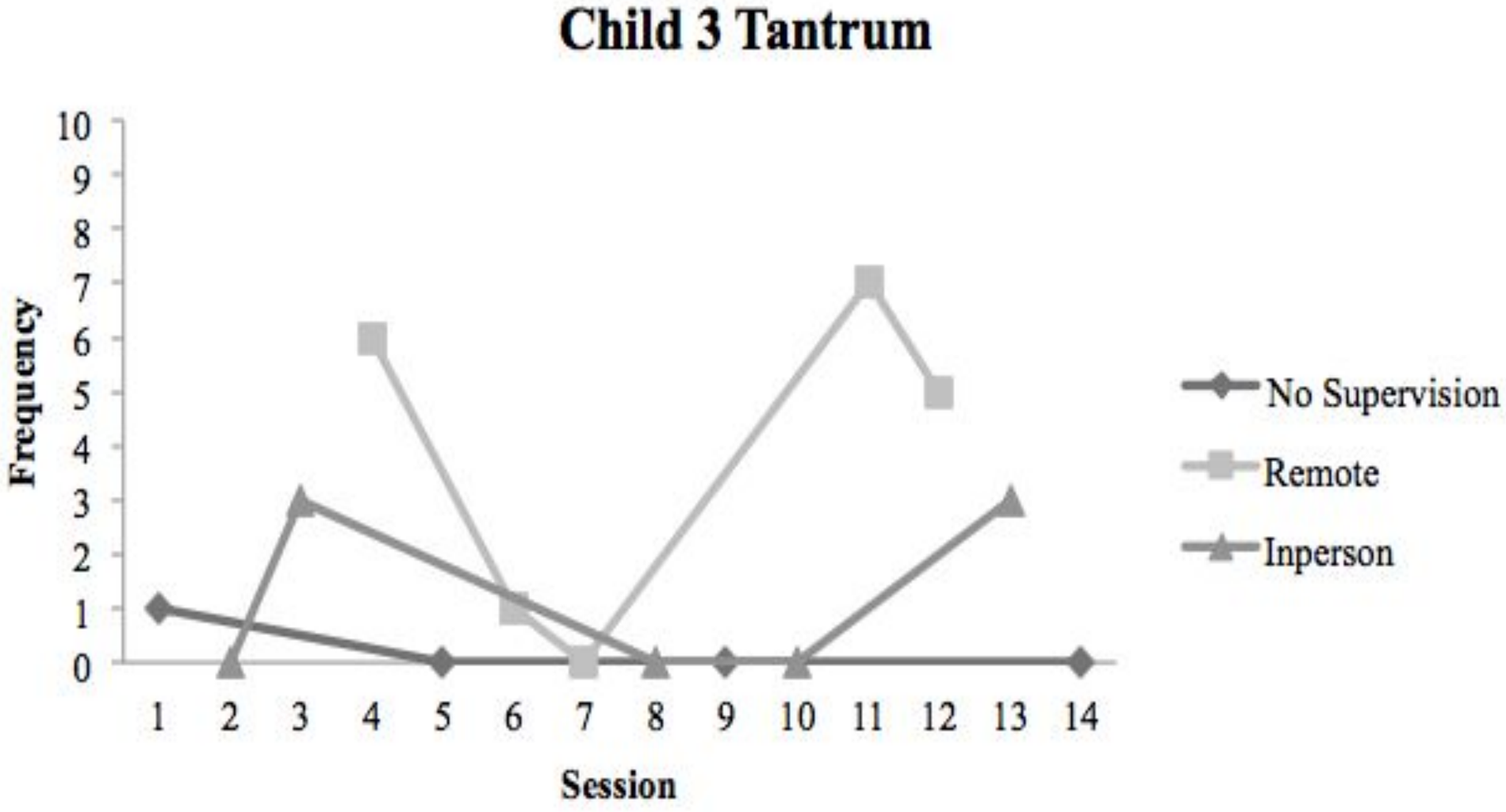
Results.


Child 1 Vocal Refusal
Frequency
10
9
8
7
6
5
4
3
2
1
0
1
2
3
4
5
6
7
8
9
10
11
12
Session
No Supervisor
Remote
In-Person

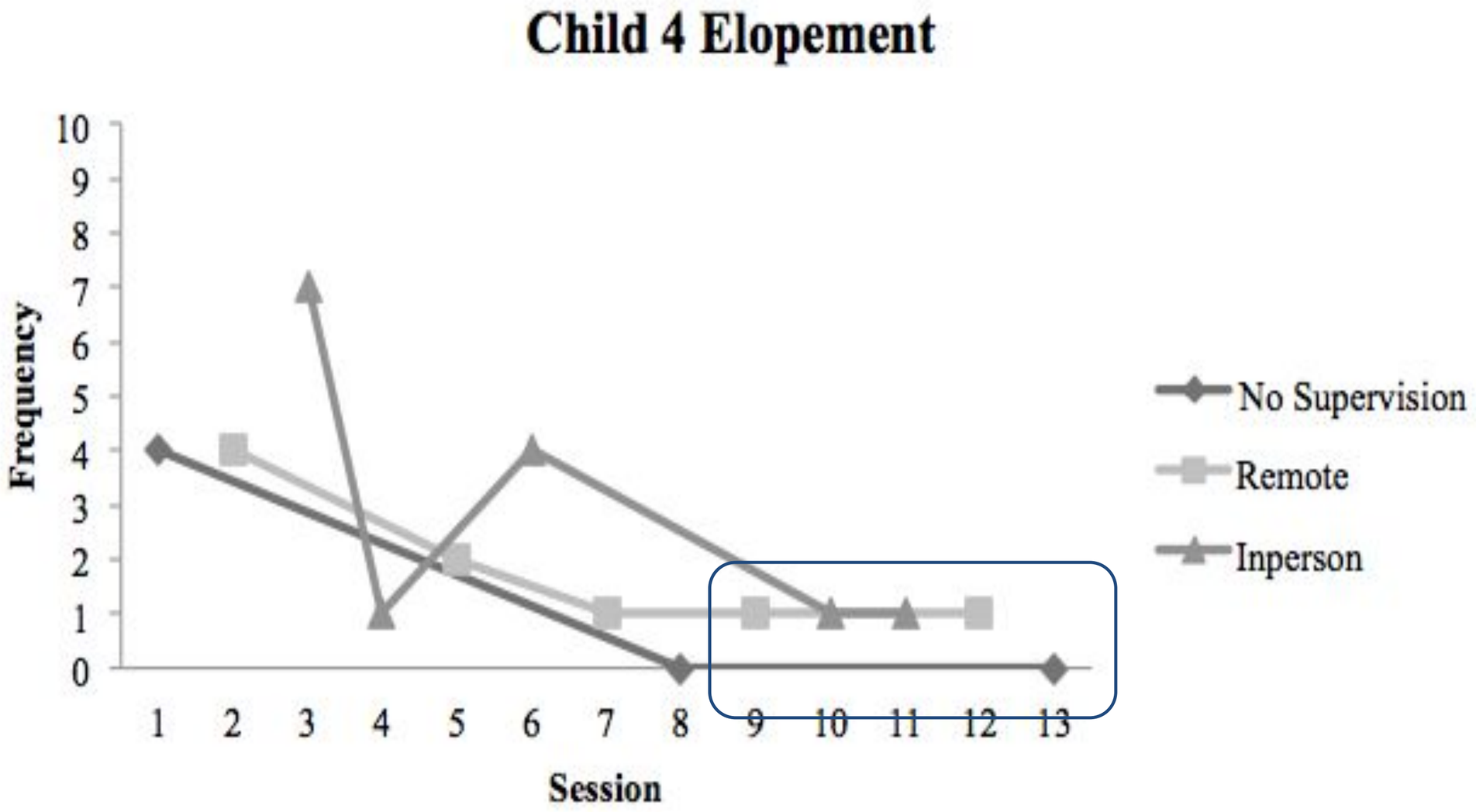
Results.


Child 2 Vocal Refusal
Frequency
10
9
8
7
6
5
4
3
2
1
0
1
2
3
4
5
6
7
8
9
Session
No Supervision
Remote
Inperson

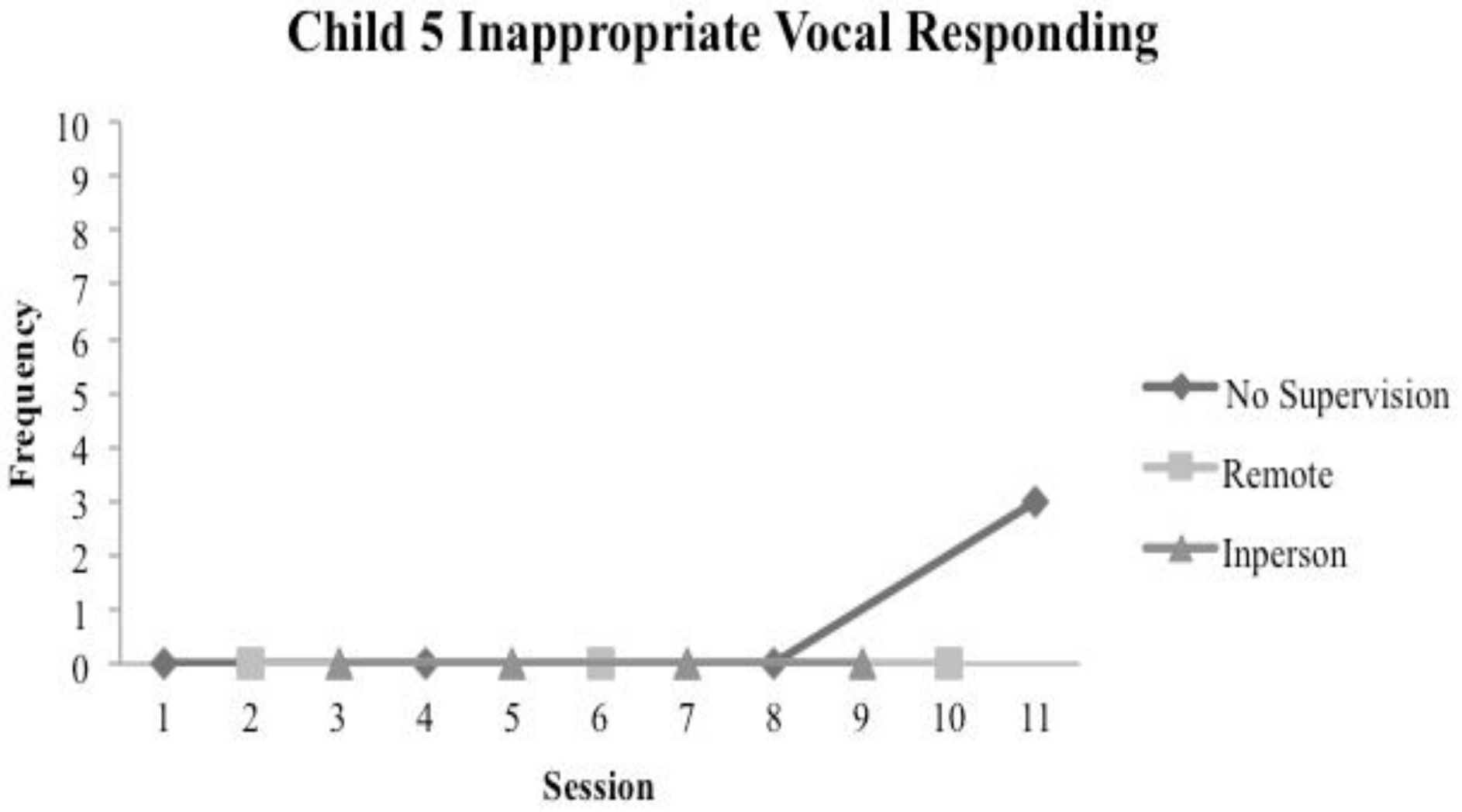
Results.


Child 3 Tantrum
Frequency
10
9
8
7
6
5
4
3
2
1
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14
Session
No Supervision
Remote
Inperson

Results.


Child 4 Elopement
Frequency
10
9
8
7
6
5
4
3
2
1
0
1
2
3
4
5
6
7
8
9
10
11
12
13
Session
No Supervision
Remote
Inperson

Results.


Child 5 Inappropriate Vocal Responding
Frequency
10
9
8
7
6
5
4
3
2
1
0
1
2
3
4
5
6
7
8
9
10
11
Session
No Supervision
Remote
Inperson

Overview Child Results

Table 7

Child Target Behavior Averages

	Control	Remote	*In-person*
Child 1	0	.5	1.25
Child 2	0	0	0
Child 3	.25	3.8	1.2
Child 4	1.33	1.8	2.8
Child 5	.75	0	0

Results.

Caregiver Social Validity Results

Question	Average Score
Remote Supervision	
Approach is effective	5
Approach was beneficial to my child	5
Recommend supervision to other parents	5
In-person Supervision	
Approach is effective	4
Approach was beneficial to my child	4
Recommend supervision to other parents	4

Results.

Discussion.

Discussion

Purpose of Study	Directly compare live remote supervision and in-person supervision
RBT Treatment Integrity	Treatment integrity levels were as high or higher during remote supervision

Discussion.

Interpretation of Findings

RBT

- Performance results consistent with Mowery et al. (2010)
- Treatment integrity results consistent with Pantermuehl and Lechago (2015)
- RBT treatment integrity support hypothesis

Discussion.

Limitations

Baseline	• Control condition included, but no baseline • Decision made for ethical reasons • Accommodations made in future research
Technology	• Technology failures despite preparations • Delays beginning sessions • Future steps ensure wireless high-speed routers
Social Validity	• Lack of responding by caregivers • Unable to truly identify satisfaction • Be provided in-vivo during final session

Discussion.

Future Research

Additional RBT Skills	DTT, PT, PECS, NET
Additional Settings	School, Daycare, Clinic, Community
Direct	Early Learners, Moderate, Sever, Social, ADL

Procedures.

Implications

Supervision of RBTs	• Number of RBTs continue to increase • BCBAs no increasing at same rate • Supports need for remote supervision
Ethical Supervision	• Not every BCBA is competent in every area • Extend collaboration to insure BCBAs practicing within competency
Environmental Control	• Need to control environment variable to ensure behavior change • Child and RBT behavior change • Remote supervisor able to provide feedback and coaching without disrupting environment
Insurance	• Major funding source • Some insurances accept telehealth • Other insurances do not accept telehealth

Future Direction.

- Direct comparison within study needed, but does not exist
- Current research an indirect comparison can be made, but not as effective
- Remote supervision has same effect on RBT treatment integrity as in-person supervision
- High need within field of ABA to identify effective and ethical supervision methods
- Future research continue to compare remote and in-person supervision

References.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

Amendah, D., Grosse, S.D., Peacock, G., & Mandell, D.S. (2011). The economic costs of autism: A review. In D. Amaral, D. Geschwind, & G. Dawson (Eds.), Autism spectrum disorders (pp. 1347-1360). Oxford: Oxford University Press.

Aljadeff-Abergel, E., Peterson, S. M., Wiskirchen, R. R., Hagen, K. K., & Cole, M. L. (2017) Evaluating the Temporal Location of Feedback: Providing Feedback Following Performance vs. Prior to Performance. *Journal of Organizational Behavior Management,37*(2), 171-195. doi:10.1080/01608061.2017.1309332

Alvero, A. M., Bucklin, B. R., & Austin, J. (2001). An objective review of the effectiveness and essential characteristics of performance feedback in organizational settings. *Journal of organizational Behavior management, 21*(1), 3-29. doi:10.1300/J075v21n01_02

Alvero, A. M., & Austin, J. (2004). The effects of conducting behavioral observations on the behavior of the observer. *Journal of Applied Behavior Analysis*, *37*(4), 457–468. http://doi.org/10.1901/jaba.2004.37-457

Artman-Meeker, K., Rosenberg, N., Badgett, N., Yang, X., & Penney, A. (2017). The Effects of Bug-in-Ear Coaching on Pre-Service Behavior Analysts' Use of Functional Communication Training. *Behavior Analysis in Practice,10*(3), 228-241. doi:10.1007/s40617-016-0166-4

Baer, D. M., Wolf, M. M., & Risley, T. R. (1968). Some current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis*, *1*(1), 91–97. http://doi.org/10.1901/jaba.1968.1-91

References.

Barkaia, A., Stokes, T., Mikiashvili, T. (2017). Intercontinental telehealth coaching of therapists to improve verbalizations by children with autism. *Journal of Applied Behavior Analysis,* 50, 582-589.

Barlow, D. H., & Hayes, S. C. (1979). Alternating treatments design: One strategy for comparing the effects of two treatments in a single subject. *Journal of Applied Behavior Analysis, 12,* 199-210.

Barretto, A., Wacker, D. P., Harding, J., Lee, J., & Berg, W. K. (2006). Using telemedicine to conduct behavioral assessments. *Journal of Applied Behavior Analysis*, 39(3), 333-340.

Behavior Analyst Certification Board (2018). *Registered behavior technician™ (RBT™) registry.* Retrieved May 29, 2016 from http://info.bacb.com/o.php?page=101127

Burke, B. J., Bynum, A., Hall-Barrow, J., Ott, R., & Albright, M. (January 01, 2008). Rural school-based telehealth: how to make it happen. *Clinical Pediatrics, 47,* 9, 926-9.

Cooper, J. O., Heron, T. E., & Heward, W. L. (2007). *Applied behavior analysis* (2nd ed.). Upper Saddle River, NJ: Merrill Prentice Hall. ISBN: 9780131421134.

Daniels, A. C. (2016). *Bringing out the best in people how to apply the astonishing power of positive reinforcement*. New York: McGraw-Hill Education.

Daniels, A. C., & Bailey, J. S. (2014). Performance Management: Changing Behavior that Drives Organizational Performance, Fifth Edition. Atlanta, GA: Performance Management Publications.

References.

Efiloğlu, K. O., & Tingöy, O. (December 01, 2017). The acceptance and use of a virtual learning environment in higher education: an empirical study in Turkey, and the UK. *International Journal of Educational Technology in Higher Education, 14,* 1, 1-15.

Fabrizio, M. (n.d.). *Voting with their feet: the role of assent in behavior analytic intervention for children with autism.* [PDF document]. Retrieved from https://www.yumpu.com/en/document/view/11716205/voting-with-their-feet-the- role- of-assent-in-behavior-analytic-

Fisher, W., Luczynski, K., Hood, S., Lesser, A., Machado, M., & Piazza C. (2014). Preliminary findings of a randomized clinical trial of a virtual training program for applied behavior analysis technicians. *Research in Autism Spectrum Disorders*, 8, 1044- 1054.

Fisher, W., Piazza, C. C., Bowman, L. G., Hagopian, L. P., Owens, J. C., & Slevin, I. (1992). A comparison of two approaches for identifying reinforcers for persons with sever and profound disabilities. *Journal of Applied Behavior Analysis, 25,* 491-498.

Iwata B.A, Wallace M.D, Khang S.W, Lindberg J.S, Roscoe E.M, Conners J, et al. Skill acquisition in the implementation of functional analysis methodology. Journal of Applied Behavior Analysis. 2000;33:181–194.

Guercio, J. M., & Dixon, M. R. (January 01, 2011). The Observer Effect and Its Impact on Staff Behavior in an Acquired Brain Injury Neurobehavioral Treatment Setting. *Journal of Organizational Behavior Management, 31,* 1, 43-54.

Hains, A. H., & Baer, D. M. (1989). Interaction effects in multielement designs: inevitable, desirable, and ignorable. *Journal of Applied Behavior Analysis, 22*(1), 57-69.

References.

Harper, J. M., Iwata, B. A., & Camp, E. M. (2013). Assessment and treatment of social avoidance. *Journal of Applied Behavior Analysis, 46*(1), 147-160.

Higgins, W. J., Luczynski, K. C., Carroll, R. A., Fisher, W. W., & Mudford, O. C. (2017). Evaluation of a telehealth training package to remotely train staff to conduct a preference assessment. *Journal of Applied Behavior Analysis,* 50(2), 238-251.

Kelley, M. L., Heffer, R. W., Gresham, E. M., & Elliot, S. N. (1989). Development of a modified treatment evaluation inventory. *Journal of Psychopathology and Behavioral Assessment, 11,* 235-247.

Kuppens, S., & Onghena, P. (2012). Sequential meta-analysis to determine the sufficiency of cumulative knowledge: The single-case of early intensive behavioral intervention for children with autism spectrum disorders. *Research in Autism Spectrum Disorders, 6,* 168- 176.

Lavie T, Sturmey P. Training staff to conduct a paired-stimulus preference assessment. Journal of Applied Behavior Analysis. 2002;35:209–211.

Lebbon, A. R., & Austin, J. (July 01, 2013). A Preliminary Examination of the Effects of Observer Presence on Work-Related Behavior in a Simulated Office. *Journal of Organizational Behavior Management, 33,* 3, 185-199.

Levy, C. E., Spooner, H., Lee, J. B., Sonke, J., Myers, K., & Snow, E. (February 01, 2018). Telehealth-based creative arts therapy: Transforming mental health and rehabilitation care for rural veterans. *The Arts in Psychotherapy, 57,* 20-26.

Machalicek, W., Lequia, J., Pinkelman, S., Knowles, C., Raulston, T., Davis, T., & Alresheed, F. (2016). Behavioral telehealth consultation with families of children with autism spectrum disorder. *Behavioral Interventions*, 31, 223-250.

References.

Machalicek, W., O'Reilly, M., Chan, J., Lang, R., Rispoli, M., Davis, T., & Shogren, K. (2009). Using videoconfrencing to conduct functional analysis of challenging behavior and develop classroom behavioral support plans for students with autism. *Education and Training in Developmental Disabilities,* 44(2), 207-217.

Maheu, M. M., Whitten, P., & Allen, A. (2001). *E-Health, telehealth, and telemedicine: A guide to start-up and success*. San Francisco: Jossey-Bass.

Makrygianni, M. K., & Reed, P. (2010). A meta-analytic review of the effectiveness of behavioural early intervention programs for children with Autism Spectrum Disorders. *Research in Autism Spectrum Disorders, 4,* 577-593.

Mamlin, B. W., & Tierney, W. M. (2016). The Promise of Information and Communication Technology in Healthcare: Extracting Value From the Chaos. *The American Journal of the Medical Sciences.* 351(1). 59-86.

Mehrotra, A., Huskamp, H. A., Souza, J., Uscher-Pines, L., Rose, S., Landon, B. E., Jena, A. B., ... Busch, A. B. (January 01, 2017). Rapid Growth In Mental Health Telemedicine Use Among Rural Medicare Beneficiaries, Wide Variation Across States. *Health Affairs (project Hope), 36,* 5, 909-917.

Mello, M. P., Goldman, S. E., Urbano, R. C., & Hodapp, R. M. (2016). Services for children with autism spectrum disorder: Comparing rural and non-rural communities. *Education and Training in Autism and Developmental Disabilities,* 51(4), 355-365.

National Research Council. (2001). *Educating children with autism* (C. Lord, & J. McGee, Eds.). Washington DC: National Academy Press.

References.

Pantermuehl, R. M., & Lechago, S. A. (2015). A Comparison of Feedback Provided In Vivo Versus an Online Platform on the Treatment Integrity of Staff Working with Children with Autism. *Behavior Analysis in Practice,8*(2), 219-222. doi:10.1007/s40617-015-0059-y

Pennington, R., Horn, C., & Berrong, A. (2009). An evaluation of the difference between big city and small town special education service for students with low incidence disabilities in Kentucky. *Rural Special Education Quarterly, 28,* 3–10.

Sarokoff R.A, Sturmey P. The effects of behavioral skills training on staff implementation of discrete-trial teaching. Journal of Applied Behavior Analysis. 2004;37:535–538.

Scheeler, M. C., McAfee, J. K., Ruhl, K. L., & Lee, D. L. (2006). Effects of corrective feedback delivered via wireless technology on preservice teacher performance and student behavior. *Teacher Education and Special Education, 29*(1), 12-25. doi:10.1177/088840640602900103

Scheeler, M. C., McKinnon, K., & Stout, J. (2012). Effects of immediate feedback delivered via webcam and bug-in-ear technology on perservice teacher performance. *Teacher Education and Special Education: the Journal of the Teacher Education Division of the Council for Exceptional Children, 35*(1), 77-90. doi:10.1177/0888406411401919

Shimabukuro, T. T., Grosse, S. D., & Rice, C. (March 01, 2008). Medical Expenditures for Children with an Autism Spectrum Disorder in a Privately Insured Population. *Journal of Autism and Developmental Disorders, 38,* 3, 546-552.

Suess, N. A., Romani, P. W., Wacker, D. P., Dyson, S. M., Kuhle, J. L., Lee, J. F., Lindgren, S. D., Kopelman, T. G., Pelzel, K. E., & Waldron, D. B. (2014). Evaluating the treatment fidelity of parents who conduct in-home functional communication training with coaching via telehealth. *Journal of Applied Behavior Analysis*, 23, 34-59.

References.

Suess, N. A., Wacker, D. P., Schwartz J. E., Lustig, N., & Detrick, J. (2016). Preliminary evidence on the use of telehealth in an outpatient behavior clinic. *Journal of Applied Behavior Analysis,* 49(3), 1-7.

Sundberg, Mark L. (2008) *VB-MAPP Verbal Behavior Milestones Assessment and Placement Program :a language and social skills assessment program for children with autism or other developmental* disabilities : guide Concord, CA : AVB Press

Wacker, D. P., Lee, J. F., Padilla, Y. C., Dalmau, P., Kopelman, T. G., Lindgren, S. D., Kuhle, J., Pelzel, K. E., & Waldron, D. B. (2013a). Conducting functional analyses of problem behavior via telehealth. *Journal of Applied Behavior Analysis*, 46(1), 31-46.

Wacker, D. P., Lee, J. F., Padilla Dalmau, Y. C., Kopelman, T. G., Lindgren, S. D., Kuhle, J., Waldron, D. B. (2013b). Conduction functional communication training via telehealth to reduce the problem behavior of young children with autism. *Journal of Developmental and Physical Disabilities,* 25, 35-48.

Wainer, A. L., & Ingersoll, B. R. (2013). Disseminating ASD interventions: A pilot study of a distance learning program for parents and professionals. *Journal of Autism and Developmental Disorders, 43*, 11-24.

Waller, A., Dilworth, S., Mansfield, E., & Sanson-Fisher, R. (December 16, 2017). Computer and telephone delivered interventions to support caregivers of people with dementia: a systematic review of research output and quality. *Bmc Geriatrics, 17,* 1.)

What is Telehealth? (n.d.). Retrieved from http://www.cchpca.org/what-is-telehealth

Wolf, M. M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its hear. *Journal of Applied*

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