



Knowledge Brokering in Vocational Rehabilitation Agency Contexts

**KTER Center's State of the Science Conference
on Employment Research**
September 5, 2019

KTER • CENTER
Knowledge Translation for Employment Research

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Today's Speakers

- **Kathleen Murphy, PhD, Principal Investigator, KTER Center**
- **Amber Brown, AIR Summer Intern for KTER Center, PhD Student at Virginia Commonwealth University, former VR Counselor**
- **Melissa Scardaville, PhD, Researcher, AIR**

Research Partner

**A big thank you to our partner in this project, the
Council on State Administrators
of Vocational Rehabilitation
(CSAVR).**

Collaboration is Key to KT!:

Technical Working Groups (TWGs)

- **Goal: provide guidance on research activities**
- **Helps recruit study participants, develop instruments and protocols, participate in webcasts, & promote KTER Center's products to partners & stakeholders**
- **Members: disability-oriented leaders, NIDILRR grantees, consumers who reflect the population, and individuals from the VR and employment communities.**

Autism TWG Members

- **Frank McCamant: Texas Council on Autism and PDD**
- **Carol Schall: Co-Director of the Virginia Commonwealth University Autism Center for Excellence, Director of the Virginia Autism Resource Center**
- **Stephen Shore: President emeritus of the Asperger's Association of New England, board member of Autism Speaks, the Autism Society, the Asperger Syndrome and High Functioning Autism Association, the US Autism and Asperger Association**
- **James Williams: Bloom Consulting, St. Edwards University, Certified Rehabilitation Counselor**

Transition TWG Members

- **Dr. Teresa Grossi, advisory board for the National Postsecondary Outcomes Center, external evaluator for the National Secondary Transition and Technical Assistance Center.**
- **Dr. Marsha Langer Ellison, Assoc. Director for Knowledge Translation for the Learning and Working During the Transition to Adulthood Research and Training Center**
- **Ms. Sandra Miller, Transition Coordinator for Delaware VR**
- **Ms. Rachel Anderson, Workforce Innovation Technical Assistance Center (WINTAC)**
- **Dr. Marcus Poppen: Assistant Professor, Special Education, Washington State University Pullman Campus**

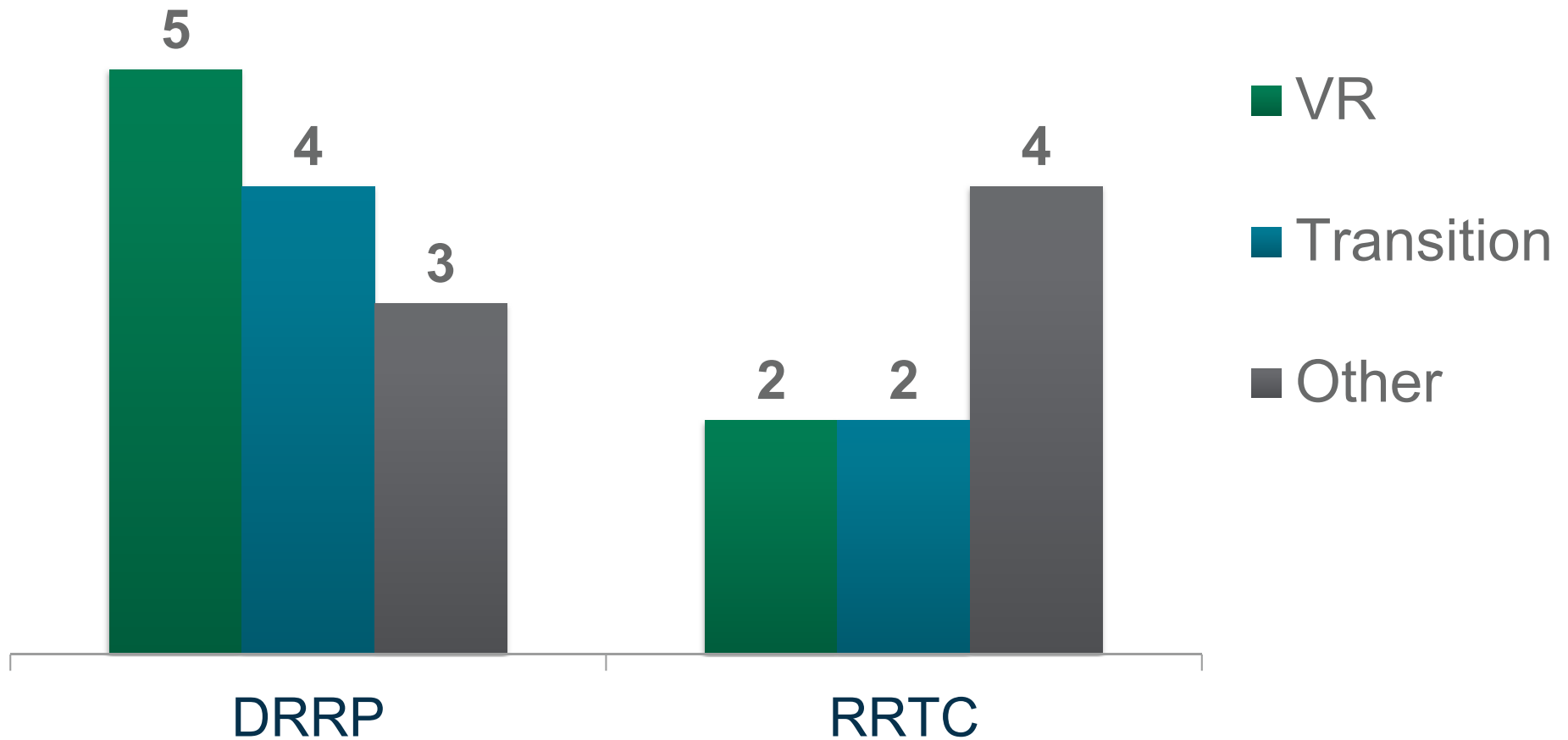
Goals of the Knowledge Translation for Employment Research (KTER) Center

- **Increased understanding of processes and practices that will lead to successful KT in the field of employment for individuals with disabilities**
- **Increased adoption and use of relevant research findings funded by NIDILRR and other entities to improve employment of individuals with disabilities**
- **Increased capacity of NIDILRR's employment-focused grantees to plan and engage in KT activities**

Mandated Activities

- **Identify areas in which stakeholders' needs for research-based knowledge are most pressing**
- **Work with employment-focused NIDILRR grantees to identify research findings that can be used to improve employment outcomes for individuals with disabilities**
- **Investigate and promote effective strategies to increase the appropriate use of the best available knowledge in the field**

NIDILRR-funded Active Projects (DRRPs and RRTCs): 2015 Overview



Other Formative Research: KTER Survey

- In 2012, KTER Center developed and administered a survey for VR counselors called *Making Research Work in VR Agencies* (Murphy et al., 2011).
- Six states, N=535.
- *“Please tell us about any area of your job where you think information about evidence-based practice would be helpful to you.”*
Collected 457 comments.

KTER Center Survey: Informational Needs Assessment

- **42%: referred to policies and procedures (e.g., caseload size, intake, assessment, individualized education programs, case management, job placement, and other topics related to how agencies are structured/organized)**
- **32% mentioned specific populations of consumers, most often:**
 - **individuals with severe mental illness**
 - **transition-aged youth**
 - **adults with autism**

Identifying Key Role of Supervisors and their Potential to be Knowledge Brokers

- **Another key finding was that *a supervisor who emphasizes evidenced-based practice* influenced whether VR counselors sought out and used research on the job (Graham, Brooke, & Murphy, 2013).**
- **Consistent with finding from Rehabilitation Research and Training Center (RRTC) on evidenced-based practice (Tansey, Bezyak, Chan, Leahy, & Lui, 2014).**

CSAVR Needs Assessment (2012)

- CSAVR surveyed members regarding *“the top three issues your agency faces in the next four years for which you think additional research might help you better serve consumers and employers.”*
- Responses included:
 - transition-aged youth
 - autism
 - human resources, client services, and return on investment.

Consequent Design of KTER

- **Research agenda**
 - **Central Role of VR supervisors in promoting evidenced-based practice**
 - **Research Track on Transition-aged Youth**
 - **Research Track on Adults with Autism**
 - **Research Track on VR Outreach to Business (separate presentation)**

Research activity 1: Focus Groups

- **What are the most pressing informational needs related to three key VR constituencies and the VR staff who work to serve their needs?**

Transition Focus Group Topics

- 1. Supports and Training for Family**
- 2. Tailoring VR Counselors' Training for Transition-Aged Youth**
- 3. Long-Term Support for Employment and Career**
- 4. Self-Empowerment for Transitioned-Aged Youth**
- 5. Work Experience (paid or unpaid)**
- 6. When VR Poses Barriers to Employment Success**

Autism Focus Group Topics

1. **Types of jobs in which people with autism tend to do well.**
2. **What VR Counselors can do to help clients identify their strengths and support long-term employment planning.**
3. **The role of programs like those at Walgreens, Project SEARCH, and AMC Theaters.**
4. **VR counselors' specific knowledge about autism.**
5. **Support during the hiring process and on-the-job.**
6. **Pre-employment training or internships.**
7. **Other training for adults with autism.**

Research Activity 2: Scoping reviews

- **Which NIDILRR-funded and other research findings can be used to meet identified pressing needs related to improving the employment outcomes for KTER's target audiences?**

What is a “Scoping Review”?

Scoping reviews or studies

- “aim to map *rapidly*
- the key concepts
- underpinning a research area and
- the main sources and
- types of evidence available”
- (Mays, Roberts, & Popay, 2001; cited in Arksey & O’Malley, 2005, bullets added).

What is a “Scoping Review”?

The purposes of a scoping review include

- **examining the extent, range, and nature of research activity;**
- **determining the value of undertaking a full systematic review;**
- **summarizing and disseminating research findings; and**
- **identifying gaps in the research literature (Arksey & O’Malley, 2005).**

Third Research Activity: Senior VR Counselors as Knowledge Brokers ("RLs")

Will Research Liaisons (RLs), who receive training and support in the use of research-based practices, increase the uptake of VR counselors and businesses, respectively, to improve consumer labor market outcomes (including employment and retention)?

Knowledge Broker Intervention Study Design

- **Inclusion criteria: work for state vocational rehabilitation agency; supervise at least 4 counselors**
- **Randomization at state level of all those enrolled**
- **Training group:**
 - **1 self-paced online module on adult learning principles**
 - **1 self-paced online module about employment of adults with autism or pre-employment training services based on scoping review findings**
 - **6 follow-up monthly check-ins from KTER staff via phone**
- **Control: offered voucher for ethics training**

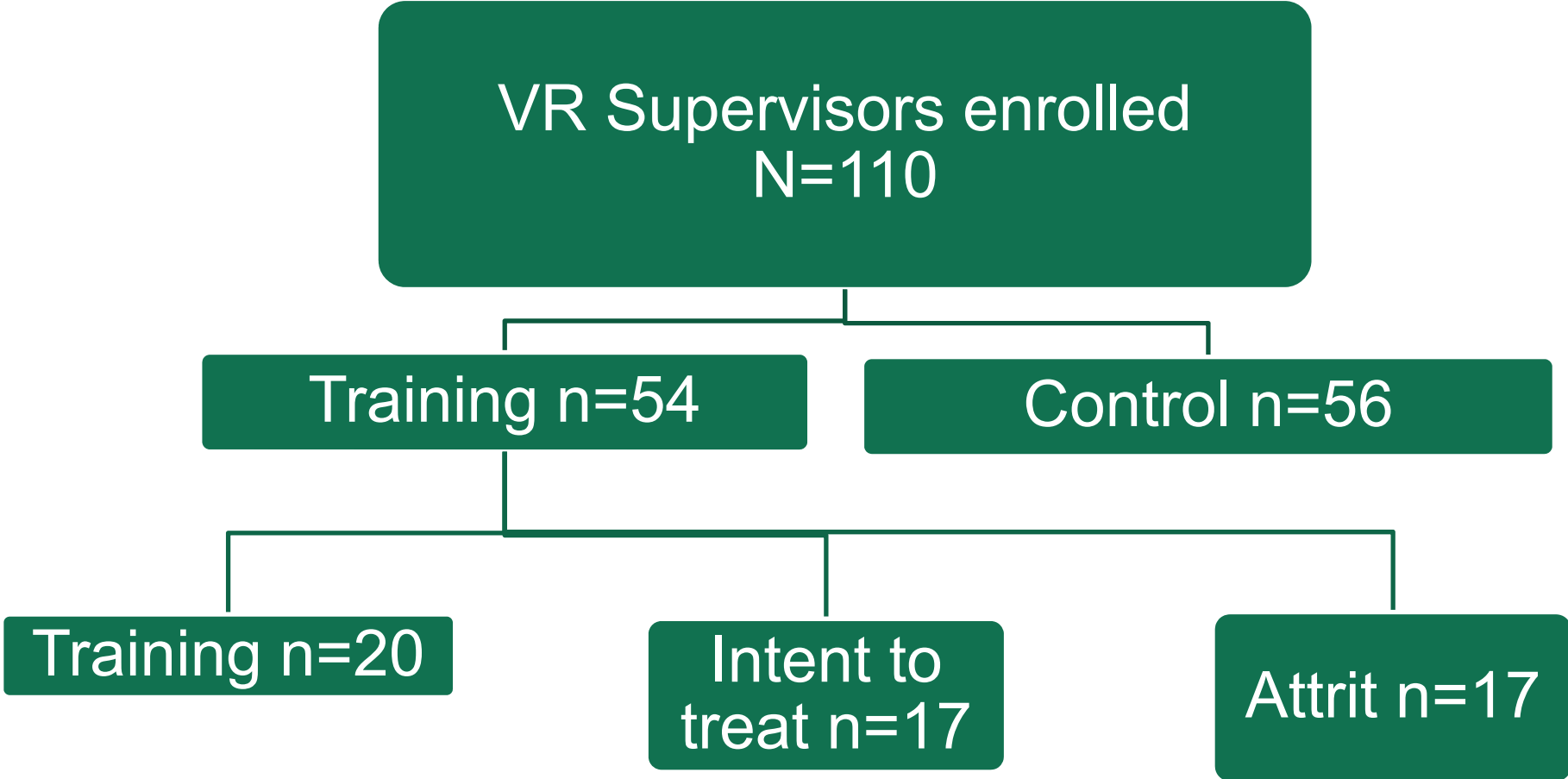
Study Measures

- **Baseline survey collects data about research-orientation: attitudes, knowledge; behaviors, resources used, including interactions**
- **As outcome measure, baseline survey repeated after check-in phase**
- **Same baseline/outcome surveys administered to staff supervised by those enrolled**

Study Measures

- **Course modules have pre/post tests**
- **Caseload data from states of participating supervisors**

2018 Study Sample, Random Assignment at State Level and Final Participant Dispositions



Sample Demographics at Baseline (n=110)

Variable	Training (n=54)	Control (n=56)	Sample (N=110)
Age (mean)	45.5 yrs	43.7 yrs	44.8 yrs
Race % White-only	90.4% = 47/52	79.6% = 43/54	85% = 90/105
Holds CRC	90.4% = 47/52	82.1% = 46/56	86.1% = 93/108
# supervised (mean)	7.1	8.3	7.7

2018 States (N=35) by Study Group

States	Training	Control
	AK, CA, HI, LA, MA, MI, MN, MO, MS, MT, NJ, NY, OH, OR, RI, TX, VA, WI, WY	AR, CO, DC, DE, FL, GA, IA, IL, KY, NV, OK, PR, SC, TN, UT, VT, WA

2018 States (N=35) by Study Group

Study Group Participants	Training				Control		
Active n=37 individuals training n=20 control n=17	Complete data (n=15) AK: 2 HI: 2 MT: 1 NJ: 1 NY: 1 VA: 7 WI: 1		Did training; no outcome survey (n=5) LA: 1 MI: 1 NJ: 2 WI: 1		AR: 2 CO: 1 DE: 1 FL: 3 GA: 2 IL: 2	NV: 1 OK: 1 PR: 1 SC: 1 UT: 1 VT: 1	
Intent to Treat n=20	CA: 1 MA: 4 MN: 1	MO: 1 MS: 3 OH: 1	OR: 1 NJ: 1 RI: 1	TX: 5 WY: 1	n/a		
Attrit n=46 n=15 training n=31 control	AK: 1 HI: 1 MI: 1	NJ: 1 NY: 4 VA: 7			CO: 2 DC: 1 FL: 4 KY: 4	GA: 2 IA: 3 IL: 2	OK: 3 TN: 4 UT: 1 WA: 5
Bounce n=8					FL: 5 GA: 2 IL: 1		

Description of Baseline/Outcome Measure

- **Most items on 4-point scale:**
 - » **Strongly Disagree, Disagree, Agree, Strongly Agree**
 - » **Three sections:**
 - **research orientation,**
 - **perceived value of various resources for job,**
 - **perceived value of various interactions for job**

Description of Baseline/Outcome Measure

**Research orientation scale based on 23 items;
some examples:**

- » **I encourage my staff to participate in training.**
- » **I am willing to try new ideas based on research.**
- » **I encourage my staff to keep up with the latest evidence-based practices.**
- » **Workload requirements make it difficult to use research-based based practices. (reverse coded)**

Quantitative Analysis of Change in Research Orientation Scores

Study Group	Mean Score (Max possible = 92)	SD
Control Group (n=17)	Baseline: 75.2% =69.18/92	7.359
	Outcome: 72.4% =66.59/92	9.500
Training Group (n=15)	Baseline: 72.3% =66.47/92	7.827
	Outcome: 75.5% =69.47/92	8.088

Next Steps for Analysis

- **Compare scores for counselors of supervisors across training and control groups (current N=30, 11 from training, 19 from control)**
- **Analyze data from pre/post tests conducted before and after online training modules**
- **Check for correlation of course test performance with research orientation scale score**
- **Compare states' caseload data across training and control groups, from summer 2018 to summer 2019**

Qualitative Analysis

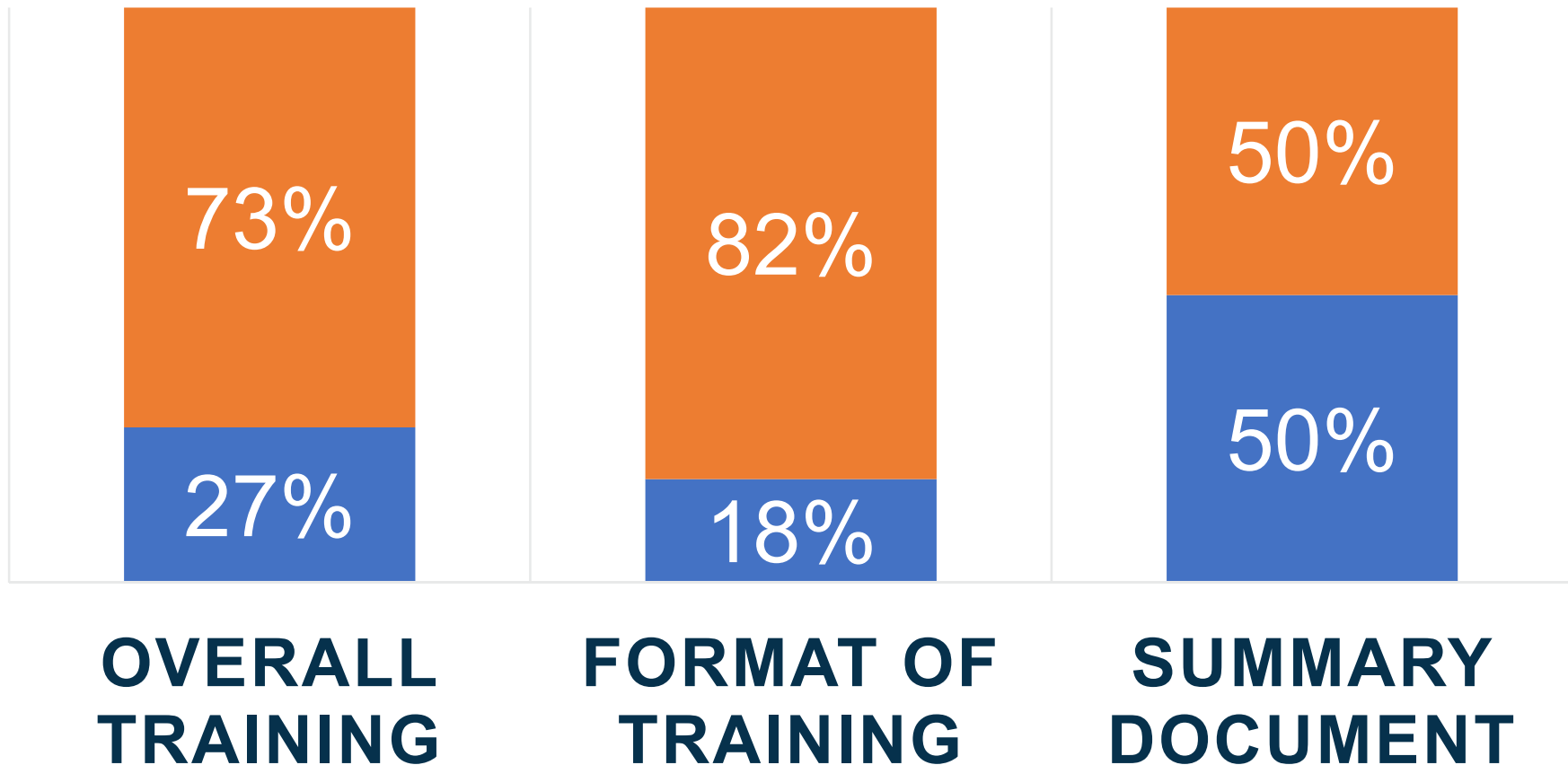
N=12

- **7 staff from 4 different states who had taken the pre-transition services module**
- **5 staff from 3 different states who had taken autism spectrum module**
- **Overall, we interviewed five people once, five people twice, 1 person three times, and 1 person four times**



Reactions to Trainings

■ Very Positive ■ Positive



Experiences After Training (Pre-Employment)



Additional coaching with staff: 14%, 83%



Use information with staff: 100%



Train staff: 57%, 43%



Encounter resistance: 14%, 83%

Experiences After Training (Autism Spectrum)



Additional coaching with staff: 50%, 50%



Use information with staff: 75%, 25%



Train staff: 50%, 50%



Encounter resistance: 25%, 75%

Changes on an Individual Level

- **All participants said the trainings either increased their awareness of PTS or ASD or positively reinforced previous knowledge.**
- **About 75% of the participants noted that they found the adult learning principles training very useful and have used those practices when they conduct internal trainings.**

Changes on an Individual Level

- **About 50% of the VR counselors who took the ASD training noted that they appreciated statistics about ASD and that they have shared them with their staff.**
- **VR counselors who took the PTS training talked more about using adult learning principles than the content in PTS likely because their departments already focused on PTS.**

Changes on an Organizational Level

Most participants noted that they found it very hard to enact change on an organizational level.

Reasons?

Changes on an Organizational Level

- **Very high staff turnover** made it difficult to impart lessons learned during the training
- **VR counselors are always “putting out fires”** and do not have the resources to implement best practices based on research
- **VR counselors have a lot of competing demands** and do not often have time or energy to attend trainings or put new ideas into practice.

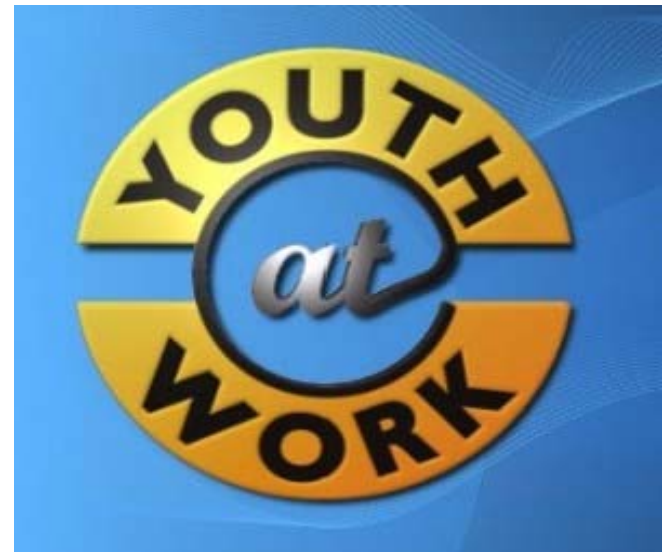
Changes at an Organizational Level

Despite these challenges, there were success stories.



Changes on an Organizational Level

One VR counselor shared that after she attended the PTS training, the VR agency created a new job category called “Vocation Rehabilitation Specialist” who works specifically with youth. Three new staff were added.



Changes on an Organizational Level

Several participants mentioned that sharing the materials they received in the training is helping spur dialogue within their organization and sometimes at the state level about PTS, ASD or adult learning principles.



Future Research

- **Most VR counselors who attended the trainings did not respond to follow-up request to receive additional assistance.**
- **Most participants who did follow-up identified staff turnover as a barrier to implementing best practice?**
- **States have very different cultures, resources, and mandates around VR services.**

Future Research

What are ways to increase participation in follow-up activities?

How should trainings take staff turnover into account? What can be done about high staff turnover?

How should trainings address the wide diversity in state VR agencies?

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