

NATSAP

ISSN 2469-3030 Online

JTSP

Journal of Therapeutic
Schools & Programs

JTSP 2021

Volume XIII, Issue 1

*A Publication of the National Association
of Therapeutic Schools and Programs*

NATSAP
Guiding the way

JTSP

Journal of Therapeutic Schools & Programs

CHIEF EDITOR

Ellen Behrens, Ph.D., LCMHC, LP
Program Chair, Associate Professor
Master of Science, Mental Health Counseling
Westminster College
Salt Lake City, UT
ebehrens@westminstercollege.edu

GUEST EDITOR

Laura Mills, Ph.D., (QM, Psych)
Director of Research and Evaluation
Pine River Institute
laura.m@pineriverinstitute.com

EDITORIAL MANAGER

Anne Farley, Westminster College, Salt Lake City, UT

EDITORIAL ASSISTANTS

Bobbi Deal, Westminster College, Salt Lake City, UT
Courtney Howard, Westminster College, Salt Lake City, UT
Ali Kelleher, Westminster College, Salt Lake City, UT
Serena Kim, Westminster College, Salt Lake City, UT
William Rozum, Westminster College, Salt Lake City, UT
Sarah Snedaker, Westminster College, Salt Lake City, UT
Whitni Syrett, Westminster College, Salt Lake City, UT

EDITORIAL BOARD

Jared Balmer, Ph.D.

Executive Director
WayPoint Academy
Syracuse, UT

Joanna E. Bettmann, Ph.D.

Professor
College of Social Work
University of Utah
Salt Lake City, UT

Michael Gass, Ph.D.

Professor
University of New Hampshire
School of Health & Human Services
Durham, NH

Harold L. (Lee) Gillis, Ph.D.

Chair & Professor
Department of Psychology
Georgia College & State University
Milledgeville, GA

John Hall, LMFT

Director, Research & Development
Telos Residential Treatment Center
Orem, UT

John McKinnon, M.D.

Co-CEO
Montana Academy
Marion, MT

Christine Norton, Ph.D., LCSW

Associate Professor
School of Social Work
Texas State University
San Marcos, TX

Sean Roberts, Ph.D.

Clinical Director
Cascade Crest Transitions
Bend, OR

Keith C. Russell, Ph.D.

Professor
College of Humanities & Social
Sciences
Western Washington University
Bellingham, WA

John Santa, Ph.D.

Co-CEO
Montana Academy
Marion, MT

Anita R. Tucker, Ph.D., LCSW

Professor
Department of Social Work
University of New Hampshire
Durham, NH

NATSAP

Guiding the way

The National Association of Therapeutic Schools and Programs Board of Directors as of 01/29/2020

David LePere – President

Cherokee Creek Boys School

198 Cooper Road

Westminster, SC 29693

Office: (864) 647-1885

Email: dlepere@cherokeecreek.net

Nikki Garza, LCSW – Vice President

Fulshear Treatment to Transition

105140 Oberrender Rd.

Needville, TX 77461

Office: (801) 631-3064

Email: nikki@fulsheartransition.com

Nichol Ernst, LCSW - Treasurer

Summit Achievement

69 Deer Hill Rd

Stow, ME 04037

Office: (207) 697-2020

Email: nichol@summitachievement.com

Tony Mosier – Immediate Past President

Telos Residential Treatment, LLC

P.O. Box 537

870 West Center St.

Orem, UT 84059

Office: (801) 426-8800

Email: tonym@telosrtc.com

Eric Allred, LMFT

Havenwood Academy

1115 N Main Street, #250

Cedar City, UT 84721

Office: (435) 586-2500

Email: ericallred@havenwoodacademy.com

Jared Balmer

WayPoint Academy

P.O. Box 488

Huntsville, UT 84317

Office: (801) 690-7000

Email: jbalmer@waypointacademy.com

Janet Farnsworth

West Ridge Academy

5500 W Bagley Park Rd

West Jordan, UT 84081

Office: 801.282.1006

Email:

jfarnsworth@westridgeacademy.org

M. Michelle Gourley, MFT, LCSW,

JD

Gateway Academy

11706 S 700 E

Draper, UT 84020

Office: (801) 523-3479

Email:

mmgourley@gatewayacademy.net

Jack Hinman PSY.D.

Kolob Canyon RTC and Moonridge

Academy

1338 600 S

New Harmony UT 84757

Office: (435) 865-1437

Email: jack@moonridgeacademy.com

Rick Pollard, M.Ed.

Solstice East

530 Upper Flat Creek Road

Weaverville, NC 28787

Office: (435) 841-0704

Email: rick@solsticeeast.com

John L. Singleton, Ed. D.

Whetstone Academy

186 Brian's Lake Road

Mountain Rest, SC 29664

Cell: (864) 723-7384

Email:

jsingleton@whetstoneacademy.com

Kelly Webster

Grove School

175 Copse Rd.

Madison CT 06443

Office: (203) 245-2778

Email: Kelly@groveschool.org

Rosemary Tippet – Ex-Officio

RGT, LLC

2931 Paces Ferry Rd SE

Atlanta, GA 30339

Office: (770) 313-8488

Email: rosemary@rosemarytippet.com

NATSAP Staff

Megan Stokes – Executive Director

4350 East-West Highway, Suite 925
Bethesda, MD 20814
Office: (301) 986-8770
Fax: (301) 986-8772
Email: megan@natsap.org

Nadia Aboulhoda – Director of Conferences

4350 East-West Highway, Suite 925
Bethesda, MD 20814
Office: (301) 986-8770
Fax: (301) 986-8772
Email: nadia@natsap.org

Shanita Smith – Director of Membership

4350 East-West Highway, Suite 925
Bethesda, MD 20814
Office: (301) 986-8770
Fax: (301) 986-8772
Email: shanita@natsap.org

Maddy Schoap – Government and Public Relations Coordinator

4350 East-West Highway, Suite 925
Bethesda, MD 20814
Office: (301) 986-8770
Fax: (301) 986-8772
Email: maddy@natsap.org

Nina Saxenian – Events and Membership Assistant

4350 East-West Highway, Suite 925
Bethesda, MD 20814
Office: (301) 986-8770
Fax: (301) 986-8772
Email: nina@natsap.org

The **JOURNAL OF THERAPEUTIC SCHOOLS AND PROGRAMS (JTSP)** is published by the National Association of Therapeutic Schools and Programs and publishes articles that assist readers in providing comprehensive care for adolescents, young adults, and families receiving services from residential and wilderness/outdoor behavioral healthcare treatment programs. Submissions are encouraged that relate relevant theory to clinical practice or provide original research relating to program or treatment outcomes and processes. All rights reserved.

PERMISSION TO QUOTE, REPRINT, PHOTOCOPY Inquiries about policy and procedures relating to permission to reproduce material published in the journal should be directed to: Ellen Behrens, Ph.D., Chief Editor, JTSP, Foster Hall, 1840 South 1300 East, Westminster College, Salt Lake City, UT 84015, ebenhrens@westminstercollege.edu

MANUSCRIPTS The editors welcome manuscripts that are the original work of the author(s) and follow the style of APA as presented in the seventh edition of Publication Manual of the American Psychological Association. *Empirical studies (qualitative and quantitative) must have been conducted under the oversight of an Institutional Review Board (IRB).*

ABOUT THE NATIONAL ASSOCIATION OF THERAPEUTIC SCHOOLS AND PROGRAMS The National Association of Therapeutic Schools and Programs is a nonprofit member organization of schools and programs and was formed to serve as a resource for its members. Through a dynamic process, the National Association of Therapeutic Schools and Programs develops and advocates ethical and practice standards designed to protect consumers while improving the effectiveness of programming within member programs.

MEMBERSHIP Schools and Programs interested in membership with the National Association of Therapeutic Schools and Programs are referred to their website, www.natsap.org.

TABLE OF CONTENTS

Author Bios	9
Preface	14
Fight or Flight: How NATSAP Programs are Responding to COVID 19 Pandemic. John Hall & Sahale Greenwood	16-37
Investigating Resiliency among Students with Emotional Disturbance Living in Undeserved Urban Communities. Kevin A. Curtin & Elizabeth Benedict	38-59
NATSAP Collaboration and Interoperability with the Greater Healthcare Community Kristen Francom, Jayte Boehler, & Nathan Olsen	60-68
Understanding Trauma-Related Distress Among Wilderness Therapy Field Staff. Lindsay Rea Clements Myrick, Ariana Wermer-Colan, Christine Lynn Norton, & Anita Tucker	69-101
Building Effective Research-Clinical Collaborations in Child, Youth, and Family Mental Health: A Developmental-Relational Model of Co-Creation. Stephanie G. Craig, Bianca C. Bondi, Benjamin D. Diplock, & Debra J. Pepler	102-131
A Timeline of Adventure Therapy Treatment for Young Adults with SUD. Garrett Cook, Matthew (Cole) Brogden, Mary Dugan, Courtney Gottemaker, Josh Heffernan, Ava Hughes, Kylie Knox, Alex West, Harold L. (Lee) Gillis, & Keith C. Russell	132-148

TABLE OF CONTENTS

Permissions and Copyright Information for Potential Authors	149-155
NATSAP Directory Order Form	156
NATSAP Ethical Principles	157-158

Authors - JTSP Volume XIII, Issue I

Elizabeth Benedict

Elizabeth Benedict is a Licensed Professional Counselor and Residential Clinician at the Buckeye Ranch in Columbus, Ohio. She earned her master's degree in School Counseling and a certificate of advanced study in Mental Health Counseling from Alfred University. Elizabeth's professional experiences include working with disenfranchised youth and their families in schools, agencies, and residential settings, using a trauma-informed, systems-based approach.

Jayte Boehler

Jayte Boehler is a clinical informatics specialist with a decade of success in the development of health technologies. He received his undergraduate in healthcare administration from Colorado State University and is doing his graduate studies in clinical informatics at the University of Washington. Currently, Jayte is the Idaho Health Information Management Systems Society chapter president, where he is committed to broadening the knowledge of and advocating for the use of health IT solutions which increases access and improves care quality and efficiency.

Bianca C. Bondi

Bianca Bondi is a doctoral student at York University within the Clinical-Developmental Psychology Program, Clinical Neuropsychology Stream. Bianca's graduate research focuses on cumulative risk and protection, early intervention, and neurodevelopment in substance- and trauma-exposed infants and young children in the context of parent-child relationships.

Matthew (Cole) Brodgen

Matthew (Cole) Brodgen graduated from Georgia College & State University in May 2020 with a degree in Physics. He is now working towards becoming a high school teacher.

Garrett Cook

Garrett Cook graduated from Georgia College & State University in May of 2020 with a Bachelor of Science in Psychology. He is currently working as a research analyst at the Sandra Dunagan Deal Center for Early Language and Literacy. In fall 2021, he will begin graduate school with a concentration in Industrial/Organizational Psychology.

Stephanie G. Craig

Stephanie Craig is a post-doctoral fellow at York University and a clinical psychologist. Dr. Craig's research focuses on understanding the development and

treatment of children and adolescents who struggle with mental health difficulties.

Kevin A. Curtin

Kevin Curtin is an Associate Professor of Counseling at Alfred University. He has a Ph.D. in Counseling from George Washington University and is a licensed mental health counselor in New York State. Kevin has over fifteen years of graduate teaching experience and over thirty years of experience working with children, adults, and families in private practice, schools, and residential programs. His scholarly interests include resiliency and exceptional youth, work-based learning programs, multifamily therapy, and therapeutic communities.

Benjamin D. Diplock

Benjamin Diplock is a doctoral student at York University within the Clinical-Developmental Psychology Program. His current research is focused on therapeutic processes in treatment for children and adolescents with learning disabilities and mental health difficulties.

Mary Dugan

Mary Dugan graduated from Georgia College & State University in May of 2020 with a Bachelor of Science in Psychology. She is currently serving as an AmeriCorps member with The Arc Jacksonville as a part of their Youth Transition Project. After her service year, she plans to pursue a master's degree in her field of interest, genetic counseling.

Kristen Francom

Kristen Francom has worked with professionals in the behavioral health and addiction treatment field for the past 9 years. She is currently the Director of OutcomeTools where she assists organizations in choosing tools that help them gather data to meet accreditation requirements. This has included helping them develop their documentation, training their staff, and developing their internal workflows.

Harold L. (Lee) Gillis

Harold L. (Lee) Gillis, Ph.D., Professor and Chair, Psychological Sciences, Georgia College and State University. Dr. Gillis earned his doctorate in counseling psychology from The University of Georgia in Athens. He is a coauthor of the text titled *Adventure Therapy: Theory, Research and Practice* (Routledge Mental Health) with Michael Gass and Keith C. Russell. He has been conducting research on adventure therapy practice and outcomes with

organizations all over the world since 1978. The article to which Dr. Gillis contributed was co-authored by the following undergraduate students in the Department of Psychological Science at Georgia College & State University: Garrett Cook, Matthew (Cole) Brogden, Mary Dugan, Courtney Gottemaker, Josh Heffernan, Ava Hughes, Kylie Knox, and Alex West.

Courtney Gottemaker

Courtney Gottemaker graduated from Georgia College & State University in May of 2020 with a dual degree in economics and psychology.

Sahale Greenwood

Sahale Greenwood is a current senior at the University of Santa Clara double majoring in Communications and Political Science. As an aspiring journalist, she has written for The Outlook, a weekly newspaper in Pasadena, The Santa Clara Magazine, and The Six Fifty, an online lifestyle publication in the Bay Area. She is an extrovert whose writing thrives on social, long-form pieces and in-depth interviews.

John Hall

John Hall, LMFT is the Director of Research and CQO for Telos. He is the Executive Director for Telos Neuro Health. He has degrees in Psychology from BYU and Marriage and Family Therapy from ACU. He has published in multiple journals and is on the editorial board of JTSP. He is the chair of the research committee for the National Association of Therapeutic Schools and Programs and has given many presentations at professional conferences.

Josh Heffernan

Joshua Heffernan is a senior at Georgia College & State University, currently pursuing a Bachelor of Science in Psychology. Following his graduation in November of 2020 Joshua plans to attend a Master of Social Work program with the intentions of becoming a licensed clinical social worker.

Ava Hughes

Ava Hughes is a junior at Georgia College & State University, majoring in psychology and graduating in May of 2021. Following her graduation, she plans to get a master's degree in the substance abuse treatment field.

Kylie Knox

Kylie Knox is a senior psychology major at Georgia College & State University, planning to graduate in May of 2021.

Lindsay Rea Clements Myrick,

Lindsay Myrick is the Assistant Clinical Director and a Primary Therapist at BlueFire Wilderness Therapy, where she works with families and adolescents to address issues related to trauma and attachment. She earned her Master of Science in Counseling with a concentration in Adventure Based Psychotherapy from Prescott College and holds a Bachelor of Science in Economics and a Bachelor of Arts in International Studies from Texas A&M University.

Christine Norton

Christine Lynn Norton, PhD, LCSW, is a Professor of Social Work at Texas State University. She received her PhD in Social Work from Loyola University Chicago. She has a MA in Social Service Administration from the University of Chicago, and a MS in Experiential Education from Minnesota State University-Mankato. Christine has over 25 years of experience as a social worker and outdoor experiential educator. Christine is a Research Scientist with the Outdoor Behavioral Healthcare Center and is a 2017 Fulbright Scholar, having taught adventure therapy at National Taiwan Normal University.

Nathan Olsen

Nathan Olsen is a co-founder of *BestNotes*. Nathan is the son of Larry D. Olsen, industry pioneer and co-founder of ANASAZI Foundation. Nathan has managed corporate farms in Turkey and Romania for Ag-Pro International and served as Vice President of Operations for ANASAZI Foundation. Nathan earned his BS degree from the University of Idaho and MBA from the University of Phoenix.

Debra J. Pepler

Debra Pepler, O.C., Ph.D., C. Psych. is a Distinguished Research Professor of Psychology at York University. For 35 years, she has led research on aggression, bullying, and victimization among children and adolescents. Her programs of research on peer and family relationships have been embedded in educational, clinical, and community programs. Dr. Pepler co-founded and co-led a federally funded national network, PREVNet (Promoting Relationships and Eliminating Violence Network) to promote healthy relationships and prevent bullying for children and youth (www.prevnet.ca).

Keith C. Russell

Keith C. Russell, Ph.D., Professor and Chair, Department of Health and Human Development, Western Washington University. Dr. Russell's research emphases include program evaluation, the study of human-nature relationships, the

therapeutic value of natural environments, and international protected area management. He teaches courses in statistics, research methods, and adventure education and therapy. He is a co-author of the recent text titled *Adventure Therapy: Theory, Research and Practice* (Routledge Mental Health) with Michael Gass and Harold L. (Lee) Gillis, Ph.D. and contributed to the article co-authored with Dr. Gillis' undergraduate students.

Anita R. Tucker

Anita Tucker, PhD, LICSW is a Professor of Social Work at the University of New Hampshire where she is the Co-Coordinator of University of New Hampshire's Dual Master's program in Social Work and Kinesiology: Outdoor Education. In addition, she is the Coordinator for UNH's MSW program in Durham, NH.

Ariana Wermer-Colan

Ariana Wermer-Colan is graduating with a dual master's degree in both Social Work and Outdoor Education at the University of New Hampshire in December 2020. After completing her bachelor's degree in psychology at Cornell University, she worked at an inpatient adult psychiatric hospital, followed by working primarily with youth through Outward Bound. She looks forward to continuing her work with various populations utilizing experiential activities in therapeutic settings.

Alex West

Alex West is a junior at Georgia College & State University, majoring in psychology and graduating in May of 2021.

Preface

Laura Mills, Ph.D., (QM, Psych)
Pine River Institute

Friends & Colleagues,

I suppose coming from a blue-collar, *'If you want it done right, do it yourself'* family has a little to do with the 'cowboy' in me. And honestly, it still seems so natural to just dig right in, get both hands dirty, barge through a task, and proudly ride off into the sunset when it's done. Time and again, however, I have been humbled by how wrong that 'lone cowboy' approach is, and how profoundly better things are when I have a little help from my friends.

In my world, 'help from my friends' means that colleagues suggest edits for my written work. My ego was seriously bruised every time my graduate advisor would return my 'final draft' with endless red ink markings that indicated I had more work to do. Later, when working with a dozen agencies in Canada, the time I spent writing a grant application was totally eclipsed by the time it took to work through suggestions from the team. In both cases, these contributions resulted in superior brevity, clarity, and organization than my original work.

Collaboration consistently trumps the 'cowboy' way. Client outcomes are optimized when therapy is a team effort, when families engage with client therapy, when interdisciplinary teams collaborate on cases, and when multiple agencies collectively drive policy mandates. Indeed, I cannot think of any domain of living or working where collaboration is not ideal. With collaboration as such a key success driver, it seemed fitting to have it as the central theme of this JTSP issue.

Two of our manuscripts contribute knowledge about the process of collaboration. Drs. Craig & Pepler, B. Bondi, and B. Diplock's article on collaboration between research and clinicians walks the reader through the important considerations for these vital partnerships. K. Francom, J. Boehler, and N. Olsen help us understand the etiology of our NATSAP data efforts and explain how technology will enhance system capacity. There is much to learn from these papers about how we can raise standards of excellence and learning.

Two papers tangentially relate to collaboration. Drs. Norton, Tucker, and Wermer-Colan & L. Clements Myrick discuss and recommend changes related to trauma among direct-care staff. This process requires agency-wide communication and invites opportunities for inter-agency communities of practice. G. Cook, M. Brogden, M. Dugan, C. Gottemaker, J. Heffernan, A. Hughes, K. Knox, A. West, and Drs. Gillis & Russell contributed knowledge about the experiences among young adults in adventure therapy and found that post-treatment communication channels were important for alumni. Both papers highlight how collaborative communication can foster healthier clients and service providers.

We were so fortunate to have two papers that touch on issues that were front and center this year. Dr. Hall and S. Greenwood authored an important piece of work about treatment agencies' experiences, challenges, and solutions related to the COVID-19 pandemic. The authors recognized the benefits of intra- and inter-agency communication to share, learn, and change. Equity and diversity were also front of mind for many North Americans in 2020. Dr. Curtin and E. Benedict contributed a paper about resilience among clients who live in areas with challenges related to access and equity. A great lesson from their paper is that school and system strength is fundamental to individual resilience.

I could not be more pleased with the breadth and depth of knowledge shared in this issue of JTSP. There is an excellent mix of quantitative, qualitative, and review content and the topics promise to be helpful for the spectrum of stakeholders in the residential treatment field. Working with each of the authors was a gift. I was so impressed by the dedication and wiliness of the authors to do whatever it took to successfully publish their submissions. I am excited that we have diversity in our authorship – manuscripts from outside NATSAP membership constitute a good proportion of the articles. I hope this trend continues, as this will serve to broaden and deepen our understanding of the field of intensive care for troubled clients.

In a year when just about everything changed, one constant is clear – we need each other. Our JTSP theme was one small way to validate the claim that collaboration fosters greater success than individual effort. The lone cowboy really can ride off for good; everyone should have a posse.

Kindly,

Laura Mills, Ph.D., (*QM*, Psych)
Director of Research and Evaluation
Pine River Institute
laura.m@pineriverinstitute.com

Fight or Flight: How NATSAP Programs are Responding to COVID 19 Pandemic

John Hall¹ & Sahale Greenwood²

Telos Residential Treatment Center¹

University of Santa Clara²

Abstract

This article is a report of both qualitative interviews with NATSAP programs and clients as well as quantitative and other data from 41 NATSAP programs responding to questions about current conditions at their programs related to the COVID-19 Pandemic. These results include discussion of data and comments about the following topics: 1) How programs have been impacted?, 2) How they are responding?, 3) What is working?, 4) What is not working?, 5) What areas need to be explored for the future so that programs can respond to this ongoing event and other similar events, should they occur, in the future?

Keywords: Covid-19 response, residential treatment, wilderness therapy, outdoor behavioral health, NATSAP

FIGHT OR FLIGHT

Fight or Flight: How NATSAP Programs are Responding to COVID 19 Pandemic

The COVID-19 pandemic has impacted therapeutic boarding schools (TBS) in unique ways that have forced schools to reconsider or change facility conditions, guidance from local authorities' health and safety policies, family visits, and food and medical supplies. There may also have been shifts in the census, quality of treatment, and distribution of cases. These challenges necessitate discussion within the TBS community. It is important to lend time and consideration to collaboration to determine the virus's impacts and what procedural changes and operations have worked and what have not. This dialogue will help us find our way through the current pandemic and be best prepared for future events of similar or more severe caliber.

To best begin this dialogue and understand the impact of COVID-19 on TBS, we reviewed a spectrum of the National Association of Therapeutic Schools and Programs (NATSAP) programs to determine how programs responded and the success of these responses. The question was, *'How have NATSAP programs been impacted by COVID-19 and how are they responding to it?'* Over 40 NATSAP programs from across the United States responded, most from residential treatment centers and therapeutic boarding schools; however, wilderness programs, transitional care, and short-term psychiatric hospitals were also represented.

The largest challenge of the pandemic has been the lack of family visits. Students miss their families, and parents worry about their children in treatment. The most beneficial coping strategy for programs has been increased communications between programs and NATSAP. Fewer effective procedures have been attempted at online learning, social distancing within the program, and students' consistency in wearing masks. In this article, we provide details of program challenges, responses, and pandemic impact.

COVID-19's massive impact on the NATSAP community has necessitated a holistic review across the entire spectrum of NATSAP programs to determine the type and effectiveness of responses to this

FIGHT OR FLIGHT

pandemic and future ones. Based on the information gathered from in-person interviews, we created a survey to send out to all NATSAP programs and then analyzed the results. The question to be answered by our research was: "How have NATSAP programs been impacted by COVID-19 and how are they responding to it?" By the survey report, the programs responding represent over 40 NATSAP programs from across the United States. Most respondents were from residential treatment centers and therapeutic boarding schools. However, wilderness programs, transitional care, and short-term psychiatric hospitals were also represented.

The regions of the country that were represented also appeared to be spread out relative to where NATSAP programs are located. Based on this demographic, the sampling appeared to have face validity regarding the representative distribution of respondents.

Method

The researchers conducted 10 to 15 in-depth interviews with directors, staff, students, and parents from 5 programs known to the researchers due to prior interactions. These interviewees were selected to achieve a variety of positions, locations in the country, and types of programs at which they work. All respondents gave their consent to have their names and programs published. Researchers also created and distributed a survey to all 155 NATSAP programs, to which 41 responded, to ensure that a breadth of perspectives and experiences were represented.

The questions asked in the survey were as follows:

1. What best describes your program? (wilderness, residential treatment center, therapeutic boarding school, short term psychiatric hospital, intensive outpatient, transitional care)
2. What Region of NATSAP is your program located in? (Utah, Northeast, Midwest, Southwest, Northwest, Southeast, Rocky Mountain)
3. What changes in census did you see since COVID-19 began? (rise,

FIGHT OR FLIGHT

- drop, no change)
4. If you saw a rise, was it from? (private pay, school-funded, both)
 5. If you saw a drop, was it from? (private pay, school-funded, both)
 6. What have the main issues/struggles been related to COVID-19?
(Safety and health, students' treatment and progress, programs functionality and finances, other)
 7. Has your program struggled to get its desired groceries during the pandemic? (yes, no)
 8. Has your program struggled to get its desired medications and medicines during the pandemic? (yes, no)
 9. Have your staff been working regular hours? (yes, no-working overtime, no-working less time)
 10. Have you seen an increase in students needing to stay in treatment longer as a result? (yes, no)
 11. Have you seen an increase in students leaving treatment early because of COVID-19? (yes, no)
 12. Has COVID-19 impacted the climate of your campus? (yes, no)
 13. If yes, how has that change been? (positive, negative)
 14. How many COVID-19 cases have you seen in your agency?
(students, staff, families)
 15. What protocols and policies did you change due to COVID-19?
Check all that apply -(visits, medical practice, cleaning, staffing, dorms/locations, programming [activities], admit/discharge, family seminars, communication, therapy, school, other)
 16. What worked? And what did not work? (Text response)
 17. What were your staff's requirements? (shelter in place at boarding school, quarantine at home, no change, special protocols for social distancing at work)
 18. How have your students reacted? (Text response)
 19. Do students with autism react more severely to COVID-19 changes than students with behavioral problems? (yes, no)
-

FIGHT OR FLIGHT

20. What is your main concern moving forward? (infection control, maintaining desired programming, census, staffing, supplies, other)
21. What do you need from NATSAP to support your work during COVID-19?
22. Where did you find information to help you make decisions? (licensing agency, accrediting agency, CDC, the local or federal government, parents, staff, peer support, other)
23. What response have you seen from parents? (Text Response)
24. What direction did you get from the health department/government entity? (Text Response)
25. Do you have any additional comments about the above questions? (Text Response)
26. Do you have any comments about topics not mentioned but important to COVID-19's impact on your program? (Text Response)

Results

It is clear that COVID-19 has had a significant impact on the operation of NATSAP programs. Indeed, 81% of programs indicated that COVID-19 had impacted the climate of their campus, and 72% of those programs indicated that the impact has been negative. Notably, nearly 30% of those indicating an impact reported that it had been positive. The scope and intensity of these impacts have demonstrated congruent experiences from programs across the country. Specific results were provided in the following quantitative and qualitative findings, which were supplemented with specific case examples.

The most significant area of concern was the safety and health of students and staff; the second was the impact on treatment and progress for students and families - critical because it related to the mission and purpose of NATSAP programs and posed threats to their identity and even solvency. All of this impacted the financial bottom line if clients could not effectively use treatment services or were unable to access the program.

FIGHT OR FLIGHT

There were multiple areas of impact that have likely contributed to the limitations on programs' ability to maintain student progress through treatment. The most often mentioned one was the restriction on students' ability to have home visits and for parents to visit the program. Programs reported that the following resources would be helpful if they could be developed or maintained by NATSAP.

Examples of Impact of Restriction on Family Visits

A seventeen-year-old girl quarantined at her NATSAP program remarked, "It's been almost a three-month period that we haven't been able to see our families. It's been really difficult because you kind of rely on them and outings and going places: out to eat, church, or youth groups. We haven't been able to do that."

One program described the impact of limited or canceled visits in this way: "Our students typically visit home regularly (or their families come here) - this has been restricted during COVID. Some students were not able to visit their families (which compounded clinical issues), and other students went home to visit and stayed an extended period of time."

Another program commented that "With C-19 on campus, we've had to limit visits, which is challenging." Finally, a third program indicated that "This goes along with student treatment, but not being able to have parents on campus or students travel to visit home has been a struggle for our students and our families."

There has been research in the past exploring which aspects of residential treatment have had the most impact on outcomes (Behrens & Raleigh, 2015). This is a complicated question given the interwoven nature of the several interventions commonly employed in outdoor behavioral healthcare and residential treatment. Some of the aspects included family therapy, individual therapy, rec therapy, equine, art, music therapy, mindfulness, athletics, journal writing, neurological interventions, psychoactive medications, visits, milieu/structure, etc. It has never been entirely clear which interventions were the most impactful or significant

FIGHT OR FLIGHT

because programs provided a blend of all these treatments. However, based on the comments made by these programs, the limitations necessitated by COVID-19 made a strong case for the importance of visits as a key intervention in the process. Parenthetically, therapists have frequently prepared families for visits by highlighting the importance of putting new skills into practice in the context of family systems and the home environment. It seems appropriate to indicate that this is a likely contributor to the larger issues of hampered therapeutic progress.

Length of Stay

With therapeutic progress and key interventions being limited, the length of stay has been impacted. Programs were relatively split when it came to whether their students needed to stay longer or leave sooner. Forty-four percent of programs said their students needed to stay longer in treatment as a result of COVID-19, and 44% reported students leaving early.

A mother of a special needs boy in a NATSAP program said, "the hardest thing is that [my son] likes quarantine. All he wants to do is stay in, and it feels like a backslide on all the things we have been working on." She is an extremely active part of her son's treatment and tries to encourage him to socialize more with others. Quarantine has proven to be an almost insurmountable barrier to this, and she worried that it was detrimental to her son's progress and could result in a longer treatment.

At a treatment center in Utah, there have been two very different responses to quarantine. "On the one hand," the Director of Admissions and Outreach for the program explained, "some kids, more often with autism, are having more incidents due to the lack of predictability. They especially struggle with their teachers wearing masks. That seems to be harming the relationship a bit. On the other hand, some kids are thriving in this lower activity environment. They are relaxing and connecting with their housemates."

While 44% of programs said they had seen an increase in students

FIGHT OR FLIGHT

staying in treatment longer due to COVID-19, conversely, the same proportion of 44% of the programs also said they were seeing an increase in students leaving early as a result of COVID-19. As the Director of Admissions and Outreach explained above, some students were coping with current conditions extremely well. One program commented on how "remarkably well" students were "normalized to the new guidelines."

Another motivator for early departures may have come from home. Parents may have been concerned about their child being surrounded by others and wanted to keep them safe at home with the family. Additionally, therapeutic treatment is expensive, and the country is currently experiencing unprecedented economic times that may make treatment difficult for some to afford.

Changes in Census

There have not been any significant trends in census change as a result of COVID-19. While the largest portion of programs, 39%, experienced a drop in numbers, 32% of programs were experiencing an increase.

The Director of Admissions and Outreach at one program predicted that the reasons for the increase in students entering the treatment process were twofold. One, parents saw how poorly their kids were doing once having them at home. Two, being at home in quarantine made it worse for the kids, especially if their parents were not dealing with it well. On the flip side, people were scared and looking to isolate themselves and their families from germs rather than send their children to a program surrounded by other students. Additionally, COVID-19 had created an economic pandemic that had brought unemployment rates up to 14.7% in April (Bureau of Labor Statistics Data, 2020). Some families may not have been able to afford treatment during this time.

Staying Supplied with Food, Medicine, Etc.

Fortunately, it appeared that most NATSAP programs had had little to no difficulty continuing to provide food and medicine to their

FIGHT OR FLIGHT

students; 82% had no issue with food and supplies, and 93% had no difficulties obtaining the medications to support their students. It is unclear whether other issues were providing other health and safety-related supplies such as hand sanitizer, cleaning agents, masks, and gloves. Those items appeared to be readily available after an initial lack of availability. However, despite the general state of success, it must be hard for the 18% of programs that have had difficulty getting food or the 8% who have had difficulty getting medication. All things considered, this is still a sizable problem for those who have it, as these items were of basic necessity.

The executive director of a TBS in Louisiana said, "What used to take two to three hours to order online and go pick up now takes two to three days as our employees have to go to all the local stores and find food where it isn't sold out." He explained this was inconvenient for student's treatment because their meals were carefully curated by a nutritionist for student's benefit. "We had a couple of weird meals, but no one starved."

Maintaining Staffing

While much of the country has experienced layoffs during this time (Bureau of Labor Statistics Data, 2020), NATSAP staff members were overwhelmingly working regular hours (49%) or over time (49%).

The Director of Admissions and Administration at an independent living program for young adults struggling with addiction said that, like all other programs, COVID-19 placed extra stress on their staff. "They are now dealing with being considered essential workers when they didn't think of themselves that way before. It's definitely a higher commitment."

Distribution of Cases

The distribution of COVID-19 cases in NATSAP programs has been very uneven – at the time of data collection, while 73% of programs have not experienced any cases, one program had 13, another 19, and one had 32 cases. The COVID-positive cases in the programs have all happened since June when Megan Stokes, the Executive Director of the National

FIGHT OR FLIGHT

Association of Therapeutic Schools and Programs, said, "We are extremely lucky that we have only had two positive cases in all of our programs." Programs also benefited from guaranteed, unlimited testing because of their status as a residential treatment facility.

One residential treatment program that had a group of students test positive for COVID-19 set up an off-site quarantine house where the students could recover while being monitored by staff and medical personnel. Programmatic modifications were made so that they had some form of media to address boredom but also had therapeutic and academic assignments provided for them to work on when they had the energy to do so. This proved valuable in being able to reintegrate academically and therapeutically when their quarantine was completed.

Given the implications for programs if or when students contract COVID-19, it is wise to consider in advance what contingency plans will be made at individual, family, group, program, facility, organizational, and community levels.

Positive Impacts on Programs

While most programs indicated a negative change in campus climate, 28% reported a positive impact of COVID-19.

The admissions and outreach staff member for an outdoor wilderness program said, "There has been this beautiful unifying effort to keep everyone in the industry informed and support our boots-on-the-ground staff." This sentiment was echoed by Stokes, who believes COVID-19 has showcased NATSAP's strong communal ties and collaborative spirit.

Another positive impact for programs, especially wilderness programs, was an increased enrollment. The admissions staff member for a wilderness program said, "We are slammed right now. Our admissions are up about 10%, and our young adult program is completely full."

FIGHT OR FLIGHT

Discussion

Changes and Strategies

NATSAP programs are making adjustments to many levels of their programming to mitigate infection while providing access to therapeutic activities. This spans housing and day to day activities, school, and therapy, to outreach for parents through online family seminars, support groups, and communication to clients and referral sources.

Changes to Visit Practices

Programs have had varying solutions to visiting practices that have become incredibly strained during the pandemic. Some programs allowed virtual family visits and therapy sessions, whereas other programs have adopted their practices to include social distancing and mask-wearing to allow on-campus visits.

Several programs reported creating on-campus protocols to simulate some of the activities typically employed on visits, such as extended family phone calls, therapeutic assignments, and access to technology such as video/teletherapy for prescribed periods of time. Some programs have practiced quarantine and testing protocols, pre-and post-visits, to accommodate the practice of visits.

As noted previously, however, any substitute for actual visits with family had not adequately met the needs of students and families. The following survey responses from programs demonstrated just how difficult it was to find the best response to this therapeutic need.

"The canceling of parent workshops has had the most dire consequences on the program progress of parents and students."

"Keeping families off-campus has had serious negative consequences as they don't know us well and tend to be more likely to side with their children rather than trust the program."

FIGHT OR FLIGHT

"It was helpful to not have families and outside providers visiting but then that hurt the youth, so that has started again."

Quarantines

Quarantines were another common policy change for programs. What quarantine looked like, however, varied by program size and type.

A larger residential treatment program with about 100 students went to great lengths to reorganize their campus to ensure safety and social distancing. Prior to COVID-19, students rotated through classrooms with different students and teachers like a regular high school. Now students have been confined to a group of ten to twelve same-gender students with whom they take all their classes in one room, live with, and share all their meals together. Meals were confined to the houses. Additionally, they established some of their housing as "orientation housing" that new students must go to for quarantine prior to entering the campus bubble.

A treatment center in Utah created a 'soft' quarantine in a separate dorm for youths awaiting COVID-19 test results. A small, all-girls program is quarantining in one house together exactly as a family would. Staff are not in quarantine with the students but are taking extraordinary measures to keep their life as quarantined as possible. The Executive Director for this program added, "It has definitely been harder on our staff. They are working overtime and having to adhere to strict quarantine as well as keeping an overnight bag in their car in case we needed to start sleeping in our offices." Louisiana, where the program is located, experienced drastic numbers of COVID-19 cases, even rivaling New York at one point.

Staff Requirements

Very few programs have gone as far as requiring their staff to shelter in place at the boarding school with students, but more often are requiring their staff to quarantine at home (34%) or undertake special protocols for social distancing at work (56%).

FIGHT OR FLIGHT

Wilderness programs have staff quarantine with students during their weeks on and quarantine at home during their weeks off. More typically, however, therapeutic boarding schools have been asking staff to take all considerations possible to stay safe. These considerations vary by location. For example, programs in Arizona, a relatively low danger state that had become a hot spot, never went into quarantine. On the other hand, programs in Louisiana had been taking extra precautions.

Staff at the majority of programs wore masks any time they were around students. This has come with its own complications. The Admission Director at a treatment center in Utah explained that this was particularly hard for the students with autism. It disrupts the trusting and honest relationship that programs look to build between student and teacher. Another program noted, "Trying to keep staff wearing masks has been a challenge. Impossible to keep students wearing masks."

Some staff continued teaching in-person, while others are teaching online, and a few are doing both. One program commented, "We offered remote learning and support to those at home, but this stretched our teachers in particular extremely thin. They were essentially pulling double duty - teaching in person, then going home and teaching remotely. Our staff are exhausted."

Many studies point to the successes of online learning, saying it achieves, at minimum, the same results of face-to-face learning (Brennan et al., 2001) while also being more convenient. Very little research, however, has been done on the effectiveness of online learning for special needs students, such as students who struggle with executive functioning. One program commented that this was a challenging group for staff to teach remotely as they typically needed more hands-on attention.

Guidance from Local and National Entities

When the COVID-19 pandemic impacted the shutting down of businesses, travel, and other gatherings in March 2020, NATSAP programs had to respond immediately and effectively. Information was constantly in flux, and changes to directives from local, national, and global governments

FIGHT OR FLIGHT

changed as frequently as multiple times in the same day. It was critical to stay accurately informed and determine best practices for responding to these changing variables.

When asked how programs handled the ever-changing directives, responses were as varied as the directions given from local health departments, the CDC, parent companies, and grassroots networking through NATSAP, current client feedback, and internal discussion. Most program representatives referenced their source of information as the CDC, followed by their state licensing body.

Most programs received guidance, direction, and approval of their protocols for testing, campus visits, school, kitchen/eating, staffing, etc. In most cases, this was reportedly helpful and endorsed their practices, but others had different experiences. In one case, a program reported being threatened that they would be shut down if they had a positive case. Another program commented that the health department was helpful at first but then became "controlling and intrusive."

Programs report being given multiple directions from these agencies regarding no visits to campus, mandatory testing every seven to ten days, staff staying away if sick, testing at admission, sheltering in place, and rules about dorms eating separately. Due to the variation of source and direction, programs were likely taking equally varied approaches to respond to COVID-19.

Value of Independent Accreditation

It is fortuitous that NATSAP announced at the 2020 national conference that it would begin the requirement for all NATSAP programs to obtain and maintain accreditation from a respected accrediting body, such as the Joint Commission, Commission on Accreditation of Rehabilitation Facilities, Association for Experiential Education, Council on Accreditation, and DNV GL. Programs that were not already accredited have begun the process and have had access to much needed additional support and guidance on how to respond to COVID-19 effectively.

FIGHT OR FLIGHT

Programs having access to these resources will be an ongoing support when potentially similar scenarios are faced in the future.

Conclusion

Programs report that plenty is going well despite these difficult circumstances; they are generally able to provide effective therapy, schooling, and support to students and families through modifications in programming to allow for social distancing and other infection control practices. Video/teletherapy has been helpful to keep families connected to their children in treatment. Having school on location is a benefit that those in residential programs enjoy that has not been accessible to those in more traditional settings.

Frequently reported effective practices center around preventing exposure to the internal living environment through practices of admissions screening, quarantine, mask-wearing, separating groups by dorm, and restricting visits (though, as has been noted, this comes at a particular cost). One program described these practices: "Daily temp checks for staff and students, no visiting to limit exposure, daily screening for staff and students, masks, canceling parent weekends and visits. All worked."

Another common theme is the importance of communication with students, families, staff, referral sources, other programs, and local and national authorities. One program described it thusly: "Being transparent with parents, licensing, and the health department has worked well."

It is clear that many of these innovations and efforts are made possible by the staff at the programs going to great lengths and even sacrifices to ensure that the clients get the medical care, therapeutic support, educational training, and milieu support that they need. Another powerful and less tangible aspect of strength commented on is the power of the culture within the programs that fuel the support and resilience needed to pull together and make things work. This is a fine tribute to the caliber of people working at NATSAP programs. One program commented, "What has worked is employees making personal sacrifices to ensure the wellness and health of campus."

FIGHT OR FLIGHT

It is perhaps best summed up by this comment: "1. The tremendous connections and professional forums between colleagues to bounce ideas and collectively brainstorm. 2. Using science to determine specific regionally based policies and practices. 3. Relying on the tremendous staff within our organizations."

What is Not Working?

The following comments demonstrate that practices of social distancing, mask-wearing, and other infection control, can be difficult even when the right policies are in place.

- "Masks have been difficult, negative COVID testing before admitting has been challenging, staying staffed has been a huge issue."
- "Did not work: social distancing, phone conference calls, remote learning (for staff)."

Finally, as noted above, the biggest challenge has been restricting visits with families throughout the treatment process. The tricky part was keeping forward momentum with the clients in treatment without the ability to keep visits occurring regularly. One program noted, "Virtual subs for in-person visits have not worked."

Canceling parent workshops has impacted the visit that typically occurs in conjunction with these events, but also removed an opportunity for parents to immerse themselves in the culture of the program and benefit from the therapeutic milieu directly. This has made it more difficult for programs to create investment in the process from parents, particularly if the student attempts to manipulate distrust between parents and the program. It can be challenging to maintain trust from a distance and with no ability to make an in-person judgment. Additionally, survey respondents report that while technology accelerators enabled virtual training and groups, these mediums are still less effective than in-person discussion, training, and support.

FIGHT OR FLIGHT

It is clear that while programs have commented that restricting family visits, along with parent seminars, has been effective at infection control, this has come at great cost. This adaptation was described as having a negative impact on treatment and a solution that has not worked for the overall effectiveness of treatment. Striking this balance between infection control and the therapeutic benefit of visits is perhaps the most significant dilemma facing NATSAP programs during the COVID-19 pandemic. This should be taken into account when engaging in an ongoing dialogue.

Student and Parent Response

Programs report that their students are experiencing increased anxiety, reactivity, and frustration. Anxiety and even reactivity are to be expected, given the impacts that COVID-19 is having for all of us (Ornell et al., 2020). Frustration has been reported nearly universally in response to restrictions on travel, visits, activities, and other protocols like mask-wearing and increased isolation. This frustration reportedly is something that students can move past, but that patience wears thin, the longer these restrictions are in place.

Students were managing this much better than expected. One program indicated that "They have adapted surprisingly well." Indeed, programs have used words such as "remarkable" and "adaptive" frequently when describing their students' responses. They report that in some ways, the students have a more normalized experience than those living at home due to the ability to continue to go to school and maintain social contact with their dorm mates rather than being cooped up at home. Finally, it was reported that the students had done well at supporting each other through these difficult times.

Reports of parent response are overwhelmingly positive. The number one word used to describe parent response is "supportive," and after that, "grateful" or "appreciative." Programs reported that parents were happy about the measures being taken by the programs to provide a safe environment for therapeutic healing. Several parents have reportedly

FIGHT OR FLIGHT

commented on how grateful they were that their son or daughter is in an environment less impacted by COVID-19 than they would be at home.

There were reports of increased parent anxiety, including around the need to travel or conversely on the restrictions on travel/visits. There were also reports of parents putting pressure on programs to discharge their students earlier. Frequent communication was highlighted as a common and helpful practice for programs when working with parents to mitigate anxiety and concerns, and proactively respond to parents and their children's needs in treatment.

Parents have the potential to impact the length of stay if they were concerned about the ability of programs to provide the full scope of treatment or because of concerns related to COVID-19, either in the program or at home. A mother to a NATSAP student commented that she is paying a hefty sum for her son to be in online treatment, an online treatment that she is not sure is effectively treating her son. With wilderness programs costing somewhere between \$12,000 to \$14,000 a month, typically for a stay of about 10 to 16 weeks followed by therapeutic boarding schools that cost between \$9,000 and \$11,000 a month and students stay for a range of three to 18 months, families are bound to question the cost-benefit analysis of their spending on NATSAP programs. A private counselor and therapist said, "Some people have to sell their homes or even turn their children over to the state because they couldn't control their kid or pay for treatment, and those are extremely sad cases." With unemployment and uncertainty rising, it may be increasingly difficult for families to pay for treatment. Additionally, insurance and school district funded options may be moving slowly under the weight of the pandemic.

The Bottom Line for Programs

It is clear that program leadership and ownership have a lot to handle when it comes to making decisions on how to respond, which is reportedly quite stressful. One program director commented that:

FIGHT OR FLIGHT

My primary challenge as a program director is managing the stress of having to make so many small decisions, each of which could have such a large impact if things go poorly somehow. That has been draining, despite the help and support from other team members. The second-largest stress has been the things we are missing out on in our programming, such as parent visits, home visits, workshops, and off-campus excursions (e.g., camping trips). Time with parents is vital but also poses a major risk. Parents and students are desperate for it, and I very much want it for them. Weighing out risks/benefits has been very challenging.

This comment encapsulates the sentiment of many of the comments made by other program representatives. There were concerns about knowing the best practices and making decisions based on current and up-to-date research about COVID-19 response. This has impacted the ability to work on program development because of "future uncertainty." There are concerns about the economic downturn that has accompanied COVID-19 and the impact that it will have on census due to families and other funding sources that have reduced resources. There are concerns about how to lessen restrictions and make a safe and effective return to normal programming. It is difficult to balance parents' fears or demands on both sides of the spectrum between holding off and rushing forward. There are concerns about the psychological impact on students, families, and staff and the need to address the trauma associated with the pandemic. All of these issues indicate a need for ongoing consideration.

What Do We Need to Explore to Effectively Respond to COVID-19 and Potential Future Events?

When asked what help programs hoped they could get from NATSAP, there were expressions of gratitude for the outreach and support already given. It is clear that having a supportive professional community had already provided many benefits. However, there continue to be ongoing needs.

Programs reported that the following resources would be helpful if they

FIGHT OR FLIGHT

could be developed and/or maintained by NATSAP.

- Publish and maintain up to date guidelines, recommendations, or best practices for responding to COVID-19
- Maintain a strong community as a sounding board
- Normalize the process of having positive cases of COVID-19 as inevitable rather than being seen as a failure on the part of the program
- Connect programs with other programs that have effectively dealt with positive cases
- Share what is working and not working
- Help programs get access to resources and supplies (like PPE, testing, etc.)
- PR and legislative advocacy to show the difference between NATSAP programs and other facilities (correctional or otherwise) to promote a safe and essential environment for healing
- Webinars and discussion groups to provide information and facilitate collaboration
- Networking and referrals between programs

This list demonstrates the need for clear direction and support for programs to move toward common practices that can be validated as standards of best practice moving forward. NATSAP programs are in an excellent position to collaborate with each other and answer the questions that still need to be addressed.

Some of the specific questions arising from this list include, 'How do programs safely allow parents to return to campus for visits? Will all students be required to be vaccinated once it becomes available? Will new procedures need to be developed for the coming flu months when many other schools will be closed? Does online learning work for kids in these programs? How can teletherapy be most effective? How do we best work with the local health department and licensure if there are positive cases? How do we provide adequate support of staff during prolonged periods of stress?' These questions and more will continue to arise and can be best addressed through collaboration with other programs, NATSAP resources,

FIGHT OR FLIGHT

accrediting agencies, and the CDC. Furthermore, programs can and should track internal data regarding the ongoing impact of COVID-19 on clients, families, staff, and the company. This data can be analyzed and published so that others can make informed decisions regarding this pandemic and similar potential situations in the future.

In conclusion, the impact of COVID-19 has significantly affected the way programs can provide care for their students. However, programs are working together and with health authorities to find innovative solutions to provide quality care for youth in treatment. The future is yet unknown and will continue to change with new developments in the virus, governmental response, and research-based recommendations for health and safety. Programs need to continue to collaborate and adjust. The NATSAP community should continue to support each other and look for professional standards of best practice.

FIGHT OR FLIGHT

References

- Behrens, E. & Raleigh, S. (2015, August). *Dose of treatment services as predictors of outcomes for youth in residential and wilderness treatment*. Paper presented at the National Wilderness Therapy Symposium, Park City, UT.
- Brennan, R., McFadden, M., and Law, E. (2001). Review of research: All that glitters is not gold: Online delivery of education and training. Leabrook, South Australia: Australian National Training Authority, NCVET.
- “Bureau of Labor Statistics Data.” (2020). *U.S. Bureau of Labor Statistics*, U.S. Bureau of Labor Statistics, data.bls.gov/timeseries/LNS14000000.
- Ornell, Felipe, Schuch, Jaqueline B., Sordi, Anne O., & Kessler, Felix Henrique Paim. (2020). “Pandemic fear” and COVID-19: Mental health burden and strategies. *Brazilian Journal of Psychiatry*, 42(3), 232-235. Epub April 03, 2020. <https://dx.doi.org/10.1590/1516-4446-2020-0008>.

INVESTIGATING RESILIENCY AMONG STUDENTS

Investigating Resiliency Among Students with Emotional Disturbance Living in Underserved Urban Communities

Kevin A. Curtin¹ & Elizabeth Benedict²

*Alfred University*¹

*Buckeye Ranch*²

Abstract

The purpose of this article is to investigate resiliency found in students with emotional disturbance who grew up in underserved urban communities and served in therapeutic, residential or day treatment programs. Researchers employed a grounded theory approach using key informant interviews to discover both risk and resiliency factors with the intention of adding to the literature on resiliency for students with special needs. Findings revealed several unique factors based on the resiliency constructs of risk, positive social conditions, positive behaviors, and positive personal qualities. Implications and recommendations for strength-based programming are highlighted.

Keywords: resiliency, special education, risk and protective factors, residential treatment, emotional disturbance

ACKNOWLEDGMENT

The authors wish to acknowledge Dr. Brian Saltsman, Director of Student Diversity and Inclusion and Interim Chief Diversity Officer at Alfred University, for his assistance.

INVESTIGATING RESILIENCY AMONG STUDENTS

Investigating Resiliency Among Students with Emotional Disturbance Living in Underserved Urban Communities

This article is intended to extend the literature on risk and resilience for children living in urban poverty (Abelev, 2009; Anthony, 2008; Yoshikawa et al., 2012). Specifically, researchers investigated the factors that make up resiliency among elementary, middle, and high school special education students who have the disability code emotional disturbance and who live in underserved urban communities.

According to IDEA (2017), the term emotional disturbance describes a condition by which one or more of the following characteristics are present, over a long period of time, and to a marked degree that adversely affects a child's educational performance:

- An inability to learn that cannot be explained by intellectual, sensory, or health factors.
- An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
- Inappropriate types of behaviors or feelings under normal circumstances.
- A general pervasive mood of unhappiness or depression.
- A tendency to develop physical symptoms or fears associated with personal or school problems.

Unfortunately, students with emotional disturbance continue to struggle with poor secondary and post-secondary performance, including academic, social-emotional, and career outcomes. Students with emotional disturbance typically perform below grade level (Gage et al., 2014), are more likely to drop out of school as compared to their same-age peers, and are more likely to encounter employment difficulties as well as increased rates of incarceration (Wagner & Cameto, 2004).

Given the additional risk factor of poverty, students with disabilities in minority and low-income school districts are also more

INVESTIGATING RESILIENCY AMONG STUDENTS

likely to experience similar adversities as well as require special education services and support (Koseki, 2017). For this reason, it is important to understand the combination of disability and poverty in terms of risk, but to also understand the resiliency factors that contribute to why certain students transcend this risk.

Resilience is defined as an individual's ability to bounce back from adverse circumstances while maintaining a level of positive functioning in their lives (Cheek, 2009). This occurs through important societal efforts that seek to reduce risk factors and increase protective factors, given evidence that resilience may be “less an individual trait and more a quality of the child’s social and physical ecology” (Ungar, 2011, p.1).

Researchers used the term underserved communities to refer to *Health Professional Shortage Areas (HPSAs)*. HPSAs are federal designations that indicate health care provider shortages in primary care, dental health, or mental health. In terms of geographic area, HPSAs are typically located in urban or rural communities (Health Resources & Services Administration, 2020). For this investigation, students living in underserved urban communities face a number of associated risk factors, not to mention having a condition of emotional disturbance. It is therefore critical that schools promote programs and practices aimed at reducing this specific combination of risk and increasing any protective factors that may exist. However, it is important to first ascertain the kinds of protective factors that do exist given the unique needs of this population.

This study seeks to broaden the literature on resiliency by developing a qualitative understanding of students with emotional disturbance living in underserved urban communities as seen through the experiences of special education professionals, as well as the lived experiences of former special education students. The method used for this study was a grounded theory approach guided by the research question, “Which factors contribute to the resiliency of students with emotional disturbance living in underserved urban communities?”

INVESTIGATING RESILIENCY AMONG STUDENTS

Grounded theory is a systematic method in which researchers discover or develop a theory through the collection and analyses of data taken from interviews, observation, focus groups, and the study of artifacts and texts (Corbin & Strauss, 2007). For this investigation, researchers sought to discover a number of recurrent and emerging themes taken from a series of open-ended questions, in order to propose a grounded theory about this unique population of students.

Materials and Methods

Research Team and Triangulation Procedures.

The research team included a counselor educator employed by a graduate program in School Counseling in a rural community in the Northeastern United States; a graduate student in School Counseling from the same program; and two educational directors from two different non-public, therapeutic, special education schools in two large metropolitan areas of the Mid-Atlantic United States. Techniques to promote trustworthiness and credibility were employed, such as prolonged engagement with participants, peer-debriefing, memoing, individual member checks, and theoretical sampling. The research was granted approval by the Human Subjects Research Committee at the authors' institution as well as the Institutional Review Board representing the special education facilities.

Participants

Participants included both school professionals as well as former students from two different special education schools in the Mid-Atlantic region of the United States that served students with the disability code of *emotional disturbance*. Demographics are outlined in Tables 1 and 2. The group of school professionals was comprised of fourteen individuals between the ages of 31 and 74 ($M= 44.85$). Thirteen of the participants were female (93%) and one was male (7%). Ten participants identified their race as White (72%); two identified as Latina (14%); and two identified as African American (14%). There were five special education teachers (36%); six mental health professionals (43%); one reading

INVESTIGATING RESILIENCY AMONG STUDENTS

specialist (7%); one speech and language therapist (7%); and one administrator (7%). The number of years that participants were employed in the profession was between 5 and 40 ($M=17$). All were currently employed in schools that served students primarily coded with emotional disturbance.

Table 1

Participant Demographics

Variable	School Professionals		Former Students	
	Range	Mean	Range	Mean
Age	31-74	44.85	22-27	24.2
Years of Experience	5-40	17	n/a	n/a
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
Gender				
Male	1	7%	5	71%
Female	13	93%	2	29%
Ethnicity				
Caucasian	10	72%	0	-
African American	2	14%	7	100%
Latina	2	14%	0	-
Professional Role				
Special Ed Teacher	5	36%	n/a	n/a
MH Professional	6	43%	n/a	n/a
Other specialist	2	14% ⁰	n/a	n/a
Administrative	1	7%	n/a	n/a

The group of former special education students was comprised of seven individuals between the ages of 22 and 27 ($M=24.2$). Five participants identified as male (71%) and two identified as female (29%). All identified their race as African American. All were gainfully employed. All lived and grew up in an underserved urban community, had previously attended one of two schools participating in this investigation,

INVESTIGATING RESILIENCY AMONG STUDENTS

and were considered, by the school professionals who knew them, as resilient given a definition that was provided. All students had a disability of emotional disturbance.

Procedure

Recruitment occurred by contacting two non-public, therapeutic, special education schools serving students with emotional disturbance, one a day school that provides special education to students ages 6-21 and the other a comprehensive special education school and residential treatment center for youth 12-18. Both schools are considered therapeutic in that they provide a continuum of services within a therapeutic milieu to students, including small class sizes; individual, group, and family therapy; psychiatric services; occupational therapy; vocational and independent living skills; transition services; and therapeutic recreation. Both schools grant high school diplomas and require service learning as a graduation requirement.

Researchers used convenience sampling procedures to obtain the sample participants who met the inclusion criteria for the study. For the school professionals, this meant that they needed to be employed as a special education professional, which included: (a) special education teacher; (b) reading specialist; (c) mental health professional; (d) transition coordinator, (e) speech and language therapist; (f) paraprofessional; (g) psychiatrist or psychiatric nurse; (h) occupational therapist; or (i) school administrator. School professionals must have also worked with students with emotional disturbance who lived in an underserved urban community. Exclusion criteria for the study included school professionals who were employed as administrative assistants or support staff.

For the group of former special education students, inclusion criteria required that they had lived and grew up in an underserved urban community; had previously attended one of the two schools participating in this investigation; had the disability code of emotional disturbance; and had been considered by the school professionals who knew them as resilient given the definition.

INVESTIGATING RESILIENCY AMONG STUDENTS

Participant Safeguards

Participants were provided with informed consent advising them that the investigation posed minimal risk, participation was voluntary, and they could withdraw from the study at any time without any penalty. Participants were provided with the contact information for the Principal Investigator, chair of the Human Subjects Research Committee, and chair of the Institutional Review Board; in addition, participants were informed that the interviews would be recorded and transcribed, kept securely on a password protected computer, and that after the recordings were transcribed, they would then be destroyed. Informed consent was obtained from all individual participants included in the study.

Data Sources

Sources of data included a demographic survey as well as a semi-structured interview, the *Youth Resilience Interview Guide*, a procedure that was developed by The Resilience Research Centre (Ungar et al., 2007) and adapted with permission for this investigation. The interview guide was developed with the goal of establishing consistency of data collection across various research sites. It comprised several catalyst questions, which were as follows:

1. *What kinds of things are most challenging for children and youth growing up in this area?*
2. *What social conditions make it possible for these students to flourish when they have grown up with such difficulties?*
3. *What do resilient children and youth do to survive and grow up well here, despite poverty and the many other problems they face?*
4. *What personal qualities make it possible for these students to flourish when they have grown up with a great deal of difficulties?*
5. *Can you share with me a story about a specific student who grew*

INVESTIGATING RESILIENCY AMONG STUDENTS

up well in this community despite facing many challenges? How did this child manage to overcome these challenges?

Data Collection

Data collection involved interviews with both school professionals and former special education students using the semi-structured interview guide. A definition of resilience (Cheek, 2009) was provided at the beginning of each interview in order to establish consistency across all interviews. Interviews lasted approximately 30-45 minutes each and were audio taped, transcribed, and edited for accuracy. Peer-debriefing, memoing, and member-checks were employed to increase triangulation, improve respondent validation, and acquire feedback for the development of emerging themes. The inclusion of both school professionals and former special education students was intended to increase validity by informing the results from different perspectives, thus promoting deep saturation. Data-collection concluded as a result of sufficient data redundancy and achievement of thick description of emerging themes.

Data Analysis

Researchers engaged in a four-step process in analyzing the data. First, researchers facilitated an open coding procedure for each line of every transcript as a way to identify key phrases and concepts as possible categories. Next, researchers conducted peer-debriefing in order to begin consensus coding, which involved memoing and a review of the open-coding procedure. This step allowed researchers to identify categories in order to move into the third step, focused coding. Through the focused coding procedure, researchers were able to further reduce the data into more meaningful groupings, allowing researchers to identify a more condensed set of potential themes and theoretical constructs of resilience. The fourth step involved researchers conducting member-checks followed by a final round of peer-debriefing in order to establish consensus for what were to be an agreed upon set of ten themes across four theoretically meaningful categories (Corbin & Strauss, 2007).

INVESTIGATING RESILIENCY AMONG STUDENTS

Table 2

Results

Risk Factors	Positive Social Conditions	Positive Behaviors	Positive Personal Qualities
Poverty	Therapeutic school setting	Connecting with adults	Optimism
Violence	Having adult role models	Attending school consistently	Social maturity
Family Instability			

Given the qualitative procedures employed as well as the structure of the Youth Resilience Interview Guide (Ungar et al., 2007), researchers determined that the four theoretically meaningful categories were: (1) risk factors; (2) positive social conditions; (3) positive behaviors; and (4) positive personal qualities. In terms of gaining consensus on risk and resiliency themes, researchers first discovered 20 emerging themes as a result of the initial open coding procedure. Following the procedures of consensus coding, focused coding, member checks, and peer debriefing, this number was eventually reduced to nine and subsequently situated by researchers within the appropriate theoretically meaningful category.

The themes include the risk factors of poverty, violence, and family instability; the positive social conditions of a therapeutic school setting and healthy adult role models; the positive behaviors of connecting with adults and attending school consistently; and the positive personal qualities of optimism and social maturity (see Table 2 for results).

Results

Risk Factors

Poverty: Participants described poverty as a terrible hardship on

INVESTIGATING RESILIENCY AMONG STUDENTS

special education students who live in underserved urban communities. These students had parents who either did not work, had low paying menial jobs, or relied on inadequate public assistance. Students' basic needs were seldom met, as many simply did not have food or money. A school counselor described:

These kids don't eat breakfast, they don't have lunches or a lot of food in the house and we tend to see them act out because of this. Poverty has an interesting trickle-down effect...behavior problems will occur, and later we find out that the parent lost their job.

Violence: Another challenge for youth living in urban underserved communities is the violence they experienced in their neighborhoods. The neighborhoods were unsafe due to gang activity, drugs, and prostitution. Many students described being afraid to go outside or were simply not allowed to, which confined them to their home. A teacher shared:

One student of mine couldn't do a homework assignment on the phases of the moon, and was in tears over it. The reason was that he was not allowed to go outside at night because his mom said it was too dangerous.

A former student also stated:

You see so many "Rest-in-Peace" shirts and tattoos; they're everywhere in my neighborhood. Everywhere you go someone has a t-shirt symbolizing their lost friends. Me too.

Family instability: This challenge was described as a lack of family structure, such as single parents, inconsistent parenting, abandonment, substance use, and an unpredictable and often chaotic home environment. In many families, the siblings raised each other with little parental supervision. A social worker stated:

The most challenging thing is for children to be children – living with a whole slew of people in one house – the child gets lost. Other parents have to work so much that the children are often by themselves.

INVESTIGATING RESILIENCY AMONG STUDENTS

A reading specialist remarked:

It also seems that the students are expected to care for themselves at an earlier age – they have to learn to be self-sufficient because adults are simply not as present given so many other difficulties.

Positive Social Conditions

Therapeutic school setting: Participants equated a therapeutic school setting with a sense of community. These schools have important programs such as early prevention and intervention, mental health counseling, academic support, and opportunities to improve social competence. In addition, a sense of community was described as having good relationships between staff and students, parent involvement, peer support, and an overall structure of clear rules and expectations. A former student stated:

Me and others who made it were the ones who were involved in the school – we took advantage of what it offered. The therapeutic community made this possible.

A teacher also stated:

While a positive school setting has supportive relationships among everyone, schools must have consistency, that is, follow-through with rules, expectations, and holding students accountable, not only to themselves but to their peers as well.

Healthy adult role models: Not surprising, healthy adult role models were seen as important in these students' lives. They were described as those individuals who believed in students and who were supportive, reliable, and positive. Further, participants saw as important, an adult who could nurture the talents and gifts the student may have or potentially have. A vocational teacher indicated:

It's important to develop a positive relationship with someone somewhere – school or community – it doesn't matter. Many don't have positive relationships at home, so they have to get it here. I

INVESTIGATING RESILIENCY AMONG STUDENTS

feel proud that I was able to help someone find her gift through the culinary program – I think through the kitchen there was the symbolic idea of nourishment which helped her give to others and really helped her self-esteem.

Positive Behaviors

Connecting with adults: Participants described resilient children as those who have the ability to attach and form good relationships with healthy adults, role models, parent figures, and mentors. They were able to reach out to, talk with, and essentially access the supports they needed.

They have the ability to elicit caring and nurturing responses from adults here at school. Part of it is we do a good job, however, there is something more that they possess, that is within them – they respond when we help them, which makes us want to help them even more. It seems to be their desire to attach – they want us to give them a chance – and we easily do.

Attending school consistently: Despite the struggles, resilient students still managed to come to school. School was seen as a place where they were comfortable and where they got many of their needs met. Participants noted that having healthy relationships and an interest in learning, even if it is just one subject or activity, reinforced student attendance.

Their attendance is good because we provide for their basic needs – food, security, shelter ...six hours/day. They also get their mental health taken care of; they feel important and understand that somebody cares. We make it a point to know every student and each of their families, as opposed to a large public school where that can be more difficult. Meeting their basic needs tends to open a lot of doors for students. When those needs are met, they continue to come to school.

Positive Personal Qualities

Optimism: A positive attitude or optimism was noted for resilient

INVESTIGATING RESILIENCY AMONG STUDENTS

students. They were described as friendly, caring, willing to please, and goal oriented. Further, these students tended to have the ability to separate themselves from negative situations or people. A teacher noted:

These are the kids who come in with the code of the street but were able to give it up. They see beyond their noses – they look beyond what is in front of them – they dare to step out and notice who they want to follow in terms of a model. These students have a sense that they can and will do better.

A school administrator also stated:

A number of these students have a sense of hope – they can live in their community but don't have to be a part of the violence and other negativity. They know how to distance themselves, and from time to time are able to walk away.

Social maturity: These students were described as precocious in a lot of ways – they were more comfortable in conversations and interactions with adults than their peers. At the same time, they were seen as very helpful with their peer group. Both school professionals and former students described how giving back, or altruism, was important to their resiliency.

These kids have a desire to help other people and recognize when others are experiencing what they've experienced. They give back in some way – they want to share and try to help others get over the hurdle – and that's really fascinating to watch.

Discussion

The following discussion will highlight the resiliency factors of students with emotional disturbance who live in underserved urban communities, as identified by school professionals and former special education students. Having knowledge of these factors can help school professionals put in place the necessary supports and programming that can foster resilience. In pursuing the factors of resiliency among this population, a grounded theory of *risk factors, positive behaviors, positive*

INVESTIGATING RESILIENCY AMONG STUDENTS

personal qualities, and *positive social conditions* emerged from interviews of both special education professionals and former students identified as resilient. Using specific qualitative procedures previously described, these four theoretical constructs led to the discovery of several common themes for each construct.

The four theoretical constructs were identified based on items from the Youth Resilience Interview Guide (Ungar et al., 2007), and this protocol deserves much credit to the investigation. The question “*What kinds of things are most challenging for children and youth growing up in this area?*” allowed researchers to listen for and discover risk factors, ultimately reducing the data to the common themes of poverty, violence, and family instability. This question was a necessary first step in the data collection as it allowed participants to reflect on risk before describing what would eventually emerge as resiliency themes across the other constructs of *positive social conditions*, *positive behaviors*, and *positive personal qualities*.

Similarly, the question “*What social conditions make it possible for these students to flourish when they have grown up with such difficulties?*” allowed researchers to determine that a therapeutic school setting and healthy adult role models contributed to the resiliency of the students with special needs that were known to the participants in this study. The question “*What do resilient children and youth do to survive and grow up well here, despite poverty and the many other problems they face?*” allowed researchers to listen for and discover specific positive behaviors of resilient children and youth, such as connecting with adults and attending school consistently. Finally, the question, “*What personal qualities make it possible for these students to flourish when they have grown up with a great deal of difficulties?*” allowed researchers to discover that children and youth who overcame adversity were generally more optimistic and socially mature than those who were less able to overcome difficulties.

The discovery of poverty, violence, and family instability as risk factors has important implications on what types of programming schools

INVESTIGATING RESILIENCY AMONG STUDENTS

should employ. Given that these particular themes are considered adverse childhood experiences (Felitti et al., 1998), schools would be wise to address these with a therapeutic component. It should come as no surprise then that, among the positive social conditions found in this study, the themes of a therapeutic school setting and healthy adult role models would be significant to promoting resiliency in a child's life. The schools in this study are in fact considered therapeutic and utilize models such as the therapeutic community along with trauma-informed care.

The therapeutic community is a model in which students with special needs are provided with structure, a sense of empowerment, and a climate of positive peer support (Curtin, 2010). Schools such as these offer a continuum of programming, including positive behavioral interventions and supports (Sugai & Horner, 2002), career/transition planning, family engagement, and school-based mental health. Therapeutic schools with trauma-informed care are those that utilize a multi-tiered framework (universal, secondary, and tertiary) that provides targeted supports for all learners, particularly evidence-based interventions (Overstreet & Chafouleas, 2016).

These schools also have educational professionals who are trained to establish healthy relationships with students, recognize any signs of trauma and stress, respond empathically to student needs, and provide effective prevention and intervention strategies. Having well-trained, healthy adult role models in therapeutic schools highlights the importance of both positive social conditions found in this investigation.

Turning to positive behaviors, researchers discovered that resilient children are those that connect with adults and attend school consistently. These factors suggest a reciprocal relationship in that students who have healthy, supportive connections with school staff are also likely to have good attendance. Broadly speaking, resilience is built on strong relationships, and the school is well-positioned to play a vital role in this area. While the existence of a safe, supportive, and therapeutic climate is indeed beneficial, schools are encouraged to implement programs and practices that help students develop stronger connections with their peers

INVESTIGATING RESILIENCY AMONG STUDENTS

and staff. In addition, schools are encouraged to adopt practices that reinforce attendance, by providing clear academic expectations while promoting academic competence, self-determination skills, and extracurricular activities students enjoy (Harvey, 2007).

Finally, optimism and social maturity emerged as common themes for the category of positive personal qualities, and both have important implications for practice. Participants described optimistic students as friendly, caring, willing to please, and goal oriented. In addition, these students are able to set and maintain appropriate boundaries when faced with negative situations and/or peers. Remarkably, they are able to live among violence yet not be a part of it, owing to their focus on the future and their ability to engage with positive peers at school. Researchers recommend that schools implement evidence-based programs and practices that focus on maintaining a climate of positive peer support. At the elementary level, this includes programs such as *Caring School Community* (Battistich et al., 2004); *Open Circle* (Hennessey, 2007); and *The Responsive Classroom* (Rimm-Kaufman & Chiu, 2007); while at the middle and high school levels, *Responding in Peaceful and Positive Ways* (Farrell et al., 2001); and *Student Success Skills* (Lemberger et al., 2015).

The theme of social maturity describes students who have positive social skills, enjoy helping others, and are comfortable interacting with adults. These youths in particular displayed a sense of altruism by giving back to the school and their community in some way. Schools can capitalize on this by developing opportunities for this kind of school and community engagement. Peer mentoring programs and service-learning projects are such opportunities and should therefore be considered. Peer mentoring connects older students with younger students and offers a wealth of benefits for both the mentor and mentee. In a review of 40 studies, Lindsay and Munson (2018) discovered a number of promising outcomes mentoring programs may have for students with disabilities, including improved academics, employability, self-esteem, self-efficacy, self-determination, self-advocacy, social and emotional support, self-confidence, sense of community, and overall life skills.

INVESTIGATING RESILIENCY AMONG STUDENTS

Service-learning is a practical and experiential approach to education that gives students opportunities to engage in and give back to their community while reflecting on societal needs (National Youth Leadership Council, 2020). In a review of the literature, service learning has shown to demonstrate a positive impact on a variety of areas for students, schools, and communities, including personal and social development, civic responsibility, academic learning, and career development (Billig, 2000). In addition, service learning has been found to be particularly effective on work performance for students with emotional and behavioral disorders (Curtin & Garcia, 2011).

Overall, despite the risk factors of poverty, violence, and family instability that was discovered in this investigation, participants found a variety of important protective factors that, when analyzed, can provide a means to develop and implement programs and practices that promote these protective factors. Specifically, schools should strive to: 1) provide a therapeutic model with well-trained, trauma-informed staff; 2) develop and maintain a climate that fosters healthy student-staff connections and positive peer support; and 3) adopt programs that reinforce attendance, provide clear academic expectations, and allow students to give back to their school and community.

Limitations and Implications for Research

The combination of the lived experiences of former special education students along with school professionals allowed investigators to consider the results from multiple perspectives, thus promoting deep saturation and overall validity. However, the study's sample was less diverse among the two different groups of participants. School professionals participating in the study were predominantly Caucasian (72%), which is close to the national average of special education teachers (74.6%), and female (93%), while the former special education students in this study all identified as African American (100%), an over-representation as compared to the national average of 16 percent (Riser-

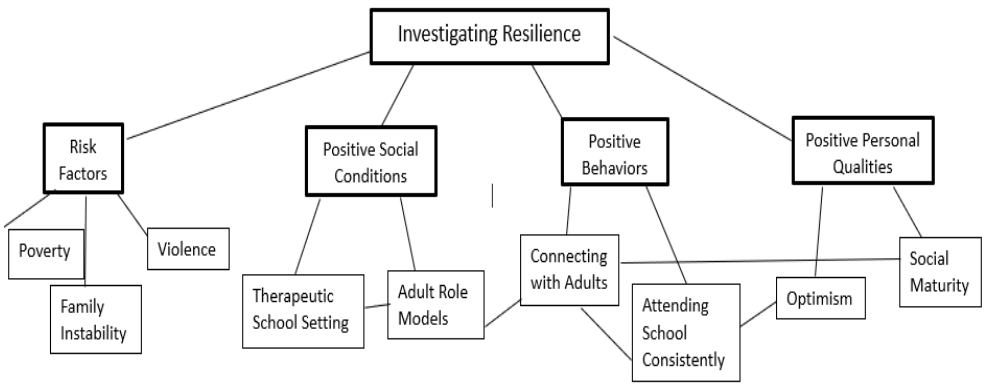
INVESTIGATING RESILIENCY AMONG STUDENTS

Kositsky, 2019). Further research should involve a more diverse sample of school professionals as well as former special education students.

In addition, sampling was limited to two different non-public, therapeutic, special education schools in large metropolitan areas of the Mid-Atlantic United States. Thus, the results are not necessarily generalizable to students with emotional disturbance living in underserved urban communities in other parts of the United States, as well as student with emotional disturbance in public school districts.

Figure 1

Illustration of interplay of resiliency factors



An interesting aspect of this study lies in the potential interplay among resiliency factors (see Figure 1). For example, the positive behavior of connecting with adults seems to have a noticeable relationship with the positive personal quality of social maturity not to mention the positive social condition of having healthy adult role models. Furthermore, despite the potentially traumatic risk factors of poverty, violence, and family instability, attending a therapeutic school was found to be an important contributor to resiliency. This should come as no surprise given how important school-based mental health has become for children and

INVESTIGATING RESILIENCY AMONG STUDENTS

youth.

Conclusion

Results of the investigation revealed several themes pertaining to specific risk and protective factors unique to students with emotional disturbance living in underserved urban communities. These factors are important given how the additional risk factor of having a mental health disability should inform treatment. The results not only contribute to a better understanding of this population, but also raise awareness for recommended strength-based programs and practices in schools that better support overall student success.

INVESTIGATING RESILIENCY AMONG STUDENTS

References

- Abelev, M. S. (2009). Advancing out of poverty: Social class worldview and its relation to resilience. *Journal of Adolescent Research, 24*, 114-141. <https://doi.org/10.1177/0743558408328441>
- Anthony, E. K. (2008). Cluster profiles of youths living in urban poverty: Factors affecting risk and resilience. *Social Work Research, 32*, 6-17. <https://doi.org/10.1093/swr/32.1.6>
- Battistich, V., Schaps, E., & Wilson, N. (2004). Effects of an elementary school intervention on students' "connectedness" to school and social adjustment during middle school. *The Journal of Primary Prevention, 24*, 243-262. <https://doi.org/10.1023/B:JOPP.0000018048.38517.cd>
- Billig, S. H. (2000). Support for K-12 service-learning practice: A brief review of the research. *Educational Horizons, 80*(4), 184-189. <http://www.jstor.org/stable/42927126>
- Cheek, J. R. (2009). Resilience. In American Counseling Association (Ed.), *The ACA encyclopedia of counseling* (p. 458). American Counseling Association.
- Corbin, J., & Strauss, A. (2007). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Sage. <https://doi.org/10.4135/9781452230153.n2>
- Curtin, K. A. (2010). Developing a therapeutic community for students with emotional disturbance: Guidelines for practice. *Journal of Therapeutic Schools and Programs, 4*, 134-146. <https://doi.org/10.19157/jtsp.issue.04.01.07>
- Curtin, K. A. & Garcia, J. (2011). Improving work performance for adolescents with emotional and behavioral disorders: A

INVESTIGATING RESILIENCY AMONG STUDENTS

comparison of two work-based learning interventions. *Journal of Rehabilitation*, 77, 31-39.

Farrell, A. D., Meyer, A. L., & White, K. S. (2001). Evaluation of responding in peaceful and positive ways (RIPP): A school-based prevention program for reducing violence among urban adolescents. *Journal of Clinical Child Psychology*, 30(4), 451-463. https://doi.org/10.1207/S15374424JCCP3004_02

Felitti V. J., Anda R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventative Medicine*, 14, 245-258. [https://doi.org/10.1016/S0749-3797\(98\)00017-8](https://doi.org/10.1016/S0749-3797(98)00017-8)

Gage, N. A., Wilson, J., & Macsuga-Gage, A. S. (2014). Writing performance of students with emotional and/or behavioral disabilities. *Behavioral Disorders*, 40, 3-14. <https://doi.org/10.17988%2F0198-7429-40.1.3>

Harvey, V. S. (2007). Schoolwide methods for fostering resiliency. *Principal Leadership (High School Ed.)*, 7, 10-14.

Health Resources and Services Administration (2020). *Health Professional Shortage Areas*. Retrieved from <https://bhwh.hrsa.gov/shortage-designation/hpsas>

Hennessey, B. A. (2007). Promoting social competence in school-aged children: The effects of the open circle program. *Journal of School Psychology*, 45(3), 349-360. <https://doi.org/10.1016/j.jsp.2006.11.007>

Individuals with Disabilities Education Act, 20 U.S.C. § 1400 (2017).
Koseki, M. H. (2017). Meeting the needs of all students: Amending the idea to support special education students from low-income households. *Fordham Urban Law Journal*, 44, 794-832.

INVESTIGATING RESILIENCY AMONG STUDENTS

<https://ir.lawnet.fordham.edu/ulj/vol44/iss3/7>

- Lemberger, M., Selig, J., Bowers, H., & Rogers, J. (2015). Effects of the student success skills program on the executive functioning skills, feelings of connectedness, and academic achievement in a predominantly Hispanic, low-income middle school district. *Journal of Counseling and Development, 93*, 25-36.
<https://doi.org/10.1002/j.1556-6676.2015.00178.x>
- Lindsay, S. & Munson, M. R. (2018). *Mentoring for youth with disabilities: National Mentoring Resource Center Population Review*. National Mentoring Resource Center.
http://nationalmentoringresourcecenter.org/images/PDF/Mentoring_for_Youth_with_Disabilities_Population_Review.pdf
- National Youth Leadership Council. (2020, November 26). *Service Learning*. <https://www.nylc.org/page/WhatisService-Learning>
- Overstreet, S. & Chafouleas, S. M. (2016). Trauma-informed schools: Introduction to the special issue. *School Mental Health, 8*, 1-6.
<https://doi.org/10.1007/s12310-016-9184-1>
- Rimm-Kaufman, S. E., & Chiu, Y. I. (2007). Promoting social and academic competence in the classroom: An intervention study examining the contribution of the Responsive Classroom Approach. *Psychology in the Schools, 44*(4), 397-413.
<https://doi.org/10.1002/pits.20231>
- Riser-Kositsky, M. (2019, December 17). *Special Education: Definition, Statistics, and Trends*. Education Week.
<http://www.edweek.org/ew/issues/special-populations/>
- Sugai, G., & Horner, R. H. (2002). The evolution of discipline practices: School-wide positive behavior supports. *Child and Family Behavior Therapy, 24*(1-2), 23-50.
https://doi.org/10.1300/J019v24n01_03

INVESTIGATING RESILIENCY AMONG STUDENTS

- Ungar, M. (2011). The social ecology of resilience: Addressing contextual and cultural ambiguity of a nascent construct. *American Journal of Orthopsychiatry*, *81*, 1-17.
- Ungar, M., Brown, M., Liebenberg, L., Othman, R., Kwong, W., Armstrong, M., & Gilgun, J. (2007). Unique Pathways to resilience across cultures. *Adolescence*, *42*(166), 287-310.
- Wagner, M. & Cameto, R. (2004). The characteristics, experiences, and outcomes of youth with emotional disturbances. *A report from the National Longitudinal Transition Study-2 (NLTS2)*. Menlo Park, CA: SRI International.
- Yoshikawa, H., Aber, J. L., & Beardslee, W. R. (2012). The effects of poverty on the mental, emotional, and behavioral health of children and youth: Implications for prevention. *American Psychologist*, *67*, 272-284. <https://doi.org/10.1037/a0028015>

NATSAP Collaboration and Interoperability with the Greater Healthcare Community

Kristen Francom, Jayte Boehler, & Nathan Olsen

BestNotes

Abstract

NATSAP and the modern patient safety and quality care movement both began in 1999. NATSAP's founders created the context for collaboration in an effort to improve safety and care quality, as demonstrated in NATSAP's ethical practice standards and in NATSAP participation with Outdoor Behavioral Health (OBH) and University New Hampshire (UNH) in creating one of the largest non-governmental databases of youth behavioral health treatment outcomes in the world. As the greater healthcare community transitions to value-based reimbursement models, NATSAP can utilize the Fast Health Interoperability Resources (FHIR) standard to collaborate with the greater healthcare community and continue leading in the patient safety and quality care movement.

Keywords: interoperability, outcomes, patient safety, behavioral health care collaboration, value-based reimbursement.

NATSAP COLLABORATION AND INTEROPERABILITY

NATSAP Collaboration and Interoperability with the Greater Healthcare Community

The National Association of Therapeutic Schools and Programs (NATSAP) was founded in 1999, the same year The Institute of Medicine released the report *To Err is Human: Building a Safer Health System*, a report that was considered to have launched the modern patient safety and care quality movement. Over the past 20 years, health systems and agencies are still making major investments to improve safety and quality (Bates & Singh, 2018) and NATSAP has been dedicated to improving the quality and standard of care delivered within its member programs. In particular, NATSAP has adopted effective collaboration efforts with stakeholders to contribute solutions to the serious problems set forth in *To Err is Human*. This paper highlights the challenges and solutions founded on NATSAP collaborations and explains the opportunity for NATSAP programs to adopt emerging interoperability technology to expand collaborations with the greater healthcare community.

A History of Collaboration

We recently read the Journal of Therapeutic Schools and Programs article, “A Brief History of the National Association of Therapeutic Schools and Programs, Reprinted and Updated,” by John Santa and Jan Courtney and found a treasure trove of collaboration examples. From NATSAP’s infancy, the founding members put aside competition and came together for the benefit of young people, their families, and those engaged in helping professions. The authors stated (2019):

As you might imagine, the idea of imposing order and structure on a group of individuals who were mostly therapists, as well as owners or leaders of their own programs, was a challenge. In a remarkably short time, however, we came to respect each other, enjoy one another’s company, and saw how each of us could contribute to the group. (p. 21)

The collaborative vision among early NATSAP members was evident in their leadership within the treatment industry to establish ethical standards of practice, demonstrating how diverse organizations can self-regulate in advance of relevant government decisions. “The initial

NATSAP COLLABORATION AND INTEROPERABILITY

organizational meeting also established a set of priority projects including standards for ethical practice, an annual conference, employee referral service, public relations support, outcome studies, a directory, training workshops, statistics, lobbying support, and a purchasing consortium” (Santa & Courtney, 2019, p. 14).

NATSAP’s early success can be contextualized by Dyer and colleagues (2013), who studied the determinants of high functioning teams. Creating the right context is the first step in establishing a framework for success. Context refers to the organizational culture, structure, and systems of support and is a foundation for effective collaboration (Dyer et al., 2013). Context is evident in NATSAP, as they collaborate within a professional association structure in which individuals from a spectrum of disciplines can support each other in professional development and program improvement most evident in a culture of data driven decisions. The leadership of NATSAP continues to create the context for effective collaboration among its members, the families it serves, and other key stakeholders in the field.

A Context for Research

Early NATSAP members with the Outdoor Behavioral Health Council (OBH) and the University of New Hampshire created the framework for what has grown into one of the largest non-governmental databases of youth behavioral health treatment outcomes in the world (M. Gass, personal communication, July 2020). In this regard, NATSAP has made significant progress in fulfilling the visionary statement of the founders:

NATSAP members must go beyond customer satisfaction surveys and simple outcome measures to explore across programs what we are doing and determine the basis of effective intervention. Such exploration requires openness, collaboration, and sharing of information. It will require developing data banks that will make possible long-term study of our work. (Santa & Courtney, 2019, p. 26)

Over 60 programs have participated in the NATSAP Practice Research Network and many qualify to be Research Designated Programs. Additionally, NATSAP has partnered with OBH, the Independent

NATSAP COLLABORATION AND INTEROPERABILITY

Educational Consultant Association, the Therapeutic Consulting Association, and Petree Consulting to create a software and data repository called The Golden Thread, which “tracks clients through their continuum of care and allows researchers to analyze what works best for whom” (M. Petree, personal communication, July 2020).

Likewise, there are many individual NATSAP member programs that have successfully created this culture and structure within their organizations:

Our leadership team and staff members have been very supportive of the research efforts at True North. We aim to take great care in incorporating data collection into the milieu of treatment without compromising the highest quality care and treatment of our clients and their families. With the resources and support that NATSAP and OBH provide, along with our partnerships with OutcomeTools and Petree Consulting, we feel confident to accomplish our data-collection goals. (A. McHugh, personal communication, July 2020)

The context for meaningful research is perhaps the greatest example of NATSAP’s collaborative efforts to improve care quality and safety. Examples of these efforts are demonstrated by two programs, Telos and Shelterwood, participating in the NATSAP research initiative.

Telos uses annual data each year to track the average improvement each client makes while in treatment. In 2018 we made changes to our approach to substance use including rewriting our curriculum and creating and implementing a new training for all staff. In 2019 our numbers showed an improvement in percentage of students that did not go back to drug use post treatment. Also in 2017 we reviewed the differences reported year to year with family functioning using the FAD-III-GF. We were able to break it down by therapist and give both group and one-on-one family therapy training to improve the quality of family therapy care for our clients and families. Research data has provided clear and concrete benchmarks for us to measure our progress on quality care and improvement. (J. Hall, personal communication, October 2020)

This approach that Telos has taken is an example of utilizing research in developing their programs, training, and evaluation of their

NATSAP COLLABORATION AND INTEROPERABILITY

processes to provide their patients with high quality care. An additional program that is taking a continuous improvement approach to treatment is exemplified by Shelterwood.

It is hard for us to know what the full potential is [of gathering data]. We create reports to . . . see changes we need to make to help grow the program, we can see what parents are not satisfied with to help increase satisfaction, and we are using data to help improve our program. (J. Faddis, personal communication, July 2020).

Faddis (2020) demonstrates the different domains in which research can improve; including but not limited to care outcomes, patient satisfaction, and operational efficiency.

Collaborative Care Models & Emerging Technology

Over the last 20 years the collaborative care model between general medical physicians and behavioral health providers has been shown to reduce costs, reduce stigmas, and improve patient outcomes (Kuramoto-Crawford et al., 2016). These models vary in their level of collaboration between primary care physicians and behavioral health providers.

- Coordinated care involves minimal collaboration at a distance. In this level physicians and behavioral health providers communicate about shared patients, though they maintain separate clinical systems. Communication often only occurs upon provider need, and providers have a limited understanding of each other's roles in the patients' care (Reiter et al., 2018).
- Co-located care includes physicians and behavioral health providers who are co-located or otherwise closely located to achieve some level of collaboration onsite. Co-located care enables the use of face-to-face team care coordination. Partners and agencies at this level of collaboration have limited shared system functionality caused by either technical or organizational barriers (Reiter et al., 2018).

NATSAP COLLABORATION AND INTEROPERABILITY

- Integrated care achieves close collaboration between the physicians and mental health providers; this includes, but is not limited to the establishment of a shared treatment plan and using population tools to incorporate patients into behavioral healthcare services (Carlo et al., 2020). Due partially to barriers in interoperability, this historically has required the use of a single centralized clinical system.

The individual and financial benefits of collaborative care occur in parallel to the needs that arise due to alternative payment models (Carlo et al., 2020). Technological advances support the care models as well as payment reimbursement models. The establishment of the electronic health record (EHR) is a platform to increase care collaboration to its full potential but has yet to be fully realized due to various technical barriers. One significant technical barrier is that of interoperability, the ability of software to exchange and make use of information. Throughout the history of EHRs, the medical informatics community has formed various structural and semantic standards to capture and share medical data across diverse health systems. Complexities in these standards have hindered EHRs from easily exchanging patient records, thus limiting the potential for collaboration.

Recently HL7, an international health standards organization, published the Fast Health Interoperability Resources (FHIR), a standard to improve interoperability, resolve shortcomings, and integrate simple web services (Saripalle et al., 2019). FHIR establishes an app-based platform that allows for the collection of health data from any FHIR-compliant health app directly from the patient and accessible via the EHR. Harari and colleagues (2016) identified the crucial role mobile apps play in the collection of health data, including behavioral data. This type of rich data collection from the patient broadens the collaborative touchpoints between the patient and provider. Available data includes, but is not limited to sleep patterns, exercise history, and resting heart rate. Research suggests that FHIR will bridge the interoperability gap between the growing number of entities and systems (Saripalle, 2019). In simpler terms, this standard allows two or more different systems to not only exchange data, but also understand those data. Additionally, with backing from national regulation, primarily from the 21st Century Cures Act, along with big tech

NATSAP COLLABORATION AND INTEROPERABILITY

firms such as Google, Microsoft, and Apple, FHIR has quickly become an established standard to back many of the interoperability and collaboration efforts that will take place in the future (Saripalle, 2019). As the healthcare technical infrastructure matures, the opportunity for NATSAP and its programs to collaborate is broadening.

An exciting collaboration effort for the behavioral health industry, outcomes tracking, and progress monitoring has created a new dimension for providers to identify opportunities to improve patient care quality and safety. Discussion can begin around effective treatment modalities and best practices for diverse populations. The utilization of the FHIR standard broadens the scope of the collaborative potential of efforts such as the Golden Thread and the NATSAP research project.

Conclusion

The birth of the modern patient safety movement coincided with the birth of NATSAP about 20 years ago. True to the spirit of collaboration established by its founders, NATSAP has demonstrated its ability to contribute solutions to the serious problems set forth in *To Err is Human*. By supporting research and leveraging technology with its partners, NATSAP has participated in creating one of the largest nongovernmental databases of behavioral health outcomes for youth in the world. Maturing interoperability technology, especially the FHIR standard, will assist NATSAP members in their efforts to work seamlessly with the greater healthcare community. As reimbursement systems promote collaborative care models, the future of NATSAP's ability to serve more young people and their families will require continuance in the collaborative spirit of its founders.

NATSAP COLLABORATION AND INTEROPERABILITY

References

- Bates, D. W., & Singh, H. (2018). Two decades since To Err Is Human: An assessment of progress and emerging priorities in patient safety. *Health Affairs*, 37(11), 1736–1743.
<https://doi.org/10.1377/hlthaff.2018.0738>
- Carlo, A.D., Benson, N. M., Chu, F., & Busch, A.B. (2020). Association of alternative payment and delivery models with outcomes for mental health and substance use disorders: A systematic review. *Journal of American Medical Association*, 3(7), e207401.
<https://doi.org/10.1001/jamanetworkopen.2020.7401>
- Dyer Jr., W. G., Dyer, J. H., & Dyer, W. (2013). *Team building: Proven strategies for improving team performance* (5th ed.). Jossey-Bass
- Harari, G. M., Lane, N. D., Wang, R., Crosier, B. S., Campbell, A. T., & Gosling, S. D. (2016). Using smartphones to collect behavioral data in psychological science: Opportunities, practical considerations, and challenges. *Perspectives on Psychological Science*, 11(6), 838–854.
<https://doi.org/10.1177/1745691616650285>
- Kuramoto-Crawford, S. J., Han, B., Jacobus-Kantor, L., & Mojtabai, R. (2016). Receipt of depression treatment from general medical providers and specialty mental health providers. *Psychiatric services*, 67(7), 758–765.
<https://doi.org/10.1176/appi.ps.201500113>
- Reiter, J. T., Dobmeyer, A. C., & Hunter, C. L. (2018). The primary care behavioral health (PCBH) model: An overview and operational definition. *Journal of Clinical Psychology in Medical Settings*, 25(1), 109-126.
<https://doi.org.offcampus.lib.washington.edu/10.1007/s10880-017-9531-x>
- Santa, J. L., & Courtney, J. M. (2019). A brief history of the National Association of Therapeutic Schools and Programs, reprinted and updated. *Journal of Therapeutic Schools and Programs*, 11(1), 18-29.

NATSAP COLLABORATION AND INTEROPERABILITY

Saripalle, R.. (2019). Fast healthcare interoperability resources (FHIR): Current status in the healthcare system. *International Journal of E-Health and Medical Communications*. 10(1), 76-93.
<https://doi:10.4018/IJEHMC.2019010105>.

Saripalle, R., Runyan, C., & Russell, M. (2019). Using HL7 FHIR to achieve interoperability in patient health record. *Journal of Biomedical Informatics*, 94(1), 103188.

Understanding Trauma-Related Distress Among Wilderness Therapy Field Staff

Lindsay Rea Clements Myrick,¹ Ariana Wermer-Colan², Christine Lynn Norton³, & Anita Tucker²,

*BlueFire Wilderness Therapy*¹

*University of New Hampshire*²

*Texas State University*³

Abstract

There is a dearth of research in the field of outdoor behavioral healthcare on the direct care staff at wilderness therapy programs, known as field staff. Some research has identified direct care staff as particularly susceptible to burnout and high levels of stress due to personal, organizational, and social factors. Recent research on burnout in fields such as social work has indicated that what was thought to be burnout may actually be the accumulation of stress over time, or some sort of post-traumatic distress, namely a response to specific incidents and pervasive cognitive and emotional shifts due to working with individuals with a trauma history. This mixed methods study used demographic and incident surveys, as well as the Trauma Attachment and Belief Scale, the Impact of Events Scale-Revised, and follow-up interviews to explore the prevalence of trauma-related distress in wilderness therapy field staff and their perceptions of support, coping, and processing the experience. Recommendations for the field based on the findings indicate a need for increased training on self-care practices, de-stigmatizing the use of mental health professionals for direct care staff, including educating staff about insurance benefits for mental health care, and assessing for signs of instructor stress such as through staff debriefs and increased social support.

Keywords: training, vicarious trauma, burnout, wilderness therapy

TRAUMA-RELATED DISTRESS AMONG STAFF

Understanding Trauma-Related Distress Among Wilderness Therapy Field Staff

Wilderness therapy (WT) field staff have a crucial role in the care and delivery of services for clients of Outdoor Behavioral Healthcare (OBH). Field staff travel with clients, spending 24 hours a day, for shifts ranging from 4 to 16 days in the field. They are responsible for keeping clients safe, running groups, and helping clients with their clinical goals and skill acquisition (Kolaski & Taylor, 2019). Despite their important role in wilderness therapy outcomes and programming, research on field staff is currently lacking (Kirk & O’Connell, 2012). While some research has focused on the general experience of being a field staff (Field et al., 2016; Karoff et al., 2019), most of the research to date has focused on negative aspects of the role, such as the challenges, stressors, high turnover rate and burnout (Kirk & O’Connell, 2012; Kolaski & Taylor, 2019; Marchand, 2008; Marchand & Russell, 2013; Marchand et al, 2009; Maslach & Leiter, 2008).

These studies have found evidence that direct care staff, both field staff and those in residential treatment programs, experience high rates of stress and turnover, something that has been attributed to burnout (Kirk & O’Connell, 2012; Marchand et al., 2009). Research is beginning to suggest that burnout, as the term is currently used, may actually incorporate a few different distinct processes, which include secondary trauma, and vicarious traumatization (Jenkins & Baird, 2002; Kanno & Giddings, 2017). These processes may contribute to employee distress and eventual job termination (Reghr et al., 2004). In addition, since field staff are linked to positive client outcomes (Kolaski & Taylor, 2019), a failure to support them may go so far as to encourage negligence and negatively impact clients’ treatment (Heron & Chakrabati, 2002). Thus, it is imperative to gain a better understanding of if and how distress shows up in wilderness therapy field staff and what can be done to mediate this distress. This study will seek to explore the contributions of vicarious and secondary trauma to field staff distress and factors that may contribute to mediating this state.

Experiences of Direct Care Staff

While there is limited research on wilderness therapy field staff,

TRAUMA-RELATED DISTRESS AMONG STAFF

research on direct care staff in wilderness therapy programs, outdoor education, and Residential Treatment Centers (RTCs) can deepen our understanding of the experiences of staff in these professions. Marchand (2008) identified that field staff in wilderness therapy programs reported that their schedules presented a challenge, both due to the amount of time they spent with clients with clinically complex behaviors, as well as their long stretches of work shifts with variable time off. Marchand (2008) also found that field staff reported high levels of anxiety and physical or emotional challenges as significant difficulties related to their work.

These reports are significant for this study because they suggest burnout or some sort of trauma-related distress. In addition, insufficient pay, pressure to perform, and compromises that were made for work, such as in personal relationships, were reported to be significant contributors to instructor stress (Marchand et al., 2009; Maslach & Leiter, 2008). Goodness of fit between employee and the job, as well as expectations about the role were also linked to job satisfaction for wilderness therapy field staff (Marchand et al., 2009; Marchand & Russell, 2013). Lastly, senior field staff reported being unsatisfied with promotion, contingent rewards, operating conditions, and communication within the organization (Marchand et al., 2009).

While the focus of much research has been on the stressors and challenges of being direct care staff, findings indicate that field staff experience personal benefits from their jobs as well (Bunce, 1998). In a study of Australian outdoor education practitioners, positives of the work included flexibility and variety, autonomy and responsibility, community and support at work, training opportunities, and work location (Thomas, 2001). In the area of training, 93% of RTC direct care staff reported they could benefit from additional training (Lakin et al., 2008). The authors suggest that direct care staff could specifically benefit from training in cognitive restructuring, or separating person and behavior, and relaxation techniques. Stapleton et al. (2016) suggest that training staff on task-oriented versus emotion-based coping mechanisms could be beneficial as well. Finally, a need for promoting self-care among employees by providing training on components of self-care, such as mindfulness and sleep hygiene, has been advocated for OBH programs and for individuals working with clients who have experienced trauma (Kolaski & Taylor,

TRAUMA-RELATED DISTRESS AMONG STAFF

2019; Valent, 2002).

Understanding Trauma-Related Distress

The role and expectations of wilderness therapy field staff clearly have embedded challenges and stressors that may affect an employee's satisfaction, turnover, and job performance. In addition, exposure to clients' stories of trauma or clients acting out behaviors as a result of trauma, commonly encountered by field staff, can effect the mental health of staff and lead to issues with retention and performance as well (Figley, 1995b). These experiences can contribute to three related, but distinct phenomena: burnout, secondary trauma, and vicarious traumatization (VT).

According to Jenkins and Baird (2002) there is much conceptual overlap between these ideas as they all result from "exposure to emotionally engaging clients via interpersonally demanding jobs and represent debilitation that can obstruct providers' services" (p. 425). Burnout is a more general phenomenon that can occur in any social service setting, while VT and secondary trauma are specifically related to work with trauma populations (Newell & MacNeil, 2010). No research currently exists on the levels of either VT or secondary trauma in wilderness therapy field staff, a gap this study aims to fill.

Burnout

Research on burnout suggests that it is composed of three dimensions: exhaustion, cynicism or depersonalization, and inefficacy (Maslach & Leiter, 2008). Maslach and Leiter (2008) found that organizational factors such as workload and union support had the greatest significant impact on burnout. Overload, or a workload that was perceived to be above and beyond what a person might be capable of, contributed significantly to employee feelings of exhaustion. Employee data also showed that role ambiguity and role conflict contributed to depersonalization. Co-worker support seemed to provide a mediating factor to burnout and was related to accomplishment and efficacy. Person-job match, which Leiter and Maslach (2004) define as congruence between individual dimensions and job dimensions on six categories (workload, control, reward, community, fairness and values) was also a significant factor in predicting burnout.

TRAUMA-RELATED DISTRESS AMONG STAFF

Secondary Trauma and Vicarious Traumatization

Secondary traumatic stress (STS) can be conceptualized as an experience almost identical to Post Traumatic Stress Disorder (PTSD) with the only difference being that the person who develops PTSD directly experienced the event, while the person developing STS has been exposed to the event indirectly or vicariously (Figley & Kleber, 1995). Originally this idea was drawn from the experiences of family members of sexual assault survivors and combat veterans and was subsequently expanded to include the experiences of professionals ranging from police officers to nurses and therapists (Figley, 1995b).

Vicarious trauma has been conceptualized by Williams et al. (2012) as a shift in one's internal experience and psychological well-being, and it was originally defined by Pearlman and Saakvitne (1995) as the permanent "transformation in the inner experience of the therapist that comes about as a result of empathic engagement with clients' trauma material" (p. 31). Pearlman and Mac Ian (1995) explain that this experience may be cumulative across time and can permeate the inner world of the person experiencing it. McCann and Pearlman (1990) describe the potential effects of vicarious trauma as nightmares, fearful thoughts, intrusive images, and suspicion of others' motives. These are all symptoms that may be present in STS as well, though they ascribe the root of these issues to be exposure to aspects of client's stories involving victimization that are inconsistent with the therapist's cognitive schemas. They highlight several areas whereby alterations to core beliefs may lead to distress and vicarious traumatization, including trust, safety, and power and control.

As Jenkins and Baird (2002) point out, these constructs are a bit conceptually muddy, although their research suggests that they are interrelated and may present distinct aspects. Key differentiations made by Jenkins and Baird (2002) between STS and VT include: the focus on symptoms in STS vs. theory in VT, the focus on observable reactions in STS vs. on covert thinking changes in VT, the focus on a wider population of professionals and individuals in STS vs. the focus on trauma therapists and mental health workers in VT, and the focus on as little as one exposure in STS vs. the focus on cumulative effects of long-term exposure in VT. Jenkins and Baird (2002) also point out that these concepts are

TRAUMA-RELATED DISTRESS AMONG STAFF

distinctive from the concept of burnout in their focus on interactions with individuals who have experienced traumatic events. For the purposes of this paper, the experiences of stress, related to working with clients with a trauma history, will be referred to as trauma-related distress.

Current Study

Wilderness therapy field staff may be at risk for developing distress related to either secondary traumatic stress or vicarious traumatization, due to the unique role they play in working with clients. In fact, some of the stress that has previously been attributed to burnout may actually be more accurately defined as some sort of post-traumatic distress. One study found that nearly half of adolescents in wilderness therapy and residential treatment programs reported recent traumatic events (Bettmann et al., 2011). As such, it is likely that wilderness therapy field staff will be exposed to their stories of trauma. In addition, wilderness therapy field staff may also be exposed to situations where their safety or client safety is threatened, such as aggression, self-harm, or running away (Gass et al., 2012). Bettmann et al. (2011) found in their study defining characteristics of clients in residential treatment that the population is “highly oppositional and acting out” (p. 205). Thus, it is reasonable to assume that field staff may be exposed to events that could lead to STS, or possibly even PTSD, although no research has explored the prevalence of these experiences in field staff.

This study aims to fill this gap by exploring the prevalence of distress related to vicarious trauma and secondary trauma among wilderness therapy field staff, as measured by the number of potentially traumatic experiences field staff experience during their shifts, and the cognitive, interpersonal, and intrapersonal shifts that may suggest the presence of trauma. This research also explores the perceptions of WT field staff about their work experiences qualitatively, something that is currently lacking in the literature (Kirk & O’Connell, 2012).

Methods

The study population consisted of wilderness therapy field staff drawn from six different programs in four different states in the United States. Four programs are members of both the Outdoor Behavioral Healthcare Council (OBHC) and the National Association of Therapeutic

TRAUMA-RELATED DISTRESS AMONG STAFF

Schools and Programs (NATSAP). One program is a member of NATSAP only, and the final program is not a member of either organization. Programs and individuals were identified through attendance at the Wilderness Therapy Symposium in August 2016 and August 2018, postings to industry Facebook pages such as the Therapeutic Adventure Professional Group and the Wilderness Genealogy Project.

Due to the exploratory nature of this study and the focus on coping in the field, only staff who had worked a shift in the past month were included in the sample size. In total, 250 surveys, with prepaid return envelopes were sent out. Thirty survey packets were returned, resulting in a return rate of just over 10%. Of the 30 packets returned, all were fully completed and 21 participants who completed packets indicated they would be willing to participate in a follow-up interview. Interviews took place over the phone between December 2016 to February 2017 and again from December 2018 to March 2019. Of the 21 participants who agreed to be contacted for interviews, 9 participants followed through with scheduling and completing interviews when contacted.

Data Collection Tools

Surveys

As a part of the survey packet, participants were asked to complete a brief demographic survey as well as a survey on the number, type, and frequency of possibly stressful events they estimate having experienced in the course of the past six months of their job.

Trauma Attachment and Belief Scale (TABS)

The TABS scale was developed as a measure to assess the cognitive, interpersonal, and intrapersonal shifts that may suggest the presence of trauma and has been used to assess vicarious trauma (Pearlman, 2003). The assessment consists of 84 statements that participants are asked to score based on their beliefs about themselves and others on a Likert type scale of 1 to 5 with 1 being strong disagreement and 5 strong agreement. The assessment can produce scores on 10 subscales: self-safety (need to feel secure and reasonably invulnerable to harm), other-safety (need to feel that cherished others are reasonably protected from harm), self-trust (need to have confidence in one's own

TRAUMA-RELATED DISTRESS AMONG STAFF

perceptions and judgments), other-trust (need to depend or rely on others), self-esteem (need to feel valuable and worthy of respect), other-esteem (need to value and respect others), self-intimacy (need to feel connected to own experience), other-intimacy (need to feel connected to others), self-control (need to manage one's feelings and behaviors), and other control (need to manage interpersonal situations).

The assessment also includes a total score that provides an index of the participant's overall level of disruption in areas that are important to maintaining healthy relationships. The higher the total score, the greater the assumed disturbance to belief structures with a mean standardized non-clinical sample total score being 187.2. Pearlman (2003) provides an argument for the face validity of the assessment as well as the assessment previously known as the Traumatic Stress Institute Belief Scale Revision L (TSI-BSL), which has demonstrated construct validity in research by Jenkins and Baird (2002). For the TSI-BSL, Jenkins and Baird (2002) report a Cronbach's alpha of .95 for the total score and Pearlman (2003) suggests the internal consistency for the TABS may be .95 for the total score and the test-retest reliability to be .75 for the total score. Jenkins and Baird (2002) report that the Cronbach's alpha for the subscales of the TSI-BSL range from .62 to .83. This study used the TABS to assess disturbances in beliefs and schemas that may be related to working with individuals who have experienced trauma.

Impact of Events Scale-Revised (IES-R)

The Impact of Events Scale-Revised is a 22- item scale designed to assess the symptoms on three subscales of Avoidance, Intrusion, and Hyperarousal related to the direct experience of traumatic events (Weiss, 2007; Weiss & Marmar, 1997). The IES-R was designed to account for criticisms to the original Impact of Events Scale and build upon its widespread use by including a domain for hyperarousal symptoms. Weiss and Marmar (1997) report a high internal consistency with estimates of the coefficient alphas as follows: Intrusion ranging from .87 to .92, Avoidance ranging from .84 to .85, and Hyperarousal ranging from .79 to .90. Creamer et al. (2003) demonstrated the construct validity of the IES-R using a sample of Vietnam veterans and comparison scores with the PTSD Checklist (Weathers et al., 1993). Though the IES-R is not designed to

TRAUMA-RELATED DISTRESS AMONG STAFF

make a diagnosis of PTSD, cutoff scores for a possible clinical diagnosis have been reported in the literature with Creamer et al. (2003) offering a conservative clinical cutoff as a total score of 33. Other markers for interpreting scores include suggestions by Asukai et al. (2002) that a cutoff of a total score of 24 or more may signal PTSD as a clinical concern and research by Kawamura et al. (2001) suggesting that scores of 37 or more may be suggestive of trauma that is significant enough to suppress immune function up to 10 years after the event.

In this study, the IES-R was used to assess behavioral responses and symptoms of potentially traumatizing events experienced while working with clients in wilderness therapy. Bride et al. (2007) are careful to point out that while this measure may be used to assess secondary trauma or hearing stories of traumatic experiences, it is designed to assess the direct experiences of trauma. Unlike trauma therapists working in an office, wilderness therapy field staff may be more likely to directly experience intensive acting out behaviors and hear of traumatic stories, so the researchers chose this scale to measure responses to strike a balance in this area. The participants were instructed to complete the survey based on the most stressful experience they had while working as a wilderness therapy field staff.

Interviews

Due to the exploratory nature of this study, the researchers chose a semi-structured interview process to explore what wilderness therapy field staff experience as stressful in their work and how they attempt to process and cope with these experiences in and out of the field. As Miles et al. (2014) point out, this loose design is appropriate for research that seeks to explore understudied or socially complex phenomena. All interviews were conducted over the phone and recorded for transcription.

Participants

The total sample size included in the study was 30 participants. Table 1 reports demographics for the participants, with a fairly even split of males and females and most had a college or graduate degree. In addition, over half of the participants filled out the survey before their shift, with the rest split as during and after their shifts. The average number of field days reported by participants was about 271.1 days ($sd =$

TRAUMA-RELATED DISTRESS AMONG STAFF

380.2) with a range from 22 to 2150 field days reported. Only six participants had less than 90 field days (See Table 1).

Table 1

Demographics of Study Participants (N = 30)

Demographics of Participants	% (N)
Gender	
Female	56.7 (17)
Male	43.3 (13)
Education	
High School	3.3 (1)
Some College	3 (10.0)
College Degree	63.3 (19)
Some Graduate	6.7 (2)
Graduate Degree	16.7 (5)
Shift Length	
4 days	3.3 (1)
8 days	80.0 (24)
16 days	16.7 (5)
Time when completed survey	
Before Shift	56.7 (17)
During Shift	20.0 (6)
After Shift	16.7 (5)
Number of Field Days	
	<i>M = 271.1, SD = 380.2</i>
Less than 90 days	20.0 (6)
90-180 days	30.0 (9)
181-360 days	30.0 (9)
360 +	20.0 (6)

Independent sample t-tests found no significant difference between those participants with less than 90 days in the field and those with more

TRAUMA-RELATED DISTRESS AMONG STAFF

in terms of the number of incidents they experienced, as well as no significant differences across both the TABS total score and its subscales, and the IES-Revised total score and its subscales. In addition, ANOVA analyses reported no significant differences in the total number of incidents, TABS total and its subscales, as well as the IES-Revised total and its subscales based on level of education (high school/some college, college, some graduate school, graduate degree).

Finally, one-way ANOVAs were calculated to better determine if the time when field staff took the survey (before, during, or after shift) was related to mean differences in the number of incidents reported, the TABS total and subscales, or the IES-R total and subscales. The overall ANOVA models found no significant differences, nor were pairwise significant differences found in the post-hoc analyses. Hence, there were no significant relationships between the number of field days and education with reported levels of incidents or scales of distress.

Results

Dosage of Incidents

This study explored how often and what type of potentially stressful incidents wilderness therapy field staff experienced over the past six months (See Table 2). In addition to those listed on the survey, there was also an option for participants to write in “other stressful events.” Responses included: “Witnessing another staff get kicked in the face,” “Running out of water with a group of girls in the summer,” “Client suicide attempt,” “Client completing suicide after leaving the program,” “Client having flashback,” “Following a large client out of camp,” “Being on safety with a student for 2 weeks,” “Working with a co-staff not comfortable with,” “Client refusal to participate,” and “Client broke ankle.” Each of these events was reported as happening only once in the past six months.

Overall, whether field staff experienced a specific incident type in the past six months, and how frequently, varied greatly depending on the incident type. For each potentially stressful event surveyed, at least 10% of the participants reported having experienced that event at least once in the past six months. The number of potentially stressful events an

TRAUMA-RELATED DISTRESS AMONG STAFF

individual experienced in the past six months ranged from 4 to 294, with a mean of 43.03. Of note, one participant reported 294 incidents, yet the next highest incident number was 148 events, indicating this individual may be an outlier. The median number of incidents was 29.50 events over the past six months which is a better estimate of the average number of incidents experienced by staff in the study.

The most frequently experienced stressful events reported were client reports of suicidal ideation and clients sharing a history of mental or emotional abuse with 86.67% of study participants having reported experiencing one of these events over the preceding six months with a mean frequency of 6.07 and 4.27 times respectively over that period. In addition, 76.7% of field staff reported that clients shared about a history of physical abuse at least once in the last six months, and 69.1% reported that clients shared about a history of sexual abuse at least once in the past six months. These numbers correspond to previous findings that clients of wilderness therapy often report recent traumatic events (Bettmann et al., 2011), and that wilderness therapy field staff are often hearing stories of this past trauma.

Additionally, a number of field staff who reported experiencing events related to personal and client safety, although once again, this varied greatly in the frequency of these events. 83.3% of participants reported experiencing verbal threats directed at another client at least once in the past six months, although only 56.7% experienced verbal threats directed at themselves at least once in the past six months. In addition, 60% of field staff reported experiencing physical threats directed at another client at least once in the past six months, but only 33.3% of field staff experienced physical threats directed at themselves at least once in the past six months.

The least frequent type of incident reported was client self-harm requiring evaluation by a medical professional outside of the field with a mean of 0.23 experiences over the past six months and 13.33% of participants having experienced this once in the past six months. Overall, this data indicates that wilderness therapy field staff are exposed to traumatizing events, though which types of events and with what frequency vary greatly.

TRAUMA-RELATED DISTRESS AMONG STAFF

Table 2

Number and Type of Potentially Stressful Incidents Experienced by Staff over 6 months (N = 30)

Type of Incident		Did not Experience (Reported 0 Incidences)	Experienced 1-2 times in last 6 months	Experienced 3-5 times in last 6 months	Experienced 5-9 times in last 6 months	Experienced 10+ times in the last six months
	<i>M (SD)</i>	<i>% (N)</i>	<i>% (N)</i>	<i>% (N)</i>	<i>% (N)</i>	<i>% (N)</i>
Verbal threats directed at you	9.07 (25.4) Range 0-100	43.3 (13)	23.4 (7)	16.7 (5)	3.3 (1)	13.3 (4)
Verbal threats directed at another client	7.1 (18.3) Range 0 - 100	16.7 (5)	33.3 (10)	30.0 (9)	6.7 (2)	13.3 (4)
Client report of suicidal ideation	6.07 (7.4) Range 0 - 32	13.3 (4)	33.3 (10)	13.3 (4)	16.7 (5)	23.4 (7)
Client sharing history of mental or emotional abuse	4.27 (3.8) Range 0 - 15	13.3 (4)	30.0 (9)	23.4 (7)	20.0 (6)	13.3 (4)
Client walking out of camp	2.93 (7.3) Range 0 - 40	30.0 (9)	43.4 (13)	16.7 (5)	10.0 (3)	3.3 (1)

TRAUMA-RELATED DISTRESS AMONG STAFF

Client sharing history of sexual abuse	2.9 (4.1) Range 0 - 16	30.0 (9)	40.0 (12)	13.3 (4)	6.7 (2)	10.0 (3)
Client sharing history of physical abuse	2.5 (3.1) Range 0 - 15	23.3 (7)	40.0 (12)	26.7 (8)	6.7 (2)	3.3 (1)
Physical threats directed at another client	2.47 (5.3) Range 0 - 25	40.0 (12)	43.3 (13)	6.7 (2)	0	10.0 (3)
Physical threats directed at you	1.50 (4.6) Range 0 - 25	66.7 (20)	23.4 (7)	3.3 (1)	3.3 (1)	3.3 (1)
Participated in therapeutic hold	1.30 (2.1) Range 0 - 15	60.0 (18)	30.0 (9)	3.3 (1)	3.3 (1)	3.3 (1)
Witnessed therapeutic hold	1.23 (3.0) Range 0 - 10	56.7 (17)	23.4 (7)	16.7 (5)	0	3.3 (1)
Client self-harm not requiring medical attention	0.90 (1.1) Range 0 - 4	43.3 (13)	43.7 (14)	10.0 (3)	0	0
Client walking out of camp and being out of instructor sight for more than 15 minutes	0.57 (1.7) Range 0-9	76.7 (23)	20.0 (6)	0	3.3 (1)	0

TRAUMA-RELATED DISTRESS AMONG STAFF

Client self-harm requiring evaluation by a professional outside of field or program staff	0.23 (0.6) Range 0 - 2	86.7 (26)	13.3 (3)	0	0	0
---	---------------------------------	-----------	----------	---	---	---

Trauma Attachment and Belief Scale (TABS)

The TABS total score provides an index of the participant’s overall level of disruption in areas that are important to maintaining healthy relationships (Pearlman, 2003). The mean total score for participants was 176.20, with a standard deviation of 34.01, and a range from 111 to 251 (See Table 3). Five of the participants had a total score that fell within the high range and two participants fell within the very high range when compared to a nonclinical standardized group as reported by Pearlman (2003). As such, 23% of the participants scored above average for a nonclinical standardized group. A correlation was conducted to assess if the TABS total score, or its subscales, was related to the number of potentially stressful incidents a participant reported. There were no significant correlations found except for the subscale of “other safety” ($r = .368, df = 28, p = .045$), which reflects “the need to feel that cherished others are reasonably protected from harm inflicted by oneself or others” (Pearlman, 2003).

In regard to the subscales, all ten subscales had a mean score in the average or low range (See Table 3). The proportion of individuals scoring in the high or very high range for each subscale were as follows: “other-intimacy” (36.7%), “self-control” (30%), “self-intimacy” (26.7%), “self-esteem” (26.6%), “other-control” (20%), “self-trust” (16.7%), “other-safety” (10%), “self-safety” (6.7%), “other-trust” (3.3%) and “other-esteem” (3.3%).

Overall, based on the TABS total scores, while 23% of participants scored in a range indicating there may be disruptions in areas important to maintaining healthy relationships, the majority of participants do not indicate disruptions. In addition, the majority of participants do not have disruptions in functioning at the level of the ten subscales either.

TRAUMA-RELATED DISTRESS AMONG STAFF

Table 3

TABS Scores and Subscales including Clinical Ranges of Symptoms

TABS Total & Subscales	<i>M (SD)</i>	Very Low	Low	Average	High Average	Very High	Extremely High
		<i>% (n)</i>	<i>% (n)</i>	<i>% (n)</i>	<i>% (n)</i>	<i>% (n)</i>	<i>% (n)</i>
Total	176.2 (34.0) ^a Range 111 - 251	10.0 (3)	26.7 (8)	40.0 (12)	16.7 (5)	6.7 (2)	
Self-Safety	24.6 (7.1) ^a Range 13 - 47	43.3 (13)	3.3 (1)	43.3 (13)	6.7 (2)	-	3.3 (1)
Other-Safety	15.0 (4.4) ^a Range 8 - 28	23.3 (7)	10.0 (3)	53.3 (16)	6.7 (2)	3.3 (1)	3.3 (1)
Self-Trust	16.5 (4.0) ^a Range 8 - 26	16.7 (5)	3.3 (1)	60.0 (18)	6.7 (2)	10.0 (3)	3.3 (1)
Other-Trust	16.2 (3.8) ^b Range 8 - 27	43.3 (13)	30.0 (9)	23.3 (7)	-	3.3 (1)	-
Self-Esteem	16.6 (4.6) ^a Range 9 - 26	10.0 (3)	23.3 (7)	40.0 (12)	13.3 (4)	13.3 (4)	-

TRAUMA-RELATED DISTRESS AMONG STAFF

Other-Esteem	15.6 (3.2) ^b Range 9 -25	23.3 (7)	23.3 (7)	50.0 (15)	-	3.3 (1)	-
Self-Intimacy	16.9 (4.3) ^a Range 8 -24	16.7 (5)	13.3 (4)	43.3 (13)	10.0 (3)	16.7 (5)	-
Other-Intimacy	19.1 (6.0) ^a Range 9 -32	6.7 (2)	13.3 (4)	40.0 (12)	16.7 (5)	20.0 (6)	3.3 (1)
Self-Control	21.7 (5.0) ^a Range 13 -33	6.7 (2)	13.3 (4)	50.0 (15)	10.0 (3)	20.0 (6)	-
Other-Control	14.9 (4.4) ^b Range 7 - 23	30.0 (9)	16.7 (5)	33.3 (10)	13.3 (4)	6.7 (2)	-

Impact of Events Scale-Revised (IES-R)

The results of the IES-R corroborate the findings of the TABS in that while the majority of individuals do not seem to be greatly affected by their direct experience of traumatic events from work, there are a number of individuals whose well-being has been disturbed (See Table 4). While 73.3% of participants scored a range indicating no distress, 26.6% of the participants scored above the cutoff designated by Aukai et al. (2002) as an indicator of possible clinical levels of distress. Beyond that, two (6.7%) of the participants scored above the level designated by Creamer et al. (2003) as a cutoff for the possible diagnosis of PTSD. Additionally, two (6.7%) of the participants scored above the level that research by Kawamura et al. (2001) indicates as a possible marker for decreased immune function for up to 10 years after the event due to stress. Overall, these numbers represent that while many field staff are not experiencing

TRAUMA-RELATED DISTRESS AMONG STAFF

high levels of distress, for a few, there have been significant disruptions.

Table 4

IES-R Score Distribution

	<i>M(SD)</i>	<i>Median</i>	<i>Range</i>
Impact of Events Scale Total	14.3 (14.5)	8.0	0 -55
Intrusive Subscale	6.6 (6.4)	5.0	0 - 18
Avoidance Subscale	4.7 (5.2)	2.5	0 - 22
Hypervigilant Subscale	3.0 (3.9)	2.0	0 -15

IES-R Total Score Cut-off Ranges	%	<i>n</i>
0 -23 (No distress)	73.3	22
24-32 (clinical level of distress)	13.3	4
33-38 (possible PTSD diagnosis)	6.7	2
39 or greater (PTSD & decreased immune function)	6.7	2

Interviews

The interviews investigated instructors' sources of stress, and methods for coping and processing, including both individual tactics and organizational support, and opportunities to access mental health support more formally.

Sources of Stress

When asked about the most stressful part of their job, 7 out of the 9 participants interviewed described some version of dealing with safety and critical incidents either from clients acting out or some sort of illness or injury and not feeling supported in this. Described by one participant as follows:

I think it's fair to call them intense moments when clients are

TRAUMA-RELATED DISTRESS AMONG STAFF

pushing boundaries in unsafe ways either physically or verbally/emotionally and this ultimate thought point of keeping my cool while keeping everyone safe, seeing clearly what's going on, issuing you know effective action on my part to help you know calm things down and simultaneously give people feedback and keep things safe.

In describing the stress of dealing with critical events, these participants described the intersection of not only having an ill, injured, or acting out client, but also having to manage an uncontrollable environment, such as cold, blizzard conditions, or heat, managing many moving parts simultaneously, or being far away from any kind of medical support. Two participants went so far as to describe a feeling of anxiety about being ultimately responsible for the death of a client, with one participant stating, "And then it just, then if anything happens then it would be like I was the last person with some parent's kid and I know that conversation would happen with me because I was there and that's like, super stressful."

Participants also described a lack of control of client behaviors and the anxiety this can create because of the types of behaviors clients may engage in. One participant described the difficulty of dealing with these behaviors when they were turned towards staff stating, "being consistently abused by multiple students for an extended period of time of, like, name-calling and degrading in that way." Field staff described knowing of other field staff who spent multiple nights crying themselves to sleep while on shift and feeling like they were going to pull their hair out. One participant explained, "I told [program executive director] had that been my first shift ever, never having worked wilderness or residential treatment before, I would've quit on the spot because it was that emotionally draining."

In addition to student behaviors, critical incidents, and safety, participants discussed a few other sources of stress. One participant described the lack of information or inaccurate information that can be passed on to field staff about clients and how that effects staff's ability to work effectively with their clients. Similarly, another participant discussed the stress induced by being prepared to go into the field with one group, and then at the last minute being told that one's assignment had changed. This same participant discussed how the stress of behaviors from the field

TRAUMA-RELATED DISTRESS AMONG STAFF

could extend to student behaviors when they were discharged, such as losing a previous student to suicide. This participant discussed how difficult this experience can be, particularly because of the time spent and closeness of the relationships that field staff make with their students, even in one shift.

Finally, some participants discussed stressors that specifically relate to the career of wilderness therapy instructing. One participant identified the low pay that wilderness field staff receive as a source of stress. Another instructor expressed the lack of awareness, or access to, potential career development tracks for wilderness field staff as a source of stress. Lastly, one participant discussed the difficulty of maintaining relationships with individuals outside of the field due to the realities of “having to regularly disappear for two weeks at a time.”

Staffing and Training

One idea that emerged in almost every interview was the need for more staff to adequately manage situations through training and professional development of staff. Participants discussed the need for new field staff to be properly trained to minimize the stress put on head field staff caused by a lack knowledge about the program model or the basics of safety. One participant described this problem as follows:

I just think that they weren't trained enough or weren't qualified for the position fully, so I think that was a huge extra stress on head field staff, especially those of us who you know had been there for already like a year and then we see all these new field staff coming in and it's like we just know that's not okay, so it's like just adding stress to what our jobs already revolve around.

For some participants, the lack of adequate staff and lack of support they experience is viewed as a symptom of companies trying to grow too quickly or as the company priority being profits or image over actually doing what they say. The stress of being a head field staff while training new or undertrained field staff also seems to be related to not being able to take a moment away from the group or time to be alone to take care of oneself. This pressure of feeling responsible for others 24/7, even during sleep, without true breaks increased field staff stress.

TRAUMA-RELATED DISTRESS AMONG STAFF

One participant described being the only field staff member in a group with a medical certification and thus being required to be with the group at all times. Other participants described this stress not necessarily as related to the numbers of staff, but as a combination of staffing and group volatility and possible mismatches between staff and groups. One field staff explained how this directly impairs their ability to support participants in their growth saying, “I think when I’m experiencing actual stress, then I can’t really facilitate eustress for these kids. I think that’s a big factor. I think it would be a bigger factor for students if I as an instructor wasn’t stressed out in a negative way.” Further on in the interview the same field staff states, “You know my real job is safety and if I can’t manage my own safety when a kid is like spitting at you and trying to throw punches at you, how am I supposed to manage everybody else’s and try to facilitate a positive experience?” This inability at times to create a positive experience was further elaborated by one participant who expressed their stress as sometimes resulting from not seeing student gains during a shift.

The individuals interviewed also discussed other staff as a great source of support in the field. Multiple participants mentioned the importance of being able to check-in with other field staff at the end of a day and decompress. A couple participants also touched on the importance of finding humor or levity in serious moments.

Participants suggested a few different solutions to these issues. Multiple participants suggested having an extra staff on rotation to be ready and willing to go into the field and support volatile groups. Participants also suggested having more staff in the field when newer field staff are being trained to better support head field staff and the learning process for new field staff.

Other suggestions included more upfront training on professionalism and boundaries in a therapeutic setting, especially with regards to working with individuals who have experienced trauma and abuse and moving requirements for certifications such as the Wilderness First Responder to earlier in the field staff development process. Training also connects to two other categories that emerged, namely culture and awareness of benefits and attitudes about seeking support from a mental health professional.

TRAUMA-RELATED DISTRESS AMONG STAFF

Culture Surrounding Mental Health Support

A few different participants talked about the culture around ending a shift or processing stressful events in the field. One interviewee explained, “You know, I’m not trying to judge it, but umm you know very much at the end of the week staff and management alike are kind of like, ‘Alright, let’s get this meeting done with so we can all go home.’” Most participants discussed the availability of support either from other staff, field supervisors, or program therapists, but a hesitance to use it or confusion about how or when to approach this kind of support because there have not been times set aside for it. One participant also described the difficulty of opening up about what you are struggling with or what clients have brought up for you for fear of what others might think of you. This theme of reluctance for seeking support extended to seeking mental health support from a professional outside the organization as well.

About half of the participants discussed a hesitation towards seeking professional support, despite simultaneously stating that they imagine they would have had benefits had they chosen to do so. For example, one participant explained, “I think for a long time I was kind of like opposed to it. Like I can tough it out. Like I don’t need to go see a therapist. I’m helping kids that need to go see a therapist, I don’t need to go see a therapist myself. Looking back, like kind of reflecting on that, like heck yeah, I could’ve used one.” Other participants expressed never having considered it and still others expressed a lack of financial resources to do so or confusion and ambivalence about attempting to find a therapist to work with. Only two participants expressed not really seeing a need for this kind of support, one whose answer was couched within a discussion about not necessarily being able to afford individual sessions and not really knowing what therapy might have to offer, and the other having tried therapy in the past and finding it to not be helpful. On the other hand, three participants said they had utilized the support of a therapist during their time instructing and found it helpful.

Interestingly, only two field staff were aware of having health insurance that would support them seeking support from a mental health professional, despite all but one participant reporting that they did have insurance. A few participants reported that their company does offer to pay for four sessions of individual therapy per year, or post critical

TRAUMA-RELATED DISTRESS AMONG STAFF

incident, but reported not having utilized this support for reasons previously described. In this area, participants suggest that it might be necessary to create a different culture around discussing stressful events. In particular, they suggested structured time for debriefing with management and some sort of regularly scheduled debrief with program therapists.

Program Therapists

When questioned about the support they receive from program therapists most participants replied that this could vary widely from therapist to therapist, but generally seemed to view therapists as a source of support. About half of participants discussed the support they received from therapists as clear guidance and strategies on working with clients in the field, with one participant stating that therapists sometimes helped run student groups.

In addition, 7 of the 9 participants described the support of program therapists simply making time for field staff as helpful, whether this was to discuss student behaviors, incidents, their emotions, or aspects of life completely unrelated to work. A couple of field staff explained the importance of simply asking how they were doing. In addition, a few participants specifically delineated understanding that the program therapists were fundamentally there for the students, and that field staff should not be relying on them for their own therapy, but rather as a general support network of people who understand the difficulty of the work they do. For example, one participant explained:

Even just asking. Even if they know they can't do anything, you know, it's just like the thought that counts and I think that goes huge like it goes a really long way with field staff, like just to have it even considered like, 'Hey I am considering your feelings right now and even though I know I can't do anything I know this is a stressful job for you right now.'

The idea of wanting to feel valued and appreciated as a person came up in almost every interview. Two participants explained that this extended to program therapists and management listening to the field staff's clinical opinions. In addition to support from program therapists, participants also described other ways they attempt to cope with their stress from

TRAUMA-RELATED DISTRESS AMONG STAFF

instructing.

Coping with Stress

About half of the participants described the importance of relationships in coping with the stress they experience from work. One individual discussed feeling blessed to have a good partner, good family, and good friends to support them. Another described venting to their roommate and how good it felt to have people compliment them based on descriptions of their job. In fact, 8 of the 9 participants discussed the importance of talking to others to process their experiences, whether this be other staff, friends, family, or professional mental health supports.

In addition, two participants discussed the importance of focusing on the positives of their work, as well as other participants discussed what kept them in their jobs. One participant explained that they stay in the job by focusing on the growth and the small moments they get to be a part of with the following description:

...so that's what I do on my off shift is just like kind of think about the things that I got to see, and I got to witness, and how it made me feel and I got to share that special moment with X amount of people. Even down to something as small as a kid cooking dinner for a bunch of people, and everyone's like, "This is so good!"

Another participant explained the importance of creativity in how they approach the kids and trying to recreate investment both for themselves and clients by doing something different from the cookie cutter routine.

All of the participants described what might be considered play or various aspects of wellness in their descriptions of coping and processing stress. Most touched on spending some of their free time enjoying outdoor activities and exercising, such as hiking, rock climbing, snow sports, or running. One participant touched on the importance of eating well, and another touched on the importance of sleep. Four of the participants also touched on formal mindfulness-based practices such as meditation and yoga. Three of the participants discussed writing or journaling. And three participants discussed finding coping in reading, two in fantasy novels and one in a meditation book. Finally, two field staff discussed the importance of taking time to be alone to cope with their stress, and one field staff

TRAUMA-RELATED DISTRESS AMONG STAFF

discussed the importance of separating their work from their time off. The importance of time off was mentioned by two other field staff as well.

Discussion

Limitations

One limitation of this study is its small sample size. While this study holds value in offering a starting point for the discussion of the issue of trauma-related distress in wilderness therapy field staff, it is in no way generalizable to the field at large, due to a small sample size and the fact that the sample was drawn from only six programs. The field is both unified and highly diverse, meaning there may be large variations from program to program. Additionally, the low response rate hampers generalizability because it may indicate response bias. For instance, field staff who are not experiencing distress from their work may have less incentive to complete the surveys, or field staff who are feeling overwhelmed by the stress of work may choose not to fill out surveys.

The data on frequency of incidents experienced must also be interpreted with caution because it is based on self-reports and not corroborated with incident reports or other program data. The wide range in reports of some incidents may be due to the nature of self-report data and a tendency to either over or under-exaggerate some experiences, or it could be due to certain field staff working more with certain client groups. This study did not analyze these types of management and scheduling characteristics, so the range lacks a clear explanation.

Additionally, the lead researcher had a previous working relationship with five participants who both filled out surveys and chose to do a follow-up interview. This may have influenced their answers in some way or the interpretation of their answers. In order to attempt to control this, other members of the research team reviewed all transcripts and coded for themes to ensure a degree of interrater reliability.

Finally, several members of the research team have practice experience in wilderness therapy, which may both enhance and confound the research. Fox et al. (2007) explain, "Being a practitioner researcher is not the same as being an academic researcher. The practitioner approaches and embeds research within practice in ways that an academic researcher cannot" (p. 1). As Fox et al. (2007) explain this type of knowledge and

TRAUMA-RELATED DISTRESS AMONG STAFF

situation may allow the researcher to make shortcuts that reach beyond irrelevant data and can also introduce bias especially in research design and interpretation. Fox et al. (2007) highlight the importance of reflexivity and collaboration to navigate and mitigate these concerns. In an effort to minimize any bias arising from the practitioner researcher role, the lead researcher utilized reflective techniques such as journaling and seeking alternative explanations for data between five readings of interview transcripts and drafts of the final research document, all methods recommended by Fox et al. (2007) to minimize bias in this type of research.

Implications for Practice

With these limitations in mind, there are important findings that should be considered from this study. First, while the types of events and their frequency vary greatly, field staff are exposed to a multitude of potentially traumatizing events, such as hearing stories of clients' trauma history and experiencing safety related incidents. Second, the interviews conducted in this study make it clear that staff do experience stress from their job, although the sources differ greatly. Though each participant expressed an investment in clients and a desire to help them grow, many described how the stress of their job and a lack of support led to jaded views, disenchantment, negative beliefs about WT, damage to their own mental health, and poor support for the clients.

Yet, despite these potentially traumatizing events and job-related stress, in the investigation of whether participants may be experiencing some form of post-traumatic stress from their work, data from the TABS and IES-R indicate that about three-fourths of participants are not experiencing any clinical levels of distress, nor disruptions in areas important to maintaining healthy relationships. On the other hand, about one-fourth of participants did score in the range indicating possible clinical levels of distress and possible disruptions in areas important to maintaining healthy relationships with themselves and others. The current research did not investigate individual level characteristics that may account for these differing experiences, such as a history of mental illness, and a trauma history. As such, it is important for future research to consider these individual level constructs to better parse out who may experience distress from the work of a field staff. Similarly, given that

TRAUMA-RELATED DISTRESS AMONG STAFF

three quarters of the field staff did not report clinical levels of distress, research should explore what factors, such as self-care, training, mental wellness or other coping mechanisms, may protect field staff from experiencing concerning levels of distress.

Regardless of these individual level characteristics, organizations can play a role in supporting all field staff given the high intensity of their jobs. While many field staff engage in self-care practices, they often expressed hesitancy at seeking out support within their organization or from mental health professionals in order to process their stress, even in organizations who already have supports in place, such as health insurance, incident debriefing or even therapy. Program supervisors and therapists may need to create more formalized systems for evaluation of stress and supporting field staff in order to ensure the resources they do have are being utilized, a practice that is consistent with recommendations made elsewhere (Kanno & Giddings, 2017). This may be especially important because field staff reported personal wellness as particularly important in dealing with stress, a finding that is consistent with work by Williams et al. (2012).

Other practices that may be particularly important are reorganizing some of the training protocols for staff and rethinking when staff may be asked to get certain certifications such as Wilderness First Responder training. Additionally, adding more staff, and more experienced staff will help to alleviate stress. Field staff also seem to draw heavily on their relationships with other staff members, so programs may seek to increase these relationships through out of work activities with staff or having more time when staff can discuss their experiences in training and debriefing, a practice advocated for elsewhere as well (Kirk, 2013).

Conclusion

While remembering the limitations to generalizability, this study reveals field staff experience potentially traumatic events in the field, as well as reporting job-related stress with varying frequency and origins. While many field staff reveal no clinical levels of distress from these experiences, some staff do experience trauma-related distress, rather than what has previously been viewed as a more generic form of burnout. These findings merit prioritizing self-care, peer and administrative

TRAUMA-RELATED DISTRESS AMONG STAFF

support, and mental healthcare for staff in these settings.

These results suggest a need for further and more extensive study in the realm of trauma-related distress for wilderness therapy field staff. Future research in this area could seek to better assess stress among WT field staff, as well as creating appropriate metrics for programs to better identify field staff who may need extra support. Research could also examine field staff characteristics and how these impact experiences of stress due to their work. Longitudinal studies could also address how field staff distress impacts client outcomes and conduct a cost benefit analysis of field staff turnover. Finally, research should seek to examine the impacts of various initiatives taken by programs to address trauma-related stress and turnover in the field staff role in order to enhance the wellbeing of both staff and participants.

TRAUMA-RELATED DISTRESS AMONG STAFF

References

- Asukai, N., Kato, H., Kawamura, N., Kim, Y., Yamamoto, K., Kishimoto, J., Miyake, Y., & Nishizono-Maher, A. (2002). Reliability and validity of the Japanese-language version of the Impact of Event Scale—Revised (IES-R-J): Four studies of different traumatic events. *Journal of Nervous and Mental Disease, 190*(3), 175–182. <https://doi.org/10.1097/00005053-200203000-00006>
- Bettmann, J. E., Lundahl, B. W., Wright, R. J., Jaspersen, R. A., & McRoberts, C.H. (2011). Who are they? A descriptive analysis of adolescents in wilderness and residential programs. *Residential Treatment for Children and Youth, 28*(3), 192-210. <https://doi.org/10.1080/0886571X.2011.596735>
- Bride, B. E., Radley, M., & Figley, C. R. (2007). Measuring compassion fatigue. *Clinical Social Work Journal, 35*(3), 155-163. <https://doi.org/10.1007/s10615-007-0091-7>
- Bunce, J. (1998). *Sustaining the wilderness therapist*. A workshop presented at the First International Conference on Adventure Therapy. Retrieved from: <https://files.eric.ed.gov/fulltext/ED424064.pdf>
- Creamer, M., Bell, R., & Failla, S. (2003). Psychometric properties of the Impact of Events Scale-Revised. *Behaviour Research and Therapy, 41*(12), 1489-1496. <https://doi.org/10.1016/j.brat.2003.07.010>
- Field, S. C., Lauzon, L. L., & Meldrum, J. T. (2016). A phenomenology of outdoor education leader experiences. *Journal of Experiential Education, 39*(1), 31-44. <https://doi.org/10.1177/1053825915609950>
- Figley, C. R. (1995b). Systemic traumatization: Secondary traumatic stress disorder in family therapists. In R. H. Mikesell & D. Lusteran (Eds.), *Integrating family therapy: Handbook of family psychology and systems theory* (pp. 571–581). American Psychological Association. <https://doi.org/10.1037/10172-033>
- Figley, C. R., & Kleber, R. (1995). Beyond the “victim”: Secondary
-

TRAUMA-RELATED DISTRESS AMONG STAFF

traumatic stress. In R. Kleber, C. R. Figley, & B. Gersons (Eds.), *Beyond trauma: Cultural and societal dynamics* (pp. 75-98). Plenum Press. https://doi.org/10.1007/978-1-4757-9421-2_5

Fox, M., Martin, P., & Gill, G. (2007). *Doing practitioner research*. Thousand Oaks, CA: SAGE Publications, Inc.

Gass, M. A., Gillis, H.L., & Russell, K. C. (2012) *Adventure therapy: Theory, research, and practice*. New York, NY: Taylor & Francis Group.

Heron, G. & Chakrabati, M. R. (2002). Examining the perceptions and attitudes of staff working in community based children's homes: Are their needs being met? *Qualitative Social Work*, 1(3), 341-358. <https://doi.org/10.1177/147332500200100308>

Jenkins, S. R., & Baird, S. (2002). Secondary traumatic stress and vicarious trauma: A validation study. *Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies*, 15(5), 423-432.

Kanno, H., & Giddings, M. M. (2017). Hidden trauma victims: Understanding and preventing traumatic stress in mental health professionals. *Social Work in Mental Health*, 15(3), 331-353. <https://doi.org/10.1080/15332985.2016.1220442>

Karoff, M. Q., Norton, C. L., Tucker, A. R., Gass, M. A., & Foerester, E. (2019). A qualitative gender analysis of women field guides' experiences in outdoor behavioral healthcare: A feminist social work perspective. *Journal of Women and Social Work*, 34(1), 48-64. <https://doi.org/10.1177/0886109918790932>

Kawamura, N., Kim, Y., & Asukai, N. (2001). Suppression of cellular immunity in men with a past history of posttraumatic stress disorder. *American Journal of Psychiatry*, 158(3), 484-486. <https://doi.org/10.1176/appi.ajp.158.3.484>

Kirk, L., & O'Connell, T. (2012). Challenges facing field staff employed in wilderness-based expeditionary programs: A review of literature. *Illuminare: A Student Journal in Recreation, Parks, and Leisure Studies*, 10(1), 16-27.

TRAUMA-RELATED DISTRESS AMONG STAFF

- Kirk, L. (2013). *Exploring perceptions of necessity, accessibility and use of social support for wilderness therapy field instructors*. [Unpublished master's thesis]. Brock University: St. Catherines, Ontario.
- Kolaski, A. Z., & Taylor, J. M. (2019). Critical factors for field staff: The relationship between burnout, coping, and vocational purpose. *Journal of Experiential Education*, 42(4), 398-416.
<https://doi.org/10.1177/1053825919868817>
- Lakin, B. L., Leon, S. C., & Miller, S. A. (2008). Predictors of burnout in children's residential treatment center staff. *Residential Treatment for Children & Youth*, 25(3), 249-270.
<https://doi.org/10.1080/08865710802429697>
- Leiter, M. P., & Maslach, C. (2004). Areas of work life: A structured approach to organizational predictors of job burnout. In P. Perrewé & D. C. Ganster (Eds.), *Research in Occupational Stress and Well Being* 3, 91-134. Elsevier.
[https://doi.org/10.1016/S1479-3555\(03\)03003-8](https://doi.org/10.1016/S1479-3555(03)03003-8)
- Marchand, G. (2008). Challenges affecting field staff in wilderness therapy. *The Journal of Experiential Education*, 30(3), 286-289.
<https://doi.org/10.1177/105382590703000313>
- Marchand, G., & Russell, K. C. (2013). Examining the role of expectations and perceived job demand stressors for field staff in Outdoor Behavioral Healthcare. *Residential Treatment for Children and Youth*, 30(1), 55-77.
<https://doi.org/10.1080/0886571X.2013.751809>
- Marchand, G., Russell, K. C., & Cross, R. (2009). An empirical examination of outdoor behavioral healthcare field instructor job-related stress and retention. *Journal of Experiential Education*, 31(3), 359-375. <http://journals.sagepub.com/home/jee>
<https://doi.org/10.1177/105382590803100304>
- Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of Applied Psychology*, 93(3), 498-512.
<https://doi.org/10.1037/0021-9010.93.3.498>
-

TRAUMA-RELATED DISTRESS AMONG STAFF

- McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress*, 3(1), 131-149.
<https://doi.org/10.1007/BF00975140>
- Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE Publications.
- National Association of Therapeutic Schools and Programs (NATSAP). (n.d.). NATSAP principles.
https://www.natsap.org/Public/About_NATSAP/Our_Principles/Public/About_Natsap/Our_Principles.aspx?hkey=d798b561-3851-44c8-8ed9-0257376c89df
- Newell, J. M., & MacNeil, G. A. (2010). Professional burnout, vicarious trauma, secondary traumatic stress, and compassion fatigue: A review of theoretical terms, risk factors, and preventative methods for clinicians and researchers. *Best Practices in Mental Health*, 6(2), 57-68.
- Outdoor Behavioral Healthcare Council (OBHC). (2014). *About us*.
<https://obhcouncil.com/about/>
- Pearlman, L. A. (2003). *Trauma and attachment belief scale*. Los Angeles, GA: Western Psychological Services.
- Pearlman, L. A., & Mac Ian, P. S. (1995). Vicarious traumatization: An empirical study of the effects of trauma work on trauma therapists. *Professional Psychology: Research and Practice*, 26(6), 558-565.
<https://doi.org/10.1037/0735-7028.26.6.558>
- Pearlman, L. A., & Saakvitne, K. W. (1995). *Trauma and the therapist: Countertransference and vicarious traumatization in psychotherapy with incest survivors*. New York, NY: W. W. Norton & Company.
- Regehr, C., Hemsworth, D., Leslie, B., Howe, P., & Chau, S. (2004). Predictors of post-traumatic distress in child welfare workers: A linear structural equation model. *Children and Youth Services Review*, 26(4), 331-346.
-

TRAUMA-RELATED DISTRESS AMONG STAFF

<https://doi.org/10.1016/j.chilyouth.2004.02.003>

- Stapleton, R., Young, A., & Senstock, T. (2016). Coping styles and secondary traumatic stress in direct care staff working in residential treatment centers. *Journal of Therapeutic Schools and Programs*, 8(1), 77-86. [10.19157/JTSP.issue.08.01.09](https://doi.org/10.19157/JTSP.issue.08.01.09)
- Thomas, G. J. (2001). Thriving in the outdoor education profession: Learning from Australian practitioners. *Australian Journal of Outdoor Education*, 6, 13-24. <https://doi.org/10.1007/BF03400740>
- Valent, P. (2002). Diagnosis and treatment of helper stresses, traumas, and illnesses. In Figley, C.R. (Ed.), *Treating compassion fatigue* 17-37. New York, NY: Brunner-Routledge.
- Weathers, F. W., Litz, B. T., Herman, D. S., Huska, J. A., & Keane, T. M. (1993). *The PTSD Checklist (PCL): Reliability, validity, and diagnostic utility*. Paper presented at the 9th annual conference of the ISTSS, San Antonio.
- Weiss, D.S. (2007). The Impact of Event Scale-Revised. In J.P. Wilson, & T.M. Keane (Eds.) *Assessing psychological trauma and PTSD: A practitioner's handbook*. (2nd ed) 168-189. New York: Guilford Press.
- Weiss, D. S., & Marmar, C. R. (1997). The Impact of Event Scale—Revised. In J. P. Wilson, & T. M. Keane (Eds.), *Assessing psychological trauma and PTSD: A handbook for practitioners* (pp. 399–411). New York: Guilford Press.
- Williams, A. M., Helm, H. M., & Clemens, E. V. (2012). The effect of childhood trauma, personal wellness, supervisory working alliance, and organizational factors on vicarious traumatization. *Journal of Mental Health Counseling*, 34(2), 133-153. <https://doi.org/10.17744/mehc.34.2.j3162k872325h583>

Building Effective Research-Clinical Collaborations in Child, Youth, and Family Mental Health: A Developmental-Relational Model of Co-Creation

Stephanie G. Craig, Bianca C. Bondi, Benjamin D. Diplock
& Debra J. Pepler

York University

Abstract

Over the past decade child, youth, and family mental health agencies have begun to undertake research to understand best practice care. The current paper outlines a developmental-relational model of research co-creation to guide agencies and academic researchers in building effective collaborative research relationships. This process needs to be both developmental and relational because it focuses on collaborations for child, youth, and family mental health. We describe the three major phases of our model, including building the developmental-relational foundation, conducting developmental-relational research, and mobilizing knowledge for change.

Keywords: Developmental, Embedded Research, Clinical Sites, Co-creation, Collaboration

DEVELOPMENTAL-RELATIONAL MODEL

Building Effective Research-Clinical Collaborations in Child, Youth, and Family Mental Health: A Developmental-Relational Model of Co-Creation

Clinicians rely on research to understand which interventions are effective in providing the best mental health care to children, youth, and families (Hoagwood et al., 2001). Currently, many interventions in child, youth, and family mental health are developed in academic settings and once proven efficacious, moved into community settings. This process was initially conceived as a linear ‘knowledge pipeline’, with knowledge flowing from academic institutions directly to service providers (Braithwaite et al., 2018). This pipeline model has been criticized for being overly simplistic and failing to attend to the complexities of delivering interventions in a real-world setting (Braithwaite et al., 2018; Greenhalgh et al., 2016). There has also been a call for practice-based research, which occurs at the frontlines of care, addressing practical clinical questions and issues (Westfall et al., 2007). Consequently, there has been a shift towards a co-creation model of research, which addresses the limitations of the knowledge pipeline and the gap it leaves between academic insight and clinical application.

Co-creation is defined in this paper as research that is produced through collaboration between an external, university-based researcher and community-based clinical sites (Heaton et al., 2016). Co-creation requires that knowledge and questions be developed within a local context and through collaboration with clinical sites. This collaborative model fosters strong partnerships with the purpose of creating, sharing, and negotiating different types of knowledge (Heaton et al., 2016; Hewison et al., 2012; Marshall, 2014a). The co-creation process supports clinical understanding of the nature and effectiveness of programming and allows researchers to ask important research questions related to child, youth, and family mental health. For example, a researcher may be interested in the development of aggression and the role of parenting. Collaborating with a program for youth with aggression provides a window into understanding how improving parenting capacity can improve youths’ aggression problems (Moretti et al., 2015).

There has been a growing impetus for clinicians to use evidence-

DEVELOPMENTAL-RELATIONAL MODEL

based interventions in all forms of child, youth, and family mental health contexts (Novins et al., 2013). The term ‘evidence-based practice’ is often used to identify interventions that have been researched with a substantial degree of rigor (Hoagwood et al., 2001). The press for evidence-based programming calls for clinical setting to participate and guide research so it has relevance for their practices. Given the lack of a model for co-creating research in child, youth, and family mental health programs, the current paper outlines a model of research co-creation that meets the increased demand for research in this field to meet the needs of both clinicians and researchers.

Several models of co-creation have been developed for general healthcare settings (e.g., Frost et al., 2012; Ovreteit et al., 2014; Ward et al., 2012). These models highlight the importance of the partnership between the researcher and healthcare organization, which can vary in levels of engagement for both researchers and practitioners (Vindrola-Padros et al., 2019). These models lay the foundation for researchers to work directly with healthcare organizations to incorporate research into practice. In co-creation, the researcher’s role is to collaborate with host institutions to identify, design, and conduct research with the purpose of contributing to the adaptation or take-up of interventions (Churruca et al., 2019). In the current paper, we focus on the co-creation relationship between researchers and clinical settings with child, youth, and family mental health programming. For example, in our research we have collaborated with residential programs for youth with addictions, a program for mothers with addictions and young children, and an attachment-based parenting intervention for youth with mental health and behavior problems.

Previous models of co-creation research have outlined the steps researchers need to take to make these collaborations successful from both the researcher’s and clinician’s point of view (see Vindrola-Padros et al., 2017 for a full review). This literature highlights the need for researchers to fully immerse themselves within the host organization (Lewis & Russell, 2011), and develop a trusting relationship with staff (Wong, 2009). Both the researcher and clinical team need to reflect on their own strengths and weaknesses throughout the co-creation process to inform

DEVELOPMENTAL-RELATIONAL MODEL

and enhance practice (McGinity & Salokangas, 2014; Rowley, 2014). The majority of co-creation research models have been developed in the health (e.g., physical health) and educational sectors (Vindrola-Padros et al., 2017). To our knowledge, there are no other papers focused on a co-creation research model for child, youth, and family mental health settings.

Developmental Perspective

A co-creation research model for child, youth, and family mental health settings needs to be grounded in a developmental framework. Child and youth development is rooted in both the family and clinical context (Nichols & Tafuri, 2013). The intervention and research questions need to align with the changing needs of children and youth (Knitzer & Cohen, 2007; Macdonald et al., 2007). As healthy child development requires strong relationships, a model of co-creation within child, youth, and family mental health settings calls for a relational approach, which refers to how to engage in service delivery and research processes (Andrews et al., 2019). Multiple relationships must be nurtured and sustained throughout the clinical and research process, including the relationship between the clinician and client (i.e., child, parent), researcher and client, and researcher and clinician (Andrews et al., 2019; Motz et al., 2019). In our experience, both clinicians and researchers bring strengths to the collaboration and both can benefit from a science-practice relationship.

Site and Researcher Strengths in Collaboration

Clinicians from mental health sites are experts in delivering services to children, youth, and their families. They recognize common clinical challenges (e.g., problems with engagement, attendance issues) and know how to engage with their clients (e.g., how to get clients to complete questionnaires). Clinicians also understand the challenges of working in community or private mental health settings, such as lack of resources, expectations from parents, waiting lists, and clinician burnout. The sites can offer collaborating researchers access to a unique set of clients and the opportunity to study developmental mechanisms through interventions. Co-creation will only work when researchers acknowledge

DEVELOPMENTAL-RELATIONAL MODEL

the clinicians' expertise and contributions throughout the collaborative research process.

Researchers specializing in child, youth, and family mental health hold knowledge of child development and current research related to risk and protective processes associated with child and youth development. They also bring expertise in research methods, such as measurement, statistics, program evaluation, scientific writing, and ethics. Experienced researchers may recognize some of the challenges that could arise in mounting a research project (e.g., recruitment, ethics, publishing) in a clinical setting. Finally, researchers provide access to resources, such as libraries, administrative support, and research grants, which may otherwise be unavailable to clinical sites. Co-creation works best when clinicians can recognize these strengths and contributions and invite the researcher to contribute their knowledge.

Developmental-Relational Model of Embedded Research

In this paper, we propose a developmental-relational model of co-creation research that is specific to child, youth, and family mental health settings. It is developmental because it focuses on collaborations for child, youth, and family mental health. It is relational in recognition of the relational foundation for child development and the importance of all relationships in embedded research. In the following sections, we describe the three major phases of our developmental-relational embedded research model (see Figure 1). We use examples from our experiences in community and residential treatment settings for child, youth, and family mental health to highlight the process in real world settings.

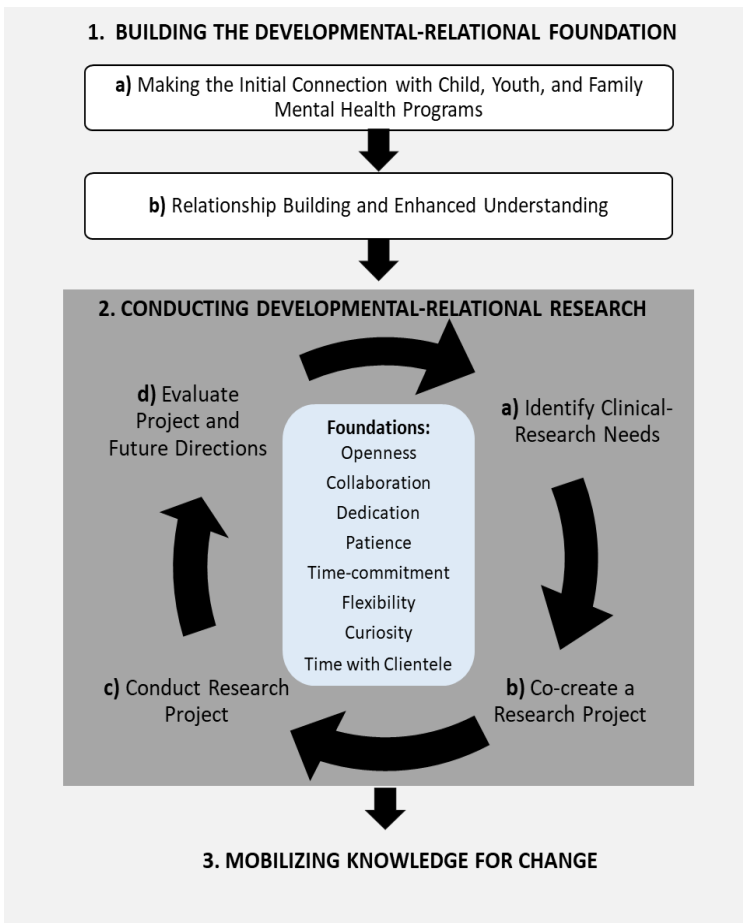
The majority of new partnerships and collaborations are fostered through previously established relationships (Vindrola-Padros et al., 2017). Initial communications between potential community partners and researchers should be made by a person who knows and trusts both partners. This bridging person will recognize that the clinical sites and researchers have shared interests and enthusiasm in the questions to be asked. If researchers are not familiar with a potential site, they need to acquaint themselves with the site, its theoretical perspectives, clinical

DEVELOPMENTAL-RELATIONAL MODEL

approaches, programs, and clients served. For example, for her study, Riddell spent a few days a week for eight months at a residential youth treatment facility, participating in daily activities with youth and staff to understand the program, its clients, and the clinical approach (Riddell et al., 2018).

Figure 1

Figure of the developmental-relational model of research



DEVELOPMENTAL-RELATIONAL MODEL

1. *Building the Developmental-Relational Foundation*

a) *Making the Initial Connection.*

To engage in successful embedded research, both researchers and clinical staff need relationship capacities to approach the science-practice collaboration (Churruca et al., 2019). Specifically, transparency and authenticity are fundamental characteristics required from researchers and sites throughout the partnership (Coghlan, 2008). Authenticity involves the ability to be reflective (i.e., being mindful and intentionally engaging in self-monitoring and self-regulation). Mutual trust and respect are built on sensitivity, transparency, unobtrusiveness, friendliness, and patience (Wong, 2009), as well as a positive regard for others' expertise (Schein, 2006), cooperation, and compromise (Hoagwood & Horwitz, 2010). An advisory board with key stakeholders can ensure that all relevant voices are heard (Hoagwood & Horwitz, 2010), further strengthening the relationship between the researcher and clinical team. This is exemplified by Riddell et al (2018), where she notes the extended time at residential youth treatment facility “was essential in developing trusting relationships with the youth and staff, as well as getting a deeper understanding of the program.” (p. 143)

Initial meetings provide opportunities for researchers and clinical staff to find common ground in terms of research questions, theoretical orientations, research capacity (e.g., empirical methods and ethical requirements; Roper, 2002), opportunities at the site (Harvey et al., 2016), participant recruitment and dropout, and buy-in from leadership (Churruca et al., 2019). Researchers must ensure that the clinicians value evidence-based programming and are willing for the site to be a *learning organization* (i.e., develop new knowledge and understanding of what best practice is; Senge, 2006). The researcher may seek to understand whether the agency leadership or clinicians are driving the research questions and whether there are site-specific incentives to adopt best practices (Hemsley-Brown & Sharp, 2003). For a sustainable research project, the research and site partners can explore funding requirements and priorities, staff turnover, and other factors that could affect capacity and resources (Fixsen et al., 2009; Wenke et al., 2018). Co-created research often unfolds slowly

DEVELOPMENTAL-RELATIONAL MODEL

because it requires ongoing consultation and training, especially in the early phases (Aarons et al., 2011; Fixsen et al., 2009). For example, research-clinicians worked alongside a residential and outpatient assessment center for youth with behavior problems for over 10 years prior to co-creating and researching an attachment-based parenting group which helped them understand the needs of the youth, and the developmental mechanisms relevant to treatment (Moretti & Obsuth, 2009).

b) Relationship Building and Enhanced Understanding

Although researchers bring strengths to the collaboration, they are not experts within the site; therefore, it is essential for them to walk alongside and co-create with clinicians (Pepler, 2016). Walking alongside involves inviting clinicians into the process of co-creating research by recognizing their practice expertise and drawing upon their knowledge and skills (Pepler, 2016; Wong, 2009). Researchers must take time to become embedded into the site (Vindrola-Padros et al., 2019) and be mindful of the space they hold and the accessibility of their language (Lewis, 2002). Researchers must be reflective and intentional in relating with the clinicians and engaging with clients (Mann et al., 2009; Moran et al., 2019). Practically, this entails learning more about the site's staff, program, and framework, while not placing a burden on the setting (Moran et al., 2019; Wong, 2009). Researchers are responsible to ensure that clinicians view research as meaningful, accessible, and feasible (O'Sullivan & O'Sullivan, 1998; Roper, 2002; Wong, 2009). For example, in disseminating an interpersonal violence prevention program into community sites, Andrews and colleagues noted that "a barrier to research with community-based projects can arise when the research process is rushed before adequate trust is established" (Andrews et al., 2019, p. 554). In disseminating their intervention, trust was established with community partners by researchers' visits to the sites and a relational training experience.

Researchers must work in harmony with the site's developmental, relational, and therapeutic approaches. Co-creation in research requires listening (Schein, 2006), observing, and learning rather than imposing

DEVELOPMENTAL-RELATIONAL MODEL

views on others (Cheetham et al., 2018). Embedded researchers must question their assumptions and biases (Quick & Gavin, 2000), as well as their roles to recognize what they know and don't know (Coghlan, 2008). Relationship building and developing a common understanding are dynamic processes through which clinical and research practices begin to interconnect. It is important to consider relationships at various levels of the clinical site, including client-clinician and clinician-organization relationships (King, 2009). In child, youth, and family mental health settings where the quality of relationships is a primary focus, it is important for researchers to discover and align with the organizational culture (Safran et al., 2006).

Within child, youth, and family mental health settings, there are unique considerations in planning a research program. Researchers connect not only with the clinical team, but also with the children, youth, and families seeking treatment. These clients need to feel comfortable with the presence of researchers and view them as members of the clinical site (Wong, 2009). Children, youth, and families seeking treatment are experts in the nature of their own presenting problems and experiences. They need to feel engaged and empowered by the research (Lewis, 2002). Involving the children, youth, and families in the research involves shifting the current embedded research models to require deeper authentic connection between the researchers and clinical staff (Coghlan, 2008) and clients (Rowley, 2014).

A special consideration within child, youth, and family mental health settings is that parents are integral to treatment and need to be engaged and trusting prior to initiating research activities involving their children and youth. The children and youth also need to be engaged and trusting, which occurs through safe, comfortable, and developmentally appropriate relationships with the clinical and research team. In creating and researching an attachment-based parenting intervention, the researcher established feedback from participants as a core aspect of the program. At the end of each group, a third-party clinician requests specific feedback directly from the participants. This feedback not only improves the program and associated research, but also provides clinicians with important perspectives from parents in the group (Moretti, 2020).

DEVELOPMENTAL-RELATIONAL MODEL

2. Conducting Developmental-Relational Research

There are four phases in conducting developmental-relational research: a) identifying clinical-research needs, b) co-creating a research project, c) conducting the research, and d) evaluating project and future directions. The success of these phases depends on a foundation of openness, collaboration, dedication, patience, time-commitment, flexibility, curiosity, and time with clients.

a) Identifying Clinical-Research Needs

Within child, youth, and family mental health settings, a developmental-relational framework guides clinical curiosity and highlights salient questions about the development of children and youth. The research must focus on the clinical perspective that development occurs through the treatment process (Coghlan, 2009; Wong, 2009). The integration of research and clinical perspectives can be strengthened through the development of a conceptual model or theory of change (Churrua et al., 2019; Pepler, 2016). The researcher's role is to support the host site in maximizing evidence-based clinical services (King, 2009) with positive outcomes for children, youth, and families (Wong, 2009). The project must also align with the researchers' scientific curiosity and questions. Building an embedded research program requires creative accommodation and innovative thinking about how to embed and align research interests with clinicians' applied questions and concerns (Pepler, 2016). Thus, the research process is both grounded in science and aligned with important clinical questions about the process and effectiveness of interventions (Pepler, 2016).

Given that implementing embedded research is typically non-linear (Aarons et al., 2011; Fixsen et al., 2009; Mendel et al., 2008), researchers and clinical staff must manage expectations with realistic short- and long-term goals (Cheetham et al., 2018). Goals need to align with site and researchers' readiness and capacity for change (Aarons et al., 2011). Clear and flexible goals and problem solving steps help to maintain collaboration (Hoagwood & Horwitz, 2010). Through their relationship, researchers and clinical staff can devise strategies to address challenges

DEVELOPMENTAL-RELATIONAL MODEL

within the research process (Cheetham et al., 2018). For example, the attachment-based parenting intervention requires the collection of questionnaires after each group. These data provide short-term perspectives for the clinicians of each group, while informing researchers in the long-term assessment of key developmental and treatment processes and challenges (Moretti, 2020).

b) Co-creating the Research Project

Within the partnership, there must be openness for vibrant discussion about the research design and implementation within the parameters of research standards (e.g., efficacy, effectiveness, and scaling-up research; Gottfredson et al., 2015). These discussions provide the opportunity to achieve balance between research standards and the realities of service delivery (Churruca et al., 2019; Coghlan, 2009). Conceptually, the research project must be anchored within the gap between research and clinical practice and be built on joint commitment, time, collaboration, accommodation, and financial support (Pepler, 2016). From a developmental-relational perspective, the needs of children, youth, and families are central in the research- practice interface (Wong, 2009).

The conceptual models of the clinical program are the foundation of the research and should be co-created (King, 2009; Macdonald et al., 2007; Masi & Cooper, 2006; Price-Robertson et al., 2017). Clinicians' understanding of the processes of change through their programming informs the conceptual model and guides the research questions, objectives, design, measures, and methods (Bickman, 2015). In the co-creative process of research, clinicians contribute a deep understanding about developmental processes and change through interventions. Researchers contribute an understanding of the research design needed to study processes of change. Broadly, these research objectives and questions should reflect equity, pragmatism, and fit within local context (Wong, 2009).

The clinical site and researchers need to maintain focus on understanding and enhancing outcomes for children, youth, and families (Wong, 2009). There may, however, be inconsistencies between the

DEVELOPMENTAL-RELATIONAL MODEL

research plans and site operations, both at the organizational (e.g., senior management) and direct clinical (e.g., clinicians, team leaders) level (Wong, 2009). For example, the research design might include extensive research measures at many time points, but clinicians may be concerned about the measurement burden for both clients and staff. Congruence between researchers and the clinical site can only be achieved through open communication about experiences, interests, and capacities. Communication enables collaborative problem solving to address incongruencies (Aarons et al., 2011). Lead researchers and site management may need to engage in problem solving to promote research capacity building for both researchers and clinicians (Moran et al., 2019). In a parenting program for mothers with addictions, the facilitators were engaged as research partners and gathered critical data from the participants (Mothercraft, 2014).

c) Conducting the Research Project

When researching in a child, youth, and family mental health site, it is standard practice for several reporters (e.g., parent, youth, clinician) to provide data. This expanded reporting requires additional time and resources for data collection, as well as a strong data management strategy. Success of a research project depends on a clear understanding of roles and boundaries, as well as establishing organizational systems to guide the research project (Hoagwood & Horwitz, 2010). The systems lay the foundation for effective and feasible data collection and management. Setting up organizational systems may involve hiring or using existing research assistants, project managers, or establishing specific people as managers for the project. This may only be possible when researchers bring or apply for funding for the project as many clinical sites have limited resources. As the project evolves, the systems and roles within them may need to be revised (Hoagwood & Horwitz, 2010).

Embedded research activities require researchers to be flexible and patient because clinicians have defined roles and duties outside the research context. Data collection with children, youth, and families must be flexible in timing, methods, and supports. Clinicians may be in the best position to guide these adaptations. Practically, open discussions about

DEVELOPMENTAL-RELATIONAL MODEL

data storage, electronic records, data protection, and data ownership should prioritize the best interest of the clients (DeVoe et al., 2012). As the research project unfolds, it is also important to continuously evaluate the finances required and the partners' commitment to provide funding supports (Aarons et al., 2011; Engelke & Marshburn, 2006).

Working in a developmental-relational manner engages researchers and clinicians in regular sharing, interpreting, and identifying implications of the findings (Ovretveit et al., 2014; Vindrola-Padros et al., 2019). This exchange contributes to a culture of inquiry that builds upon clinicians' skills and expertise (Grundy, 1996) and generates specific knowledge that is relevant for clinicians, clients, and the organization. It also generates general knowledge that can contribute to program dissemination, educational change, and social reform (Lewis, 2002; Nevo, 2001; Wong, 2009). In our experience, research can strengthen clinical processes. For example, at two sites that we collaborate with, the research and clinical files are merged, with client consent, so that research measures directly inform clinical decisions and planning. Clinicians and researchers can deepen this connection through integrating research into progress or outcome monitoring, which allows clinicians to tailor their approach based on client improvement or deterioration (Russell et al., 2018).

d) Evaluate Project and Future Directions

Prior to sharing findings, researchers should consider how, when, and to whom they will mobilize the knowledge (Lewis, 2002). Some decisions around the sharing of knowledge may be based on previously established agreements on intellectual property (Wong, 2009). It is important to consider the nature of researcher-site relationships (e.g., power-dynamics, obstacles, sustainability), and how to navigate knowledge mobilization with these relationships in mind (Cheek et al., 2005; McGinity & Salokangas, 2014). It also involves advocating for the democratization of knowledge by sharing all findings, not just the positive or promising findings, with the institution, clients, and public (Strand et al., 2003). Researchers need to remain objective and transparent in knowledge dissemination, recognizing that negative findings may be

DEVELOPMENTAL-RELATIONAL MODEL

difficult for some stakeholders to accept (Marshall, 2014a). Finding sensitive and thoughtful solutions to these potential conflicts prior to knowledge dissemination allows for sustained relationships and collaboration (Lewis & Russell, 2011).

There must be transparent conversations and planning about both authorship and knowledge dissemination. Discussions about authorship clarify roles and enhance transparency. As full partners in the research process, clinicians should be provided with the opportunity to contribute to all aspects of knowledge dissemination (Phipps et al., 2016). To represent the strong collaborative process underlying all stages of the research project, clinicians and researchers should have a sense of shared credit and ownership around research findings, implications, and dissemination (Hoagwood & Horwitz, 2010). When we have integrated clinicians' views in research, we have been able to achieve a deeper understanding of the research findings and their implications. To represent their essential contributions, we have included our valued clinical partners in the resulting publications (e.g., Andrews et al., 2019; Riddell et al., 2018). This not only enriches understanding, but also provides the agency with evidence of their programming in published form.

Discussions on planning for future projects must flow from the established relationships. Researchers may need to take pragmatic steps regarding ongoing funding to align with funding and grant cycles (Walley et al., 2018). In child, youth, and family mental health, answering one research question often elucidates just one piece of the puzzle and other salient questions emerge as projects come to a close. Both researchers and site leaders can identify novel research questions that emerge from the project, as well as gauge the interest and feasibility of engaging in new projects. This process resets the research cycle by bringing the researchers and site leaders back to identifying the research-clinical needs.

3. Mobilizing Knowledge for Change

In working together on knowledge mobilization, researchers and sites can maximize the scholarly impact of the project, as well as the practice and policy impact for the wellbeing of children, youth, and

DEVELOPMENTAL-RELATIONAL MODEL

families (Grimmett et al., 2018). In keeping with our embedded research experiences, we follow *PREVNet's Co-produced Pathway to Impact*, with the addition of an embedded research lens, to guide considerations of how to mobilize knowledge for change (Frechtling, 2007; Phipps et al., 2016). The stages of knowledge mobilization are described in the following sections.

Knowledge Dissemination.

Knowledge mobilization in embedded research has been characterized as two processes, one that “pushes” evidence into practice and the other that “pulls” evidence to improve practice (Rycroft-Malone et al., 2011). An embedded research project occurs within the pull process; the site has engaged with the researcher to enhance practice. Sharing knowledge at the researcher-site interface enriches the understanding that emerges from the project. Researchers can share their unique insights, observations, and data-driven perspectives, while clinicians can share their observations, feedback, and clinical insights. These knowledge exchange conversations may reveal research-practice gaps and lead to re-aligning expectations and goals, resolving disagreements, and planning future directions (Jenness, 2008; Tran et al., 2017; Van De Ven & Johnson, 2006; Vindrola-Padros et al., 2017).

For mental health partners, it is particularly important for scientific knowledge to be accessible (Grimmett et al., 2018). Researchers and site supervisors or clinicians need to work together to disseminate knowledge effectively for those who can use it (e.g., clients and families, scientific community, clinicians/practitioners, public-health, public, funders). Knowledge dissemination can take many forms: easy-to-use toolkits, evidence summaries, infographics, internal publications, press-releases, website/social media, parent/family workshops, as well as scholarly conferences and publications (e.g., see the *PREVNet* website: www.prevnet.ca). It is important to elicit feedback on these resources to inform the acceptability of future embedded research projects and the resources developed. Feedback from children, youth, and families on the resources may lead to future research questions that can be examined, thus reigniting the cycle of embedded research through a relational process. In

DEVELOPMENTAL-RELATIONAL MODEL

our team's collaborative work, Riddell et al. (2019) integrated the knowledge dissemination process and research by listening to the voices of the youth at a residential treatment center and found that strong relationships with staff and other youth at the center were key in achieving program goals. This client-driven research helped to support a future collaboration between the clinical center and our research team. Working with the clinicians, we identified a clinical need, short-term intervention for youth on the waitlist, and a developmental process, the attachment relationship between parent and youth, that were of interest to both the clinical site and our research team. Through the co-creation relationship, we established a planned waitlist intervention trial using an attachment-based parenting program, bringing us back to the top of the research cycle (2a in the model).

Uptake, Implementation, and Impact. The knowledge is only valuable if it can be taken up and integrated by sites that serve children, youth, and families. Although site stakeholders and researchers are important voices for uptake and implementation, site leaders (e.g., clinical director) are ultimately responsible for uptake and integration of research findings (Phipps et al., 2016). Clinicians within the site have practice wisdom that can guide the integration of research into practice (Goodfellow, 2005; Grundy, 1996; Poulter, 2006).

Finding ways to translate research into institutional practice and policy has been a pressing issue in mental and physical healthcare over the past decade (Nutley et al., 2007). The impact of knowledge dissemination, uptake, and implementation can be measured by “acceptability, adoption, appropriateness, feasibility, fidelity, implementation cost, coverage and sustainability” (Peters et al., 2013, p. 2). The impact of embedded research can be further measured by improved programming, service delivery, future research, and funding in the partnered site itself (Darzi, 2008; Ghaffar et al., 2014; Groundwater-Smith & Mockler, 2006; Langlois et al., 2016; Systems, 2004). For policy, the impact of knowledge dissemination, uptake, and implementation is often dependent on time-sensitive priorities of decision-makers and funders (Frost et al., 2012; Ghaffar et al., 2014; Langlois et al., 2016). For example, our work on restraint and seclusion policies in youth in-patient and residential facilities led to changes in the

DEVELOPMENTAL-RELATIONAL MODEL

policy in a residential treatment center, including emphasizing least-invasive restraint practices and training for staff (Craig et al., 2013).

In some cases, embedded research can provide direction for institutional practice and policy modifications and can address barriers (Best & Holmes, 2010). Evidence-based policy modifications can lead to improved care with reduced resources (Marshall, 2014b; Tran et al., 2017) and can generate future research questions (Reiter-Theil, 2004). With this information, stakeholders can formulate policy guidelines that include steps to navigate and resolve project-oriented disagreements (Aarons et al., 2011; Fixsen et al., 2009; Wong, 2009).

Conclusion

Our experiences, as described above, have been with community-based child, youth, and family mental health agencies that often face a lack of resources including time and support for research. Entering into a clinical-research partnership with community-based mental health agencies requires patience and the understanding that research may advance at a slower pace than in a lab-based environment. In our experience, working with these agencies provides researchers with a gateway to rich information that can help improve both developmental understanding and clinical practice.

Researchers bring many questions to the stakeholder table at the beginning of an embedded research process. Relational processes, discussions, and vision shared amongst the researchers, clinical staff, administrators, and the children, youth, and families create the foundation for effective and relevant embedded research. Working together, researchers, practitioners, and stakeholders can address power-imbalances, improve client engagement, and modify methods to ensure the research is feasible, relevant, and sustainable (Peters et al., 2013; Strand et al., 2003; Tran et al., 2017). With collaborative direction of the research process, embedded research can also promote professional reflection and enable program evaluation (Wong, 2009). Although barriers and obstacles cannot always be addressed in an initial project, these can be addressed in future projects (Frost et al., 2012). Once programs have been shown to be

DEVELOPMENTAL-RELATIONAL MODEL

feasible and effective, community mental health programs can begin to ask questions about what parts of the program contribute to effectiveness and what mechanisms are responsible for the increased mental health for children, youth, and families (Hoagwood, 2005). Although embedded research is challenging, it contributes to enhanced knowledge and practice that can transform the lives of children, youth, and families who are struggling.

DEVELOPMENTAL-RELATIONAL MODEL

References

- Aarons, G. A., Hurlburt, M., & Horwitz, S. M. C. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(1), 4–3. <https://doi.org/10.1007/s10488-010-0327-7>
- Andrews, N. C. Z., Pepler, D. J., & Motz, M. (2019). Research and evaluation with community-based projects: Approaches, considerations, and strategies. *American Journal of Evaluation*, 40(4), 548–561. <https://doi.org/10.1177/1098214019835821>
- Best, A., & Holmes, B. (2010). Systems thinking, knowledge and action: Towards better models and methods. *Evidence and Policy*, 6(2), 145–159. <https://doi.org/10.1332/174426410X502284>
- Bickman, L. (2015). The revised quality standards: “A man’s reach should exceed his grasp” or “A bridge too far”: Which is the case? *Prevention Science*, 16(7), 933–937. <https://doi.org/10.1007/s11121-015-0583-6>
- Braithwaite, J., Churrua, K., Long, J. C., Ellis, L. A., & Herkes, J. (2018). When complexity science meets implementation science: A theoretical and empirical analysis of systems change. *BMC Medicine*, 16(1), 63. <https://doi.org/10.1186/s12916-018-1057-z>
- Cheek, J., Gillham, D., & Ballantyne, A. (2005). Using education to promote research dissemination in nursing. *International Journal of Nursing Education Scholarship*, 2(1). <https://doi.org/10.2202/1548-923X.1191>
- Cheetham, M., Wiseman, A., Khazaeli, B., Gibson, E., Gray, P., Van Der Graaf, P., & Rushmer, R. (2018). Embedded research: A promising way to create evidence-informed impact in public health? *Journal of Public Health (United Kingdom)*, 40, i64–i70. <https://doi.org/10.1093/pubmed/fox125>

DEVELOPMENTAL-RELATIONAL MODEL

- Churruca, K., Ludlow, K., Taylor, N., Long, J. C., Best, S., & Braithwaite, J. (2019). The time has come: Embedded implementation research for health care improvement. *Journal of Evaluation in Clinical Practice*, 16(1), 63. <https://doi.org/10.1111/jep.13100>
- Coghlan, D. (2008). Authenticity as first person practice: An exploration based on Bernard Lonergan. *Action Research*, 6(3), 351–366. <https://doi.org/10.1177/1476750308094649>
- Coghlan, D. (2009). Toward a philosophy of clinical inquiry/research. *Journal of Applied Behavioral Science*, 45(1), 106–121. <https://doi.org/10.1177/0021886308328845>
- Craig, S. G., Moretti, M. M., and Moore, K. (2013). *Seclusion and restraint policy and practice in Canadian youth forensic and mental health facilities*. Ministry of Child and Family Development, British Columbia.
- Department of Health. (2008). *High quality care for all: NHS next stage review final report*. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/228836/7432.pdf
- DeVoe, J. E., Likumahuwa, S., Eiff, M. P., Nelson, C. A., Carroll, J. E., Hill, C. N., Gold, R., & Kullberg, P. A. (2012). Lessons learned and challenges ahead: Report from the OCHIN Safety Net West Practice-based Research Network (PBRN). *Journal of the American Board of Family Medicine*, 25(5), 560–564. <https://doi.org/10.3122/jabfm.2012.05.120141>
- Engelke, M. K., & Marshburn, D. M. (2006). Collaborative strategies to enhance research and evidence-based practice. *Journal of Nursing Administration*, 36(3), 131–135. <https://doi.org/10.1097/00005110-200603000-00006>
- Fixsen, D. L., Blase, K. A., Naoom, S. F., & Wallace, F. (2009). Core

DEVELOPMENTAL-RELATIONAL MODEL

implementation components. *Research on Social Work Practice*, 19(5), 531–540. <https://doi.org/10.1177/1049731509335549>

Frechtling, J. A. (2007). *Logic modeling methods in program evaluation* (5th ed.). Jossey-Bass.

Frost, H., Geddes, R., Haw, S., Jackson, C. A., Jepson, R., Mooney, J. D., & Frank, J. (2012). Experiences of knowledge brokering for evidence-informed public health policy and practice: Three years of the Scottish Collaboration for Public Health Research and Policy. *Evidence and Policy*, 8(3), 347–359. <https://doi.org/10.1332/174426412X654068>

Ghaffar, A., Tran, N., Röttingen, J. A., & Kieny, M. P. (2014). Health policy and systems research: Building momentum and community. *Bulletin of the World Health Organization*, 92(12), 851. <https://doi.org/10.2471/BLT.14.149393>

Goodfellow, J. (2005). Researching with/for whom? Stepping in and out of practitioner research. *Australasian Journal of Early Childhood*, 30(4), 48–57. <https://doi.org/10.1177/183693910503000408>

Gottfredson, D. C., Cook, T. D., Gardner, F. E. M., Gorman-Smith, D., Howe, G. W., Sandler, I. N., & Zafft, K. M. (2015). Standards of evidence for efficacy, effectiveness, and scale-up research in prevention science: Next generation. *Prevention Science*, 16(7), 893–926. <https://doi.org/10.1007/s11121-015-0555-x>

Greenhalgh, T., Raftery, J., Hanney, S., & Glover, M. (2016). Research impact: A narrative review. *BMC Medicine*, 14(78), 1–16. <https://doi.org/10.1186/s12916-016-0620-8>

Grimmett, M. A., Lupton-Smith, H., Beckwith, A., Englert, M. K., & Messinger, E. (2018). The Community Counseling, Education, and Research Center (CCERC) model: Addressing community mental health needs through engagement scholarship. *Journal of Higher Education Outreach and Engagement*, 22(3), 201–230.

DEVELOPMENTAL-RELATIONAL MODEL

<https://sites.ced.ncsu.edu/ccerc/wp-content/uploads/sites/2/2018/10/The-Community-Counseling-Education-and-Research-Center-CCERC-Model-Addressing-Community-Mental-Health-Needs-Through-Engagement-Scholarship.pdf>

- Groundwater-Smith, S., & Mockler, N. (2006). Research that counts: Practitioner research and the academy. *Review of Australian Research in Education, 6*, 105–117.
- Grundy, S. (1996). Building professional research partnerships: Possibilities and perplexities. *The Australian Educational Researcher, 23*, 1–15. <https://doi.org/10.1007/BF03219609>
- Harvey, D., Plummer, D., Nielsen, I., Adams, R., & Pain, T. (2016). Becoming a clinician researcher in allied health. *Australian Health Review, 40*, 562–569. <https://doi.org/10.1071/AH15174>
- Heaton, J., Day, J., & Britten, N. (2016). Collaborative research and the co-production of knowledge for practice: An illustrative case study. *Implementation Science, 11*(1), 1–10. <https://doi.org/10.1186/s13012-016-0383-9>
- Hemsley-Brown, J., & Sharp, C. (2003). The use of research to improve professional practice: A systematic review of the literature. *Oxford Review of Education, 29*(4), 449–470. <https://doi.org/10.1080/0305498032000153025>
- Hewison, A., Gale, N., & Shapiro, J. (2012). Co-production in research: Some reflections on the experience of engaging practitioners in health research. *Public Money and Management, 32*(4), 297–302. <https://doi.org/10.1080/09540962.2012.691311>
- Hoagwood, K., Burns, B. J., Kiser, L., Ringeisen, H., & Schoenwald, S. K. (2001). Evidence-based practice in child and adolescent mental health services. *Psychiatric Services, 52*(9), 1179–1189. <https://doi.org/10.1176/appi.ps.52.9.1179>

DEVELOPMENTAL-RELATIONAL MODEL

- Hoagwood, K. E. (2005). Family-based services in children's mental health: A research review and synthesis. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 46(7), 690–713.
<https://doi.org/10.1111/j.1469-7610.2005.01451.x>
- Hoagwood, K. E., & Horwitz, S. M. C. (2010). Balancing science and services: The challenges and rewards of field research. In A. R. Stiffman (Ed.), *The field research survival guide*. Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780195325522.003.0001>
- Jeness, V. (2008). Pluto, prisons, and plaintiffs: Notes on systematic back-translation from an embedded researcher. *Social Problems*, 55(1), 1–22. <https://doi.org/10.1525/sp.2008.55.1.1>
- King, G. (2009). A relational goal-oriented model of optimal service delivery to children and families. *Physical and Occupational Therapy in Pediatrics*, 29(4), 384–408.
<https://doi.org/10.3109/01942630903222118>
- Knitzer, J., & Cohen, E. P. (2007). Promoting resilience in young children and families at the highest risk: The challenge for early childhood mental health. In D. F. Perry, R. K. Kaufmann, & J. Knitzer (Eds.), *Social and emotional health in early childhood: Building bridges between services and systems*. (pp. 335–359). Paul H. Brookes Publishing Co..
- Langlois, E. V., Montekio, V. B., Young, T., Song, K., Alcalde-Rabanal, J., & Tran, N. (2016). Enhancing evidence informed policymaking in complex health systems: Lessons from multi-site collaborative approaches. *Health Research Policy and Systems*, 14(20).
<https://doi.org/10.1186/s12961-016-0089-0>
- Lewis, J. (2002). The contribution of research findings to practice change. *Journal of Integrated Care*, 10(1), 9–12.
<https://doi.org/10.1108/14769018200200003>
- Lewis, S. J., & Russell, A. (2011). Being embedded: A way forward for

DEVELOPMENTAL-RELATIONAL MODEL

ethnographic research. *Ethnography*, 12(3), 398–416.
<https://doi.org/10.1177/1466138110393786>

Macdonald, E., Lee, E., Geraghty, K., McCann, K., Mohay, H., & O'Brien, T. (2007). Towards a developmental framework of consumer and carer participation in child and adolescent mental health services. *Australasian Psychiatry*, 15(6), 504–508.
<https://doi.org/10.1080/10398560701458228>

Mann, K., Gordon, J., & MacLeod, A. (2009). Reflection and reflective practice in health professions education: A systematic review. *Advances in Health Sciences Education*, 14(4), 595–621.
<https://doi.org/10.1007/s10459-007-9090-2>

Marshall, M. (2014a). Researchers-in-residence: A solution to the challenge of evidence-informed improvement? *Primary Health Care Research & Development*, 15(4), 337–338.
<https://doi.org/10.1017/S1463423614000310>

Marshall, M. N. (2014b). Bridging the ivory towers and the swampy lowlands; increasing the impact of health services research on quality improvement. *International Journal for Quality in Health Care*, 26(1), 1–5. <https://doi.org/10.1093/intqhc/mzt076>

Masi, R., & Cooper, J. L. (2006). *National Center for Children in Poverty - children's mental health: Facts for policymakers*.
<https://academiccommons.columbia.edu/doi/10.7916/d8-4fcj-jq55/download>

McGinity, R., & Salokangas, M. (2014). Introduction: “Embedded research” as an approach into academia for emerging researchers. *Management in Education*, 28(1), 3–5. <https://doi.org/10.1177/0892020613508863>

Mendel, P., Meredith, L. S., Schoenbaum, M., Sherbourne, C. D., & Wells, K. B. (2008). Interventions in organizational and community context: A framework for building evidence on dissemination and implementation in health services research. *Administration and*

DEVELOPMENTAL-RELATIONAL MODEL

Policy in Mental Health and Mental Health Services Research, 35(1–2), 21–37. <https://doi.org/10.1007/s10488-007-0144-9>

Moran, A., Haines, H., Raschke, N., Schmidt, D., Koschel, A., Stephens, A., Opie, C., & Nancarrow, S. (2019). Mind the gap: Is it time to invest in embedded researchers in regional, rural and remote health services to address health outcome discrepancies for those living in rural, remote and regional areas? *Australian Journal of Primary Health*, 25(2), 104–107. <https://doi.org/10.1071/PY18201>

Moretti, M. M. (2020). *Connect: An attachment based and trauma informed program for parents and caregivers, Third Edition, TM ©*. Department of Psychology, Simon Fraser University.

Moretti, M. M., & Obsuth, I. (2009). Effectiveness of an attachment-focused manualized intervention for parents of teens at risk for aggressive behaviour: The Connect Program. *Journal of Adolescence*. <https://doi.org/10.1016/j.adolescence.2009.07.013>

Moretti, M. M., Obsuth, I., Craig, S. G., & Bartolo, T. (2015). An attachment-based intervention for parents of adolescents at risk: Mechanisms of change. *Attachment and Human Development*. <https://doi.org/10.1080/14616734.2015.1006383>

Mothercraft. (2014). *Connections: A group intervention for mothers and children experiencing violence in relationships*. Mothercraft Press. https://www.mothercraft.ca/assets/site/docs/connections/Connections_Manual_EN.pdf

Motz, M., Andrews, N., Bondi, B., Leslie, M., & Pepler, D. (2019). Addressing the impact of interpersonal violence in women who struggle with substance use through developmental-relational strategies in a community program. *International Journal of Environmental Research and Public Health*, 16(21). <https://doi.org/https://doi.org/10.3390/ijerph16214197>

Nevo, D. (2001). School evaluation: Internal or external? *Studies in*

DEVELOPMENTAL-RELATIONAL MODEL

Educational Evaluation, 27(2), 95–106.
[https://doi.org/10.1016/S0191-491X\(01\)00016-5](https://doi.org/10.1016/S0191-491X(01)00016-5)

- Nichols, M., & Tafuri, S. (2013). Techniques of structural family assessment: A qualitative analysis of how experts promote a systemic perspective. *Family Process*, 52(2), 207–215.
<https://doi.org/10.1111/famp.12025>
- Novins, D. K., Green, A. E., Legha, R. K., & Aarons, G. A. (2013). Dissemination and implementation of evidence-based practices for child and adolescent mental health: A systematic review. *Journal of the American Academy of Child and Adolescent Psychiatry*, 52(10), 1009–1025. <https://doi.org/10.1016/j.jaac.2013.07.012>
- Nutley, S. M., Walter, I., & Davies, H. T. O. (2007). *Using evidence: How research can inform public services*. The Policy Press.
<https://doi.org/10.1332/policypress/9781861346650.001.0001>
- O’Sullivan, R. G., & O’Sullivan, J. M. (1998). Evaluation voices: Promoting evaluation from within programs through collaboration. *Evaluation and Program Planning*, 21(1), 21–29. [https://doi.org/10.1016/S0149-7189\(97\)00042-6](https://doi.org/10.1016/S0149-7189(97)00042-6)
- Ovretveit, J., Hempel, S., Magnabosco, J. L., Mittman, B. S., Rubenstein, L. V., & Ganz, D. A. (2014). Guidance for research-practice partnerships (R-PPs) and collaborative research. *Journal of Health, Organization and Management*, 28(1), 115–126.
<https://doi.org/10.1108/JHOM-08-2013-0164>
- Pepler, D. (2016). Stepping sideways to move forward: Closing the science-practice gap. *Canadian Psychology*, 57(1), 44–50.
<https://doi.org/10.1037/cap0000046>
- Peters, D. H., Adam, T., Alonge, O., Agyepong, I. A., & Tran, N. (2013). Implementation research: What it is and how to do it. *BMJ*, 48(8), 1–7. <https://doi.org/10.1136/bmj.f6753>

DEVELOPMENTAL-RELATIONAL MODEL

- Phipps, D., Pepler, D., Craig, W., Cummings, J., & Cardinal, S. (2016). The co-produced pathway to impact describes knowledge mobilization processes. *Journal of Community Engagement and Scholarship, 9*(1), 31–40. <http://jces.ua.edu/the-co-produced-pathway-to-impact-describes-knowledge-mobilization-processes/>
- Poulter, J. (2006). The two embedded research functions of heuristic case practice. *Australian Social Work, 59*(3), 328–341. <https://doi.org/10.1080/03124070600833279>
- Price-Robertson, R., Obradovic, A., & Morgan, B. (2017). Relational recovery: Beyond individualism in the recovery approach. *Advances in Mental Health, 15*(2), 108–120. <https://doi.org/10.1080/18387357.2016.1243014>
- Quick, J. C., & Gavin, J. H. (2000). The next frontier: Edgar Schein on organizational therapy. *Academy of Management Executive, 14*(1), 31–48. <https://doi.org/10.5465/ame.2000.2909835>
- Reiter-Theil, S. (2004). Does empirical research make bioethics more relevant? “The embedded researcher” as a methodological approach. *Medicine, Health Care, and Philosophy, 7*(1), 17–29. <https://doi.org/10.1023/B:MHEP.0000021846.20508.c8>
- Riddell, J. K., Barnes, M. E., Mills, L., Creighton, V., & Pepler, D. J. (2018). Better relationships, mental wellness, and self-development: What parents expect from residential treatment for their struggling youth. *Journal of Therapeutic Schools and Programs, 10*(1), 1–10. <https://doi.org/10.19157/jtsp.issue.10.01.09>
- Roper, L. (2002). Achieving successful academic-practitioner research collaborations. *Development in Practice, 12*(3–4), 338–345. <https://doi.org/10.1080/0961450220149717>
- Rowley, H. (2014). Going beyond procedure: Engaging with the ethical complexities of being an embedded researcher. *Management in Education, 28*(1), 19–24. <https://doi.org/10.1177/0892020613510119>

DEVELOPMENTAL-RELATIONAL MODEL

- Russell, K. C., Gillis, H. L., Law, L., & Couillard, J. (2018). A pilot study examining outcomes associated with the implementation of progress monitoring at a substance use disorder treatment program for adolescents. *Child and Youth Care Forum, 47*(3), 403-419. <https://doi.org/10.1007/s10566-018-9437-2>
- Rycroft-Malone, J., Wilkinson, J. E., Burton, C. R., Andrews, G., Ariss, S., Baker, R., Dopson, S., Graham, I., Harvey, G., Martin, G., McCormack, B. G., Staniszewska, S., & Thompson, C. (2011). Implementing health research through academic and clinical partnerships: A realistic evaluation of the Collaborations for Leadership in Applied Health Research and Care (CLAHRC). *Implementation Science, 6*, 74. <https://doi.org/10.1186/1748-5908-6-74>
- Safran, D. G., Miller, W., & Beckman, H. (2006). Organizational dimensions of relationship-centered care: Theory, evidence, and practice. *Journal of General Internal Medicine, 21*(S1), S9–S15. <https://doi.org/10.1111/j.1525-1497.2006.00303.x>
- Schein, E. H. (2006). From brainwashing to organizational therapy: A conceptual and empirical journey in search of “systemic” health and a general model of change dynamics. A drama in five acts. *Organization Studies, 27*(2), 287–301. <https://doi.org/10.1177/0170840606061831>
- Senge, P. M. (2006). *The fifth discipline: The art & practice of the learning organization* (Rev. ed). Doubleday.
- Strand, K., Marullo, S., Cutforth, N., Stoecker, R., & Donohue, P. (2003). Principles of best practice for community-based research. *Michigan Journal of Community Service Learning, 9*(3), 5–15. <https://doi.org/3239521.0009.301>
- Systems, S. H. (2004). *World report on knowledge for better health: Strengthening health systems*. <https://doi.org/10.1038/325473b0>

DEVELOPMENTAL-RELATIONAL MODEL

- Tran, N., Langlois, E. V., Reveiz, L., Varallyay, I., Elias, V., Mancuso, A., Becerra-Posada, F., & Ghaffar, A. (2017). Embedding research to improve program implementation in Latin America and the Caribbean. *Pan American Journal of Public Health, 41*, e75. <https://doi.org/10.26633/RPSP.2017.75>
- Van De Ven, A. H., & Johnson, P. E. (2006). Knowledge for theory and practice. *Academy of Management Review, 31*(4), 802–821. <https://doi.org/10.5465/amr.2006.22527385>
- Vindrola-Padros, C., Eyre, L., Baxter, H., Cramer, H., George, B., Wye, L., Fulop, N. J., Utley, M., Phillips, N., Brindle, P., & Marshall, M. (2019). Addressing the challenges of knowledge co-production in quality improvement: Learning from the implementation of the researcher-in-residence model. *BMJ Quality and Safety, 28*(1), 67–73. <https://doi.org/10.1136/bmjqs-2017-007127>
- Vindrola-Padros, C., Pape, T., Utley, M., & Fulop, N. J. (2017). The role of embedded research in quality improvement: A narrative review. *BMJ Quality and Safety, 26*(1), 70–80. <https://doi.org/10.1136/bmjqs-2015-004877>
- Walley, J., Khan, M. A., Witter, S., Haque, R., Newell, J., & Wei, X. (2018). Embedded health service development and research: Why and how to do it (a ten-stage guide). *Health Research Policy and Systems, 16*(1). <https://doi.org/10.1186/s12961-018-0344-7>
- Ward, V., Smith, S., House, A., & Hamer, S. (2012). Exploring knowledge exchange: A useful framework for practice and policy. *Social Science and Medicine, 74*(3), 297–304. <https://doi.org/10.1016/j.socscimed.2011.09.021>
- Wenke, R. J., Tynan, A., Scott, A., & Mickan, S. (2018). Effects and mechanisms of an allied health research position in a Queensland regional and rural health service: A descriptive case study. *Australian Health Review, 42*(6), 667–675. <https://doi.org/10.1071/AH17086>

DEVELOPMENTAL-RELATIONAL MODEL

Westfall, J. M., Mold, J., & Fagnan, L. (2007). Practice-based research - “Blue highways” on the NIH roadmap. *Journal of the American Medical Association*, 297(4), 403–106.
<https://doi.org/10.1001/jama.297.4.403>

Wong, S. (2009). Tales from the frontline: The experiences of early childhood practitioners working with an “embedded” research team. *Evaluation and Program Planning*, 32(2), 99–108.
<https://doi.org/10.1016/j.evalprogplan.2008.10.003>

A Journey Through Adventure Therapy SUD Treatment

Garrett Cook¹, Matthew (Cole) Brogden¹, Mary Dugan¹, Courtney Gottemaker¹, Josh Heffernan¹, Ava Hughes¹, Kylie Knox¹, Alex West¹, Harold L. (Lee) Gillis¹, & Keith C. Russell²

*Georgia College & State University*¹

*Western Washington University*²

Abstract

This study examines influential factors for client Adventure Therapy Substance Use Disorder (SUD) treatment at Envirosh Shunda Creek. To better understand the influence of factors like mindfulness and age of onset on treatment progression, analyses are pulled from four distinct points—intake, during treatment, at discharge, and six months after treatment. Intake data suggest age of onset drug use had no significant impact on client mindfulness. Correlational analyses during treatment revealed a significant relationship between client mindfulness and treatment outcomes. Intake and post-treatment statistics suggest that clients who tried alcohol younger in life had more severe relapses after treatment. Additionally, those who reported more severe relapses six months post-treatment also called the Alumni Coordinator more frequently. These results and future study implications are discussed.

Keywords: Adventure Therapy, Wilderness Therapy, Outdoor Behavioral Healthcare, Substance Use Disorder, Mindfulness Based Experiences, Young Adult Males

AT SUD TREATMENT

A Journey Through Adventure Therapy SUD Treatment

North America is experiencing an unprecedented drug overdose crisis despite concerted efforts by many government officials, researchers, and clinicians (Wood, 2018). From 1999 to 2004, prescription opioid-related deaths in the U.S. skyrocketed with a 52% increase in urban areas and a staggering 371% increase in rural areas (Paulozzi & Xi, 2008). Twelve years later, American drug overdose deaths reached upwards of 64,000—more than the total number of U.S. military deaths during the Vietnam War (Dowell et al., 2018; Wood, 2018). Unfortunately, the drug overdose crisis is not limited to the United States. Canada’s opioid-related death toll was more than double the mortality rate of HIV/AIDS in 2004 (King et al., 2014). As circumstances worsened, the opioid-related death toll increased fivefold from 1991-2014 with most cases involving young adults (Fischer et al., 2016). Substance Use Disorder (SUD) has grown increasingly common since the turn of the century; however, research on treatment options for young adults has been lacking (Zhou et al., 2015). To address this issue, we will analyze potential contributors to young adult SUD treatment outcomes.

Prevalence of SUD

Recent findings reveal alarming trends regarding the prevalence of SUD among young adults (“SAMHSA’s Annual Mental Health,” 2018). For instance, young adults have higher rates of using cigarettes, alcohol, heroin-related opioids, cocaine, and methamphetamine compared to both their younger and older counterparts. Furthermore, SAMHSA’s Treatment Episode Data Set (2017) suggests that males are disproportionately affected by SUD. Reportedly, males aged 12 years and older made up 64.5% of substance use treatment admissions. Additionally, males accounted for higher admissions for 13 out of the 14 primary drug types, including alcohol, marijuana, heroin, and hallucinogens. The onset age of drug use has also impacted the progression of these trends in recent years (“SAMHSA’s Treatment Episode Data Set”, 2011). Among treatment admissions of clients aged 18 to 30, roughly 40% of individuals began using drugs at age 14 or younger. Furthermore, males accounted for 68.9% of those who initiated drug use at 11 years or younger. As the prevalence of SUD among young adults escalates, the development of effective therapeutic interventions becomes an increasingly urgent matter.

AT SUD TREATMENT

Current SUD Treatment Options

Many current treatment options (i.e. Narcotics Anonymous/Alcoholics Anonymous) utilize an abstinence only approach to SUD treatment, labeling clients either as “using” or “not using” based on their most recent behaviors (Ilgen et al., 2007). Findings suggest that the abstinence only approach incorporates skills training and abstinence self-efficacy, enabling clients to abstain from substances more effectively. However, clients are faced with strict expectations under abstinence only guidelines, as any level of drug use represents a complete loss in progress. Generally, abstinence only treatments subscribe to a “one size fits all” model characterized by rigid standards and minimal flexibility. Idiosyncrasies such as mental health disparities among clients highlight the need for individualized treatment alternatives. For example, Greenfield and colleagues (2012) found an inverse relationship between Major Depressive Disorder (MDD) and abstinence following treatment; clients with higher rates of MDD had lower rates of abstinence from substances compared to their counterparts with lower MDD levels.

Depression and other mental health conditions inhibit clients’ ability to successfully complete treatment emphasizing the necessity of individualized treatment options rather than the one size fits all approach (Mueser et al., 2000). Jhanjee’s (2014) findings demonstrate that psychosocial treatments for SUD are significantly more effective than simply treating clients’ physiological symptoms. Common psychosocial interventions include cognitive-behavioral therapy, contingency management, and mindfulness-based therapy (Chapman et al., 2018).

Treating SUD with Adventure Therapy

Outdoor Behavioral Healthcare (OBH), also known as Adventure Therapy (AT), describes programs that employ a multimodal treatment approach within wilderness environment contexts to facilitate progress toward individualized treatment goals (Russell, 2003). Meta-analyses on the use of AT has demonstrated its effectiveness compared to treatment as usual (e.g. treatment in a traditional setting; Bowen & Neill, 2013; Gillis et al., 2016). Gillis et al. (2016) found consistently large effect sizes in 15

AT SUD TREATMENT

studies measuring AT clients' pre- and post-treatment symptom reduction. Similar effects have also been demonstrated from other meta-analyses on this treatment model (Bettman et al., 2016). The expanding research behind AT has indicated that youth and young adults who are reluctant to participate in traditional treatments show progress in AT treatment settings.

DeMille and colleagues (2018) demonstrated that OBH is an effective treatment option for young adults with SUD. SUD develops when the use of alcohol and/or drugs causes clinical and functional impairment such as health complications or failure to maintain major life responsibilities (Substance Abuse and Mental Health Services Administration [SAMHSA], n.d.). Several concurrent circumstances can influence SUD development, including, but not limited to age at onset of drug use, socioeconomic status, social ties, and psychosocial development. Therefore, individualization of SUD treatment based on these factors is crucial to consider in order to maximize treatment success rates (Mueser et al., 2000).

Adventure Therapy at Enviros Shunda Creek

Enviros Shunda Creek, hereafter referred to as 'Shunda', is an AT program in Alberta, Canada that tailors treatment to each client, constructing objectives based on clients' unique needs. At Shunda, clients participate in wilderness experiences such as rock climbing, white water canoeing, and hiking excursions. During these experiences, clients practice mindfulness techniques to increase awareness of their thoughts, actions, and the subsequent consequences (Chapman et al., 2018). Once discharged from the program, alumni are better equipped to deal with their SUD symptoms by applying their mindfulness techniques to real-world settings.

A recent article by Russell et al. (2020) identified key aspects of the Shunda model of AT. Perhaps one of the most distinctive characteristics is that clinicians are not viewed as professionals who dictate the progression of treatment, but rather, as facilitators who work alongside clients throughout their recovery journey. As such, they do not

AT SUD TREATMENT

tell or direct clients, but instead let them learn and reflect as they interact with the wilderness setting and social aspects of life at Shunda. Shunda staff allow clients to co-construct their mindfulness-based experiences (MBEs; Russell et al., 2015) to match their unique therapeutic intentions, as opposed to more traditional treatment settings where clinicians might create a prescribed, rigid schedule.

Before constructing their therapeutic goals with clinicians, clients at Shunda share their intentions and receive feedback from their cohort group. After the experiences, clients are given a chance to reflect on how well (or poorly) their intentions were realized. Clinicians also do not judge or criticize clients. Rather, clients are prompted to reflect on their choices and to consider their own appraisal of the situation. AT at Shunda has been shown to effectively reduce SUD symptoms for individuals with a wide range of drug dependencies (Chapman et al., 2018). Russell et al. (2015) demonstrated the importance of MBEs on treatment success AT at Shunda. Here, we compare those findings with a larger, more current sample and examine the fluctuation of clients' SUD symptoms at intake, during treatment, at discharge, and six months after treatment.

Numerous studies have confirmed the efficacy of OBH SUD treatment (Chapman et al., 2018; DeMille, et al., 2018; Mandas et al., 2019; Russell et al., 2015; Russell et al., 2020). Russell et al.'s (2015) pilot study examined the relationship between mindfulness skills and treatment success. Mindfulness (Baer et al., 2006) and treatment outcome (Lambert et al., 1996) data revealed a correlation between positive changes in subscales of mindfulness measures and reductions in SUD symptoms. This suggests that Mindfulness Based Experiences (MBEs; Russell et al., 2015) are an integral part of successful treatment progressions at Shunda. In the following years, research on the Shunda population shifted to understand the effects different drug use frequencies have on treatment progress.

Chapman et al. (2018) studied the relationship between self-reported frequency of drug use and treatment progress at Shunda. Findings indicated that individuals with higher involvement with substances also experienced higher Symptom Distress (SD) and less awareness of their actions compared to those who reported lower levels of drug use at intake.

AT SUD TREATMENT

Results also suggested that no matter what level of drug use clients have at intake, treatment was equally effective across the board.

In a follow-up to Chapman et al. (2018), researchers compared self-reported opioid use with relapse severity to analyze differences between opioid and non-opioid users after treatment (Mandas et al., 2019). Shunda clients who used opioids were prone to more severe relapses six months after treatment than those who had not used opioids.

The primary purpose of this investigation is to identify how mindfulness, onset age (grade level) of substance use, contact frequency after treatment, severity of relapse after treatment, and outcome monitoring contribute to treatment outcomes. To illustrate this progression, factors are separated into four phases of treatment—intake, during treatment, discharge, and post-treatment.

Method

Participants

Shunda is a 90-day, 10-bed, open enrollment residential SUD treatment program. The focus of this program is treating comorbid addiction and mental health issues with the therapeutic intentions of increasing clients' self-awareness of their substance use and strengthening their personal volition. While clients complete these surveys, they are asked to reflect on their experiences in nature, utilizing mindfulness-based skills such as observing, acting with awareness, nonjudging, and nonreactivity. Additionally, clients regularly rate their level of mindfulness during their adventure experiences. After their discharge from the program, Shunda alumni are given many opportunities to communicate with the therapeutic staff, alumni coordinator, and other alumni.

Shunda clients are young adult males (ages 18-24) that have been diagnosed with SUD. The population ($N = 201$) consisted of 83 men who identified as white, 27 who identified as First Nation or Indigenous, 30 who identified as 'other', and 61 whose ethnicity was not reported. If a client's ethnicity was denoted as 'other', this meant that they identified as a race that was not listed. Additionally, if their ethnicity was recorded as

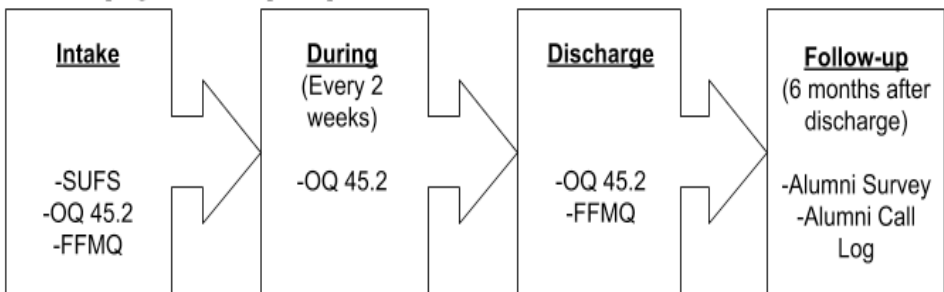
AT SUD TREATMENT

‘unknown’, this meant that they did not answer the question regarding ethnicity on the intake questionnaire. The average age of the sample was 21 (*SD* 2.13). Clients are admitted to Shunda voluntarily and can leave at any time during their treatment. The average length of stay at Shunda was 82.69 days (*SD* 19.78).

Instruments

Figure 1

Instrument progression from pre-to post-treatment at Shunda Creek



Intake

Substance Use Frequency Scale

The Substance Use Frequency Scale (SUFS; Winters & Henly, 1987) is a self-report scale that is used to evaluate the severity of clients' drug use during the last 90 days leading up to their intake at Shunda. It consists of 22 questions. An example of a question asked in this measure is, "In the past three months: how frequently did you consume alcohol? (Example: beer, wine, coolers, hard liquor, etc.)" could be answered with either "Never. 1-2 times, 3-5 times, 6-9 times, 10-19 times, 20-30 times," or "40 or more times."

AT SUD TREATMENT

Before, During, and After Treatment

Outcome Questionnaire-45.2

The OQ-45.2 is a measure used to determine treatment outcomes and monitor progress. This instrument is administered at client intake and discharge to yield a change score which illustrates a clinically significant and reliable change in the client's psychosocial functioning as a result of treatment. Additionally, the OQ-45.2 is administered every two weeks to gauge progress during treatment. The three domains of psychosocial functioning measured through the OQ.45.2 are as follows: (a) symptom distress ("I feel that something is wrong with my mind"), (b) interpersonal relations ("I have frequent arguments"), and (c) social role performance ("I feel that I am not doing well at work"). The OQ-45.2 consists of 45 Likert scale items. These ratings are computed into a total score within a range of 0 to 180, with higher scores representing low psychosocial functioning and lower scores representing high psychosocial functioning. According to Lambert et al. (1996) the test-retest reliability associated with the OQ-45.2 has been approximated at $r = .84$, the internal consistency is strong overall ($\alpha = .93$), and the estimates of concurrent validity range from $r = .60$ to $r = .88$ across many psychosocial functioning measures. Vermeersch et al. (2000) have exhibited in their analysis of the OQ-45.2 that it is useful in indicating sensitive psychosocial function changes.

Intake & Discharge

Five-Facet Mindfulness Questionnaire

The FFMQ is a self-report measure that consists of 39 items across five subscales. The subscales include the following: (a) observing (When I am walking, I deliberately notice the sensations of my body moving), (b) describing (I am good at finding words to describe my feelings), (c) acting with awareness (I am easily distracted), (d) nonjudging (I tell myself I shouldn't feel the way I am feeling), and (e) nonreactivity (I watch my feelings without getting lost in them). Baer and colleagues (2006) have demonstrated the validity and reliability of the FFMQ in clinical populations. FFMQ items are rated on a Likert scale ranging from 1 (never or very rarely true) to 5 (very often or always true), and higher scores

AT SUD TREATMENT

indicate greater mindfulness.

Post-Treatment

Alumni Survey

The Alumni Survey was given to Shunda alumni 6 months after discharge. The survey is comprised of 22 questions scored on a scale of 1-10, with 10 implicating the strongest level of agreement. This instrument assesses overall life satisfaction after treatment by inquiring about current relationships, quality of life, and information about relapses. In our case, we specifically examined two questions from this survey—“How would you rate the severity of your first relapse?” and “How would you rate your satisfaction with life right now?” It is important to note that this is a self-reported measure, and the definition of ‘relapse’ is up to the client’s own interpretation.

Alumni Log

The alumni log records information about calls between the alumni and Shunda’s alumni coordinator. The purpose and content of calls is up to the discretion of the alumni who may contact the coordinator for any reason, such as information on alumni gatherings, updates on sobriety and employment, and support during the transition back to normal life. The frequency of calls between the alumni and the coordinator was investigated.

Results

Intake & Discharge

Analysis of our pre-treatment factors investigated grade level onset of use, broken by grade level of drugs, as defined by SUFS scores and differences in FFMQ data. Due to the role of mindfulness as a treatment outcome, FFMQ change scores were created from Intake to Discharge. ANOVA analyses revealed no statistically significant overall differences for change (Discharge–Intake) in Total FFMQ scores, using the client’s reported school grade of when they began to use substances, as the independent variable. However, we did find significant differences in

AT SUD TREATMENT

FFMQ change scores in the subcategory “acts with awareness” and the onset age of regular Marijuana use. These results were significant at the 0.05 significance level, $df = 65$, $F = 4.674$, $p < 0.05$ and are reflected in the following table:

Table 1

FFMQ Subscale “Acts with Awareness” Change Scores and School Grade when Using Marijuana Regularly

You started getting high on marijuana regularly	Grade	N	M	Sd
FFMQ CHANGE “Acts with Awareness”	7-8	2	3.4	4.7
		6	2	26
	9-10	4	0.9	4.3
		1	8	79
	Total	6	1.9	4.6
		7	3	39

Thus, clients who started using marijuana regularly in lower grade levels increased more on mindfulness measures from intake to discharge.

Treatment

Results suggest that the intake to discharge change in the nonreactivity facet of the FFMQ was significantly related to a decrease in OQ-45.2 scores, $b = -.260$, $t(199) = -2.277$, $p < .05$. Clients who increased their mindfulness nonreactivity subscale during treatment experienced improvements in OQ-45.2 scores.

Intake & Post-Treatment

Using a Chi-Square analysis, we found that the age at which participants began to *regularly* use drugs had no effect on their relapse

AT SUD TREATMENT

severity rating. These results were consistent for marijuana, alcohol, and other drugs. In regard to post-treatment factors, we compared Alumni Log (contact) data with Alumni Survey data. Specifically, client frequency of contact with the Alumni Coordinator was compared with the self-reported rating of severity of their first relapse and their self-reported satisfaction with life at the time they took the Alumni Survey. We found a statistically significant, negative correlation between relapse severity and satisfaction with life, $r(97) = -.231, p = .022$. The more severe the relapse was rated; the lower clients rated their satisfaction with life at that time. For relapse severity and contact frequency variables, we found a significant, positive correlation, $r(100) = .277, p = .005$. This means clients with more frequent interactions with the alumni coordinator rated their relapse as more severe. We found no statistically significant correlation between call frequency and satisfaction with life.

Discussion

Our findings give insight into the general progression of clients who enter treatment at Shunda, as well as factors that might contribute to changes from intake to discharge. Namely, aspects of mindfulness, onset age of drug use, and relapse severity are better understood. For example, regular marijuana use at a younger age was related to significant increases in mindfulness from intake to discharge, and clients whose mindfulness scores increased experienced significant improvements on outcome measures. Furthermore, the age at which clients began regularly using drugs had no impact on the severity of their first relapse; however, clients who reported more severe relapses also rated their satisfaction with life lower than others. Interestingly, clients with more frequent interactions with the alumni coordinator expressed more severe relapses.

Clinicians and treatment facilitators should consider the results of this study when developing effective treatment plans for young adult males with SUD. Specifically, the positive impact of MBEs should urge organizations to incorporate mindfulness-based adventure experiences to techniques when treating SUD. Additionally, programs should begin monitoring client progress during and after treatment by incorporating projects similar to the Shunda Alumni Program. Through the Alumni

AT SUD TREATMENT

Program, Shunda has been able to implement contact and support for those transitioning back to life outside Shunda. Our finding that clients with more severe relapses contacted the alumni coordinator more frequently emphasizes the need for a support system after treatment.

This study provides support for the continued use of psychosocial outcome measures to monitor progress of AT for young adult males with SUD during and after treatment. As such, further investigation on specific areas, including the relationships of earlier use of marijuana on the mindfulness facet of acting with awareness, age of trying alcohol on relapse severity, and contact (call) frequency on relapse severity, is warranted. Specifically, one area from our study to investigate further is, why the onset use of only certain drugs (e.g. alcohol and marijuana) affect mindfulness behaviors and relapse severity over the course of treatment. Additionally, the post-treatment aspect of OBH needs to be explored deeper to understand the role that satisfaction with life and relapse severity have on contact frequency. One limitation of our study is the fact that all data is self-report and is subsequently prone to error and bias. Our future goal is to further investigate what constitutes a ‘healthy’ alumnus of Shunda.

AT SUD TREATMENT

References

- Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment, 13*(1), 27-45. doi:10.1177/1073191105283504
- Bettmann, J. E., Gillis, H. L., Speelman, E. A., Parry, K. J., & Case, J. M. (2016). A meta-analysis of wilderness therapy outcomes for private pay clients. *Journal of Child and Family Studies, 25*(9), 2659-2673. <https://doi.org/10.1007/s10826-016-0439-0>
- Black, D. S. (2012). Mindfulness and substance use intervention. *Substance Use & Misuse, 47*(3), 199–201. doi: 10.3109/10826084.2011.635461
- Bowen, D. J., & Neill, J. T. (2013). A meta-analysis of adventure therapy outcomes and moderators. *The Open Psychology Journal, 6*(1). doi:10.2174/1874350120130802001
- Chapman, J., Groark, S., Beale, M. M., Mandas, P., Argo, K., Gillis, H. L., & Russell, K. (2018). The relationship between self-reported prior drug use and treatment effectiveness in substance use disorder during outdoor behavioral healthcare treatment for young adult males. *Journal of Therapeutic Schools and Programs, 10*(1), 93-106. <https://doi: 10.19157/JTSP.issue.10.01.04>
- DeMille, S., Tucker, A. R., Gass, M. A., Javorski, S., VanKanegan, C., Talbot, B., & Karoff, M. (2018). The effectiveness of outdoor behavioral healthcare with struggling adolescents: A comparison group study a contribution for the special issue: Social innovation in child and youth services. *Children and Youth Services Review, 88*, 241-248. <http://dx.doi.org/10.1016/j.childyouth.2018.03.015>
- Dowell, D., Koonan, R. K., & Houry, D. (2018). Underlying factors in drug overdose deaths. *Journal of the American Medical Association, 318*(23), 2295-2296. doi:10.1001/jama.2017.15971

AT SUD TREATMENT

- Fernandez, A. C., Wood, M. D., Stein, L. A. R., & Rossi, J. S. (2010). Measuring mindfulness and examining its relationship with alcohol use and negative consequences. *Psychology of Addictive Behaviors, 24*(4), 608. <https://doi.org/10.1037/a0021742>
- Fischer, B., Rehm, J., & Tyndall, M. (2016). Effective Canadian policy to reduce harms from prescription opioids: Learning from past failures. *Cmaj, 188*(17-18), 1240-1244 <https://doi.org/10.1503/cmaj.160356>
- Gillis, H. L., Kivlighan, D. M., & Russell, K. C. (2016). Between-client and within-client engagement and outcome in a residential wilderness treatment group: An actor partner interdependence analysis. *Psychotherapy, 53*(4), 413-423 <https://doi.org/10.1037/pst0000047>
- Greenfield, B. L., Venner, K. L., Kelly, J. F., Slaymaker, V., & Bryan, A. D. (2012). The impact of depression on abstinence self-efficacy and substance use outcomes among emerging adults in residential treatment. *Psychology of Addictive Behaviors, 26*(2), 246. <https://doi.org/10.1037/a0026917>
- Ilggen, M., McKellar, J., & Moos, R. (2007). Personal and treatment-related predictors of abstinence self-efficacy. *Journal of Studies on Alcohol and Drugs, 68*(1), 126-132 [doi:10.15288/jsad.2007.68.126](https://doi.org/10.15288/jsad.2007.68.126).
- Jhanjee, S. (2014). Evidence based psychosocial interventions in substance use. *Indian Journal of Psychological Medicine, 36*(2), 112-118. [doi: 10.4103/0253-7176.130960](https://doi.org/10.4103/0253-7176.130960)
- King, N. B., Fraser, V., Boikos, C., Richardson, R., & Harper, S. (2014). Determinants of increased opioid-related mortality in the United States and Canada, 1990–2013: A systematic review. *American Journal of Public Health, 104*(8), e32-e42. [doi:10.2105/AJPH.2014.301966](https://doi.org/10.2105/AJPH.2014.301966).
-

AT SUD TREATMENT

- Lambert, M. J., Burlingame, G. M., Umphress, V., Hansen, N. B., Vermeersch, D. A., Clouse, G. C., & Yanchar, S. C. (1996). The reliability and validity of the Outcome Questionnaire. *Clinical Psychology & Psychotherapy: An International Journal of Theory and Practice*, 3(4), 249-258. [https://doi.org/10.1002/\(SICI\)1099-0879\(199612\)3:4<249::AID-CPP106>3.0.CO;2-S](https://doi.org/10.1002/(SICI)1099-0879(199612)3:4<249::AID-CPP106>3.0.CO;2-S)
- Levin, M. E., Dalrymple, K., & Zimmerman, M. (2013). Which facets of mindfulness predict the presence of substance use disorders in an outpatient psychiatric sample? *Psychiatry of Addictive Behaviors*, 28(2), 498–506. <https://doi.org/10.1037/a0034706>
- Liebling, E. J., Yedinak, J. L., Green, T. C., Hadland, S. E., Clark, M. A., & Marshall, B. D. (2016). Access to substance use treatment among young adults who use prescription opioids non-medically. *Substance Abuse Treatment, Prevention, and Policy*, 11(1), 38. <https://doi.org/10.1186/s13011-016-0082-1>
- Mandas, P., Argo, K., Rose, H., Zelenik, T., Wetherington, A., Cook, G., Brogden, M., Gillis, H., & Russell, K. (2019). Differences between opioid and non-opioid users during and after outdoor behavioral treatment. *Journal of Therapeutic Schools and Programs*, 11, 105-119. https://natsap.org/pdf_files/JTSP/VOL11/11_ARTICLE_8.pdf
- Mayet, S., Farrell, M., Ferri, M., Amato, L., & Davoli, M. (2004). Psychosocial treatment for opiate abuse and dependence. *Cochrane Database of Systematic Reviews*, (4). [doi:10.1002/14651858.CD004330.pub2](https://doi.org/10.1002/14651858.CD004330.pub2)
- Mueser, K. T., Yarnold, P. R., Rosenberg, S. D., Swett, C. J., Miles, K. M., & Hill, D. (2000). Substance use disorder in hospitalized severely mentally ill psychiatric patients: Prevalence, correlates, and subgroups. *Schizophrenia Bulletin*, 26(1), 179-192. [doi:10.1093/oxfordjournals.schbul.a033438](https://doi.org/10.1093/oxfordjournals.schbul.a033438)
- Paulozzi, L. J., & Xi, Y. (2008). Recent changes in drug poisoning

AT SUD TREATMENT

mortality in the United States by urban–rural status and by drug type. *Pharmacoepidemiology and Drug Safety*, 17(10), 997-1005. <https://doi.org/10.1002/pds.1626>

Russell, K. (2003, December). An assessment of outcomes in outdoor behavioral healthcare treatment. *Child and Youth Care Forum*, 32(6), pp. 355-381.
<https://doi.org/10.1023/B:CCAR.00000004507.12946.7e>

Russell, K. C., Gillis, H. L., & Hayes, M. (2020). Adventure therapy treatment for young adult males struggling with addictions. *Journal of Health Service Psychology*, 1-8.
<https://doi.org/10.1007/s42843-020-00003-4>

Russell, K. C., Gillis, H. L., & Heppner, W. (2015). An examination of mindfulness-based experiences through adventure in substance use disorder treatment for young adult males: A pilot study. *Mindfulness*, 7(2), 320-328. <https://doi.org/10.1007/s12671-015-0441-4>

Substance Abuse and Mental Health Services Administration. (2018, September 14). *SAMHSA's Annual Mental Health, Substance Use Data Provide Roadmap for Future Action*.
<https://www.hhs.gov/about/news/2018/09/14/samhsa-annual-mental-health-substance-use-data-provide-roadmap-for-future-action.html>

Substance Abuse and Mental Health Services Administration. (2017). *Treatment Episode Data Set (TEDS): Report on Discharges from Substance Abuse Treatment Services*. [Data set]. Substance Abuse and Mental Health Services Administration.
<https://www.samhsa.gov/data/data-we-collect/teds-treatment-episode-data-set>.

Substance Abuse and Mental Health Services Administration. (2011). *Treatment Episode Data Set (TEDS): Discharges from Substance Abuse Treatment Services*. [Data set]. Substance Abuse and Mental

AT SUD TREATMENT

Health Services Administration.

https://samhsa.gov/data/sites/default/files/TEDS2011D_Web/TEDS2011D_Web/TEDS2011D_Web.pdf

Substance Abuse and Mental Health Administration (n.d.). *Mental and Substance Use Disorders*. <https://www.samhsa.gov/disorders>

Vermeersch, D. A., Lambert, M. J., & Burlingame, G. M. (2000).

Outcome questionnaire: Item sensitivity to change. *Journal of Personality Assessment*, 74(2), 242-261.

https://doi:10.1207/S15327752JPA7402_6

Winters, K. C., & Henly, G. A. (1987). Advances in the assessment of adolescent chemical dependency: Development of a chemical use problem severity scale. *Psychology of Addictive Behaviors*, 1(3), 146.

Wood, E. (2018). Strategies for reducing opioid-overdose deaths—lessons from Canada. *New England Journal of Medicine*, 378(17), 1565-1567. doi: 10.1056/NEJMp1800216

Zhou, X., Qin, B., Del Giovane, C., Pan, J., Gentile, S., Liu, Y., Lan, X., Yu, J., & Xie, P. (2015). Efficacy and tolerability of antidepressants in the treatment of adolescents and young adults with depression and substance use disorders: A systematic review and meta-analysis. *Addiction*, 110(1), 38-48. <https://doi.org/10.1111/add.12698>

**PERMISSIONS, COPYRIGHT INFORMATION AND IRB
REQUIREMENTS
FOR POTENTIAL AUTHORS**

Empirical studies (qualitative and quantitative) must have been conducted under the oversight of an Institutional Review Board (IRB). When appropriate, authors must provide journal editors with a copy of the IRB approval and proposal so that we have assurance that subjects' rights were respected, and research protocols were ethical prior to publication of any data.

Authors must provide the Journal of Therapeutic Schools and Programs (JTSP) with all necessary permissions to reproduce in print and electronic form any copyrighted work prior to acceptance of publications (e.g., photographs of people, quotations longer than 500 words). JTSP policy prohibits an author from submitting the same manuscript for consideration by two or more publications at the same time.

Authors are required to reveal any possible conflict of interest in the conduct and reporting of research (e.g., financial interests in a test procedure, external funding provided by program) when their manuscript is submitted.

It is the policy of the National Association of Therapeutic Schools and Programs (NATSAP) to retain the copyright of its publications and the contributions contained therein in order to protect the interests of the Journal of Therapeutic Schools and Programs (JTSP) and its authors, and at the same time to facilitate the appropriate reuse of this material by others.

Therefore, upon acceptance of their manuscript for publication by the JTSP, authors will be sent a copyright assignment form to complete and return to the editor. Publication of the manuscript will be contingent upon receipt of the completed copyright transfer form. In the event that the JTSP decides to republish an article that has already been published in copyrighted form, the Board will require explicit permission from the copyright holder.

Note: NATSAP and the JTSP reserve the right to publish these materials in both

written and electronic form. Authors will be notified of the use of their material. Questions may be directed to:

Dr. Ellen Behrens – JTSP Chief Editor

Westminster College
1840 South 1300 East
Salt Lake City, UT 84105
ebehrens@westminstercollege.edu

Manuscript Topics

The *Journal of Therapeutic Schools and Programs* (JTSP) is published by the National Association of Therapeutic Schools and Programs and publishes articles that assist readers in providing comprehensive care for adolescents, young adults, and families receiving services from residential, wilderness/outdoor behavioral healthcare, and transition treatment programs. The editors welcome manuscripts that are the original work of the author(s), have been approved by an Institutional Review Board when data was collected, and follow APA style as presented in the seventh edition of the *Publication Manual of the American Psychological Association*. Manuscripts may include, but are not limited to, case studies, topical clinical articles, literature reviews, qualitative research and empirical research. Submissions are encouraged that relate relevant theory to clinical practice or provide original research relating to program or treatment effectiveness.

Submitting the Manuscript

Electronic submission is required at www.natsap.org. **Author/s must submit an abstract, keywords, and author bio/s along with the manuscript.** Authors are required to reveal any possible conflict of interest in the conduct and reporting of research (e.g., financial interests in a test procedure, funding provided by program) when their manuscript is submitted. Contact Dr. Ellen Behrens at ebehrens@westminstercollege.edu with questions.

Manuscript Evaluation

Submitted manuscripts will initially be reviewed and evaluated by Dr. Ellen Behrens or a Guest Editor. After the initial evaluation, manuscripts will be sent to a Review Board who will forward their recommendations to Dr. Behrens or the Guest Editor. The JTSP management team reserves the right to edit or to require editing of content, format, or style, or to make other revisions before accepting a manuscript for publication. Dr. Behrens will make final decisions regarding publication status.

Manuscript Format

All manuscripts should be submitted in a form that allows blind refereeing (see *APA guidelines – 7th edition*). The author's name and any identifying information must be visible only on a detachable front page. Manuscripts will be retained by the JTSP Editorial Board and will not be returned to the author(s).

Manuscripts should be formatted to 8 1/2" x 11" paper as follows:

- Font to be used is “Times New Roman – Size 12”
- Italics and Underline are accepted
- Document must be in black text only
- 1-inch margins are required on all sides
- Double line spacing is required
- Pages are to be numbered in the top right-hand corner
- Submit manuscripts in the following order: 1) Title Page (de-identified), 2) Abstract (no more than 100 words) and keywords, 3) Text, 4) References, 5) Figures (Tables, Charts, Graphs).

Total manuscript length including abstract, tables, and references should ordinarily not exceed 25 pages. The entire manuscript including footnotes, references, and quoted material and figures/illustrations should conform to the style specified in *The Publication Manual of the American Psychological Association – 7th Edition*.

Images depicting aspects of the contribution are strongly encouraged. Insertion notations for figures, tables, and images should be included in their preferred place within the document though the actual figures, tables, and images along with appropriate captions should be appended to the end of the submitted manuscript. Please attach original camera-ready art or jpeg/gif files for figures and images.

Journal Management

The National Association of Therapeutic Schools and Programs (NATSAP) Board of Directors has engaged Ellen Behrens, Ph.D. for the editorial and managerial responsibilities for the *Journal of Therapeutic Schools and Programs* (JTSP).

Publication Ethics and Publication Malpractice Statement

It is necessary to agree upon standards of expected ethical behavior for all parties involved in the act of publishing: the author, the journal editor, the peer reviewer, and the publisher. Our ethic statements are based on COPE's Best Practice Guidelines for Journal Editors.

Publication Decisions

The editor of the journal is responsible for deciding which of the articles submitted to the journal should be published. The editor may be guided by the policies of the journal's editorial board and constrained by such legal requirements as shall then be in force regarding libel, copyright infringement, and plagiarism. The editor may confer with other editors or reviewers in making this decision.

Fair Play

An editor will at any time evaluate manuscripts for their intellectual content without regard to race, gender, sexual orientation, religious belief, ethnic origin, citizenship, or political philosophy of the authors.

Confidentiality

The editor and any editorial staff must not disclose any information about a submitted manuscript to anyone other than the corresponding author, reviewers, potential reviewers, other editorial advisers, and the publisher, as appropriate.

Disclosure and Conflicts of Interest

Unpublished materials disclosed in a submitted manuscript must not be used in an editor's own research without the express written consent of the author.

Duties of Reviewers

Contribution to Editorial Decisions

Peer review assists the editor in making editorial decisions and through the editorial communications with the author may also assist the author in improving the paper.

Promptness

Any selected referee who feels unqualified to review the research reported in a manuscript or knows that its prompt review will be impossible should notify the editor and excuse themselves from the review process.

Confidentiality

Any manuscripts received for review must be treated as confidential documents. They must not be shown to or discussed with others except as authorized by the editor.

Standards of Objectivity

Reviews should be conducted objectively. Personal criticism of the author is inappropriate. Referees should express their views clearly with supporting arguments.

Acknowledgement of Sources

Reviewers should identify relevant published work that has not been cited by the authors. Any statement that an observation, derivation, or argument had been previously reported should be accompanied by the relevant citation. A reviewer should also call to the editor's attention any substantial similarity or overlap between the manuscript under consideration and any other published paper of which they have personal knowledge.

Disclosure and Conflict of Interest

Privileged information or ideas obtained through peer review must be kept confidential and not used for personal advantage. Reviewers should not consider manuscripts in which they have conflicts of interest resulting from competitive, collaborative, or other relationships or connections with any of the authors, companies, or institutions connected to the papers.

Duties of Authors**Ethical Oversight**

Authors are required to have full oversight and approval from a recognized Institutional Review Board (IRB) for any human subjects' data collected as part of a research study, whether that study be qualitative or quantitative.

Reporting Standards

Authors of reports of original research should present an accurate account of the work performed as well as an objective discussion of its significance. Underlying data should be represented accurately in the paper. A paper should contain sufficient detail and references to permit others to replicate the work. Fraudulent or knowingly inaccurate statements constitute unethical behavior and are unacceptable.

Data Access and Retention

Authors may be asked to provide the raw data in connection with a paper for editorial review and should be prepared to provide public access to such data (consistent with the ALPSP-STM Statement on Data and Databases), if practicable, and should in any event be prepared to retain such data for a reasonable time after publication.

Originality and Plagiarism

The authors should ensure that they have written entirely original works, and if the authors have used the work and/or words of others that this has been appropriately cited or quoted.

Multiple, Redundant, or Concurrent Publication

An author should not in general publish manuscripts describing essentially the same research in more than one journal or primary publication. Submitting the same manuscript to more than one journal concurrently constitutes unethical publishing behavior and is unacceptable.

Acknowledgement of Sources

Proper acknowledgment of the work of others must always be given. Authors should cite publications that have been influential in determining the nature of the reported work.

Authorship of the Paper

Authorship should be limited to those who have made a significant contribution to the conception, design, execution, or interpretation of the reported study. All those who have made significant contributions should be listed as co-authors. Where there are others who have participated in certain substantive aspects of the research project, they should be acknowledged or listed as contributors. The corresponding author should ensure that all appropriate co-authors and no inappropriate co-authors are included on the paper, and that all co-authors have seen and approved the final version of the paper and have agreed to its submission for publication.

Disclosure and Conflicts of Interest

All authors should disclose in their manuscript any financial or other substantive conflict of interest that might be construed to influence the results or interpretation of their manuscript. All sources of financial support for the project should be disclosed.

Fundamental Errors in Published Works

When an author discovers a significant error or inaccuracy in their own published work, it is the author's obligation to promptly notify the journal editor or publisher and cooperate with the editor to retract or correct the paper.



NATIONAL ASSOCIATION OF THERAPEUTIC SCHOOLS AND PROGRAMS Member Directory Order Form

To order a current copy of the Directory, please complete the form below and mail or FAX your order, with your check or credit card information for shipping and handling, to NATSAP, Inc.

First/Last Name: _____
Organization: _____
Mailing Address: _____
City: _____ State: _____ Zip: _____
Phone: _____ Email: _____

Please indicate your profession:

- checkbox Educational Consultant
checkbox Psychologist
checkbox Psychiatrist
checkbox NATSAP Member
checkbox Parent
checkbox Other (please specify): _____
checkbox Licensed Counselor
checkbox Licensed Therapist
checkbox College/University Professor
checkbox Alumnus Program Staff
checkbox Student

Please select your NATSAP Membership Status:

- checkbox NATSAP Member (Staff of Member Program or Individual Professional)
checkbox Non-Member

Shipping and handling charges

(We ship via United States Postal Service.)

Table with 2 columns: Quantity/Description and Price. Rows include Single Copy (Media Mail) \$-0- (complimentary), 2 directories (Priority Mail) \$5.00, 3 to 15 directories (Priority Mail) \$10.00, 16 to 30 directories (Priority Mail) \$20.00, and 31 or more contact the NATSAP office.

Number of Copies Requested: _____ Total Shipping Charges (see above): \$ _____
(Media Mail: Allow 7-10 days for delivery, Priority Mail: Allow 3 to 5 days for delivery)

Payment

(This form also serves as your invoice and payment is due once you FAX your request.)

- checkbox Check Enclosed
checkbox Credit Card Number _____ Exp. Date: _____ CVC: _____

Please return completed form and payment to:

Fax: (301) 986-8772 • Email: info@natsap.org



The National Association of Therapeutic Schools and Programs Ethical Principles

Members of the National Association of Therapeutic Schools and Programs (NATSAP) provide residential, therapeutic, and/or education services to children, adolescents, and young adults entrusted to them by parents and guardians. The common mission of NATSAP members is to promote the healthy growth, learning, motivation, and personal well-being of our program participants. The objective of all our therapeutic and educational programs is to provide excellent treatment for our program participants; treatment that is rooted in good-hearted concern for their well-being and growth; respect for them as human beings; and sensitivity to their individual needs and integrity.

When applying to become or continue as a member of The National Association of Therapeutic Schools and Programs, the program / school Executive signs the Ethical Principles stating that *our organization supports and follows the NATSAP Ethical Principles.*

1. Be conscious of, and responsive to, the dignity, welfare, and worth of our program participants.
2. Honestly and accurately represent ownership, competence, experience, and scope of activities related to our program, and to not exploit potential clients' fears and vulnerabilities.
3. Respect the privacy, confidentiality, and autonomy of program participants within the context of our facilities and programs.
4. Be aware and respectful of cultural, familial, and societal backgrounds of our program participants.
5. Avoid dual or multiple relationships that may impair professional judgment, increase the risk of harm to program participants, or lead to exploitation.
6. Take reasonable steps to ensure a safe environment that addresses the emotional, spiritual, educational, and physical needs of our program participants.
7. Aspire to maintain high standards of competence in our areas of expertise and to be mindful of our limitations.
8. Value continuous professional development, research, and scholarship.

9. Place primary emphasis on the welfare of our program participants in the development and implementation of our business practices.
10. Manage our finances to ensure that there are adequate resources to accomplish our mission.
11. Fully disclose to prospective candidates the nature of services, benefits, risks, and costs.
12. Provide informed, professional referrals when appropriate or if we are unable to continue service.
13. NATSAP members agree to not facilitate or practice reparative therapy.

NATSAP
Guiding the way

National Association of
Therapeutic Schools and Programs
4350 East-West Hwy, Suite 925
Bethesda, MD 20814