

August/September 2018

Volume 41 • No. 5
CanadianParamedicine.ca

Canadian Paramedicine



Publications Mail Agreement No. 40007174

AugustSeptember 2018



Volume 41, No. 5

Featured are the co-winners of Crestline Coach's Paramedic Week Photo Contest.

Top photo: Moose Jaw and District EMS. Clockwise are Paul Litzenger, Michaela Sykora, Jaycee Frape, Caitlyn Nelson, Nicholas Hennink, Andre Bourdeau.

Bottom photo: Paramedic on right: Amy Larson, Medavie EMS Chatham-Kent EMS, Ontario. Paramedic on left: Sarah Parr, Medavie EMS Chatham-Kent EMS, Ontario.

Left 31st Canadian Brigade Group, Canadian Armed Forces Medic: Officer Hayward. Right 31st Canadian Brigade Group, Canadian Armed Forces Medic: Officer Slack.

Photos Courtesy Crestline Coach.

Feature **STORIES**

PROFESSIONALIZATION OF PARAMEDICS	6
CLINICAL LEADERSHIP AT BC EHS	10
PERCEPTIONS OF PROFESSIONALISM	13
A LACK OF PROFESSIONALISM	15
POINT OF CARE TESTING	18
ORGAN DONATION—A ROLE FOR PARAMEDICS?	20
CHARACTERISTICS OF A PARAMEDIC	23
NEW PSYCHOLOGICAL HEALTH AND SAFETY STANDARD	25
APPROACH TO NERVE AGENT POISONING	27
COMMUNITY PARAMEDIC: A PRACTITIONER'S PERSPECTIVE	29
ROY SUTHONS INTERVIEW: PART 2	31
MEDICALERT BRACELETS HELP AUTISTIC PATIENTS	33
PARAMEDIC SELF-ASSESSMENT	34
OTTAWA PARAMEDIC SERVICE PARTNERS	
WITH CHILDREN'S HOSPITAL OF EASTERN ONTARIO	36
PSYCHOLOGICAL HEALTH AND SAFETY: THE ROLE OF ADULT EDUCATORS ..	39
PARAMEDIC SELF-ASSESSMENT ANSWER KEY	50

Associations

PARAMEDIC ASSOCIATION OF CANADA	42
PARAMEDIC ASSOCIATION OF MANITOBA	43
ONTARIO PARAMEDIC ASSOCIATION	46

Canadian Paramedicine

The Voice of
Canadian Paramedicine
for 41 Years

Publisher/Editor

Lyle Blumhagen: lyle@emsnews.com

Contributing Writers

Alan Batt	Blair Bigham
Mike Billingham	Jill Deboer
Chris Farnady	Lynea Finn
Angela Graham	Kaitlynn James
Shane Knox	Chelesa Lanois
Laurie Mawlam	BT Murray
Ron Oswald	Dr Stephanie Pedpath
Gabriele Stephen	Tanishq Suryawanshi
David Wolff	Robin Young

Editorial Board

Mike Adair	Alan Batt
Mike Billingham	Dean DiMonte
Becky Donelon	Eric Glass
Judith Goldstein	Tim Hillier
Chris Hood	Caroline Mellor
Peter O'Meara	Kelly Shppard
Walter Tavares	Robin Young

How to Contact us:

PO Box 579
Drumheller, AB T0J 0Y0
Website: www.CanadianParamedicine.ca
E-mail: cp@emsnews.com
Toll Free: 1-800-567-0911
Fax: 1-888-264-2854

Advertising Sales

Canadian Paramedicine and
www.CanadianParamedicine.ca
Lyle Blumhagen: lyle@emsnews.com

Graphic Design/Layout

Acorn Communications Inc.

Information Systems

Dean DiMonte
paramergency.com

Subscription Inquiries:

subscriptions@emsnews.com

Canadian Paramedicine is published by
Pendragon Publishing Ltd.

CANADIAN PARAMEDICINE

The magazine for Canada's paramedicine professions. The opinions and views expressed in this magazine are those of the writers and not necessarily those of the publisher.

Contents Copyright 2018 By Pendragon Publishing Ltd., may not be reprinted without permission.

ISSN 1927-6710 (Print)
ISSN 1927-6729 (Online)

PUBLICATIONS MAIL AGREEMENT NO.
40007174

RETURN UNDELIVERABLE CANADIAN
ADDRESSES TO CIRCULATION DEPT.
PO Box 579
DRUMHELLER AB T0J 0Y0
E-mail: cp@emsnews.com



PSYCHOLOGICAL HEALTH AND SAFETY: THE ROLE OF AN ADULT EDUCATOR IN BUILDING RESILIENCY IN FIRST RESPONDERS

By: David Wolff MAdEd(c)

Abstract

There is limited research on Posttraumatic Stress Disorder (PTSD) in First Responders, little on PTSD resiliency strategies in preparation for, or response to, exposure to stressors, and even less from the perspective of an adult educator. This literature review seeks out the intersection between the concepts of adult education and cognitive psychology as they relate to First Responder resiliency to stress, leading to a critique and discussion, and identification of gaps in the literature. It explores how fostering critical reflection and transformational learning interrelates with resiliency and questions if individuals can become self-directed transformational learners; seeking out opportunities to change and adapt; to accommodate their meanings interpreted from critical events into their belief structures; and how transformational learning can encourage self-directed posttraumatic growth in First Responders. Although many relevant articles were reviewed, few, if any, brought all of the topics together as building resiliency is traditionally in the domain of psychology, not adult education. This section of the larger review provides the summary of what it means to be a facilitator versus a teacher and how adults learn and think, including predominant adult learning concepts and theories. It summarises stress resilience strategies from a psychological viewpoint and then compares, contrasts, and highlights the commonalities between the two disciplines, adult education and psychology. A critique and discussion are included and a gap in the literature is identified: “can an individual be trained to think critically to respond to, and in preparation for, expected, potential, or real critical events, as a stress resiliency strategy?”, thus laying the foundation for future research in the facilitation of critical thinking skills and training transformational learners as a resilience strategy.

This is an excerpt (summary, discussion, and theoretical gap) of a larger literature review.

The full paper can be viewed at
<http://davidwolff.ca/sites/default/files/2018-07/DWolffLitReviewFINALPub.pdf>

Summary of the Literature

To teach is actually to facilitate, to collaborate, to be part of the group and learn together as a group. It is to be an expert, not the expert. To guide, mentor, have dialogue, to critically reflect and foster critical reflection, and learn (Brookfield, 1987; Cranton, 2016; Fazio-Griffith & Ballard, 2016; Merriam & Bierema, 2014). According to Merriam and Bierema, (2014), Coady (2013), Cranton (2016), and Virtanen, Myllarniemi and Wallander (2013), learning is about the individual's meanings developed from experience, how those meanings are applied to new experiences, and how we create our realities from those experiences. It is how adults grow and develop. We learn through and by experience, and the meanings we create through critical reflection, dialogue and discourse with others (Mezirow, 2012; Merriam & Bierema, 2014). Merriam and Bierema (2014) and Pretorius and Ford (2016) add that self-directed learning enhances the ability to critically reflect, but not all adults prefer or have the innate ability to be a self-directed learner. Self-directed learning can and should be encouraged as it leads to a more autonomous learner who is willing to engage in critical self-reflection and group learning; critical reflection with others.

Brookfield (1987), Cranton (2016), Kreber (2012), Merriam and Bierema (2014), and Pretorius and Ford (2016) promote reflection as the cornerstone of adult learning, where the ability to critically reflect is a significant component of adult development. Brookfield and Merriam and Bierema propose that critical reflection is

how we identify and challenge our assumptions and see how we fit in the world, through the identification and exploration of assumptions, how they compare to our constructed reality, and integration of the modified assumptions into our realities. Brookfield, Cranton, Hollins, Luna and Lopez (2014), Mezirow (2012), and Taylor and Cranton (2013) all agree critical reflection is difficult to teach, as challenging core beliefs may be painful for some. Regardless, both Brookfield, and Kreber emphasize the importance of critical reflection in adult development. They suggest that critical reflection can and should be taught, learned, and fostered. There are many methods used to teach critical reflection, but the common theme highlighted by Brookfield, Kreber, and Mezirow is the confrontation of individuals with unexpected or unfamiliar ideas that cause them to reconsider their previously held beliefs or perceptions. Mezirow summarizes that critical reflection can be fostered by something read, seen, through discussion with others, or experienced, including unexpected critical incidents. Cranton builds on Mezirow's foundation suggesting the result of critical reflection can be a change in the way an individual sees themselves in the world; changing their world, resulting in transformational learning.

Brookfield (1987), Cranton (2016), Fazio-Griffith and Ballard (2016), and Mezirow (2012) explain transformational learning as changing how we know by interpreting experiences and generating meanings that are more justified. It affects our values and core beliefs that act as a filter for interpreting meaning that comes from our experiences, explaining the disorienting dilemmas we encounter, and changing the way we see ourselves and the world. Cranton, Merriam and Bierema (2014), Mezirow, and Hollins et al. (2014) submit critical reflection and constructive discourse with others is key to transformational learning, regardless of what

causes the critical reflection—be it fostered, or as a result of a critical incident. Brookfield (2012), Charaniya (2012), Coady, (2013), Mezirow, and Taylor and Cranton (2013) add that although critical reflection and dialogue can be fostered, an openness to change in the individual must exist for transformational learning to occur.

We see many similarities when using critical reflection and transformational learning as a lens to view facilitation of stress resilience strategies. Smith and Ascough (2016), and Walinga and Rowe (2013), propose that it is the lens of the individual's beliefs that create the reality to which they respond, learning to discover, challenge and change how they view stressors. Walinga and Rowe add that there must be reflection, framing of goals, learning strategies that support change, and trying on new roles when responding to stress, similar to the steps involved in transformational learning as described by Mezirow (2012). Merriam and Bierema (2014) agree that the constant change of adulthood and reframing our understanding of circumstances can evoke transformational learning. Ochoa, Casellas-Grau, Vives, Font and Borràs, (2017) add a new paradigm to consider, the potential of positive and negative outcomes of transformational learning. Their goal of transformational learning is to foster PTG after stressful or traumatic events, avoiding potential negative outcomes, cautioning the transformational learning involved can influence the self and identity. Brookfield (2012), Charaniya (2012), and Illeris (2013) also advise caution when areas of identity are involved, but suggest for transformation to occur, ideology and personal identity must also transform.

Critique and discussion

The transformation discussed by Ochoa et al. (2017), Smith and Ascough (2016), and Walinga and Rowe, (2013) focuses on reflection and transformation subsequent to a critical event, versus rumination resulting in negative coping strategies. Conversely, Brookfield (1987; 2012), Cranton (2016), Kreber (2012), Hollins et al. (2014), Merriam and Bierema (2014), Mezirow (2012), and Pretorius and Ford (2016) suggest that critical reflection and discourse is key to transformational learning, the difference being it can be fostered with or without a critical event, if the individual is open to transformation (Brookfield, 2012; Charaniya, 2012; Coady, 2013; Mezirow, 2012; Taylor & Cranton, 2013). Brookfield (1987), Cranton, and Walinga and Rowe tell us individuals can be taught how to think critically; to critically reflect. It is through the use of reflection and discourse with others that individuals can be encouraged to be self-directed learners (Pretorius & Ford, 2016) where, according to Brookfield (1987) and Coady (2013), legitimization of private interpreta-

tions of meanings of experiences can occur. It is these legitimizations that become important in learning as it is where meaning can be ascribed to experience. Brookfield (1987), Cranton, Merriam and Bierema, and Mezirow suggest a facilitator or co-learner is required to encourage the process. Lloyd, Pfeiffer, Dominish, Heading, Schmidt and McCluskey (2014) suggest such co-learning can occur spontaneously with peers. Common amongst the authors is there must be reflective and supportive dialogue with others to analyse experiences to interpret meaning and potentially experience transformational learning (Brookfield, 1987; Cranton, 2016; Pretorius & Ford, 2016; Walinga & Rowe, 2013).

Both fostering PTG, and fostering critical reflection and transformational learning, follow the same principles, with the difference being fostering PTG focuses on feelings and relationships (Mezirow, 2012), changing rumination to reflection (Lindstrom, Caan, Calhoun & Tedeschi., 2013), and only after a crisis; and transformational learning focuses on perceptions, the way people think, and can occur as a result of critical reflection with or without a crisis (Brookfield, 1987; Cranton, 2016, Mezirow, 2012). Brookfield (1987) suggests that the most important desired result from fostering critical thinking is to resolve the anomalies between what we believe is supposed to be happening and what appears to be taking place. Brookfield adds that the role of the facilitator of critical thinking is to analyse underlying assumptions and help imagine alternatives, encouraging an openness to alternative ideas and making enlightened choices. Coady's (2013) and Fazio-Griffith and Ballard's (2016) concept of reflection would suggest that the analysis of underlying assumptions, and imagination of alternatives, can occur in advance of experiencing critical events. The question the literature leaves is: can an individual be trained to think critically to respond to, and in preparation for, expected, potential, or real critical events, as a stress resiliency strategy? The connections made in the literature suggest that since it is the influence or the lens of the individual's beliefs that create the reality to which they respond to, that by facilitating or guiding an individual to become a self-directed learner, willing to seek discourse with others, to pre-reflect, critically reflect, imagine alternatives, and be open to transformation, to resolve the anomalies between what we believe is supposed to be happening and what appears to be taking place, may serve as a self-directed resilience strategy.

Theoretical Gap in the Literature

Brookfield (2012), Charaniya (2012), Illeris (2013), and Merriam and Bierema (2014) suggest a major component of critical reflection, and the resulting transformational learning, is changing how we think. Brookfield (1987), Cranton (2016),

Charaniya (2012), Illeris (2013), Kreber (2012), and Merriam and Bierema (2014) emphasize the importance of this action in the process of adult development. Brookfield (1987) goes as far as suggesting the ability to think critically, and having the capacity for cognitive restructuring, results in a more satisfying life, "somehow more developed, mature, or adult" (p. 113), adding that the ability to think critically is tied to life experience. Our implicit assumptions, which form the lens through which we view the world, are created through our life experiences. By making our assumptions explicit through discourse with others, they can be reflected on, analysed, and our interpretive perspectives of life's events may be changed.

What can be inferred is an individual who constantly critically reflects on life's events, seeks out opportunities to have dialogue on their experiences; changing how they know, continuing to grow, develop, and mature; could be classed as a transformational learner, a concept not identified in the literature. Can the concept of a transformational learner explain why so many who experience critical events go on about their lives with minimal distress, or even experience PTG in comparison to the smaller number that experience distress? Can a facilitator of adult education assist individuals in becoming better transformational learners—adults who use critical thinking on an ongoing basis to constantly analyse what, why, and how they think and believe? And if so, can the same strategies be used to promote resiliency to stress, to learn to be able to critically reflect instead of ruminating on life's experiences? To undergo self-initiated critical reflection and discourse with peers or others, to self-initiate their own cognitive restructuring or transformational learning, and accommodate their beliefs to incorporate change and experience PTG versus distress? The connections made in this literature review, and the gaps in the literature, suggest further research is required to explore how transformational learning can encourage resiliency and self-directed PTG in First Responders, where individuals become transformational learners, self-initiating their own cognitive restructuring; seeking out opportunities to change and adapt to accommodate their meanings interpreted from experiences into their belief structures. **CP**

ABOUT THE AUTHOR



David Wolff, completed his his Bachelors Degree in Clinical Practice from Charles Stuart University in 2009 and is currently a full time Masters student at St Francis Xavier University, as well as Instructional Designer/ Educational Consultant for Premergency in Arnprior

Ontario. David first entered the paramedic field in 1986 and has worked as a PCP, owned and



operated a Patient Transportation Service (PTS), and served as a Paramedic Program Coordinator. In 2008, David moved into management performing many diverse roles including Quality Assurance Manager, Field Superintendent, Commander of Training, and finally Deputy Chief, eventually becoming a Certified Municipal Manager (CMM III, EMS Executive), prior to returning to school.

References

Blaney, L., & Brunson, V. (2015). Resilience and health promotion in high-risk professions: A pilot study of firefighters in Canada and the United Kingdom. *The International Journal of Interdisciplinary Organizational Studies*, 10(2), 23-32. Retrieved From <https://viurrspace.ca/handle/10613/2580>.

Brookfield, S. (1987). *Developing critical thinkers: Challenging adults to explore alternative ways of thinking and acting*. San Francisco, CA: Jossey-Bass.

Brookfield, S. (2012). Critical theory and transformative learning. In E.W. Taylor & P. Cranton (Eds.), *The handbook of transformational learning: Theory, research and practice* (pp. 131-145). San Francisco CA: Jossey-Bass.

Carson, B. (Producer), & Jackson, J. (Director) (2011). *War in the mind* [Motion Picture]. Canada: Judy Films Inc. Retrieved from <http://www.cultureunplugged.com/documentary/watch-online/play/52568/WAR-IN-THE-MIND>

Charaniya, N. (2012) Cultural-spiritual perspective of transformational learning. In E.W. Taylor & P. Cranton (Eds.), *The handbook of transformational learning: Theory, research and practice* (pp. 231-244). San Francisco, CA: Jossey-Bass.

Coady, M. (2013). Adult health learning and transformation: A case study of a Canadian community-based program. *Adult Education Quarterly: A Journal of Research and Theory*, 63(4), 321-337. Retrieved from <http://libproxy.stfx.ca/login?url=https://search-proquest-com.libproxy.stfx.ca/docview/1651852602>

Cranton, P. (2016). *Understanding and promoting transformative learning: A guide to theory and practice* (3rd Ed.) [Kindle version]. Sterling, Virginia: Stylus Publishing.

Dewey, J. (1938/1997). *Experience and education*. New York, NY:

Simon & Schuster.

English, L. (2012). A critical theory of adult health learning in adult education and health. In L. English, (Ed.), *Adult education and health* (pp. 12-26). Toronto, ON: University of Toronto Press.

Fazio-Griffith, L., & Ballard, M. (2016). Transformational learning theory and transformative teaching: A creative strategy for understanding the helping relationship. *Journal of Creativity in Mental Health*, 11(2), 225-234. doi:10.1080/15401383.2016.1164643

Heddy, B. C., Sinatra, G. M., Seli, H., Taasobshirazi, G., & Mukhopadhyay, A. (2017). Making learning meaningful: Facilitating interest development and transfer in at-risk college students. *Educational Psychology*, 37(5), 565-581. Retrieved from <http://libproxy.stfx.ca/login?url=https://search-proquest-com.libproxy.stfx.ca/docview/1913349867>

Hollins, E. R., Luna, C., & Lopez, S. (2014). Learning to teach teachers. *Teaching Education*, 25(1), 99-124. Retrieved from <http://libproxy.stfx.ca/login?url=https://search-proquest-com.libproxy.stfx.ca/docview/1651843889>

Illeris, K. (2014). Transformative learning and identity. *Journal of Transformative Education* 12(2), 148-163. doi:10.1177/1541344614548423

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, N.J: Prentice-Hall.

Kreber, C. (2012). Critical reflection and transformative learning. In E.W. Taylor & P. Cranton (Eds.) *The handbook of transformational learning: Theory, research and practice* (pp. 323-340). San Francisco CA: Jossey-Bass.

Lai, C., Gardner, D., & Law, E. (2013). New to facilitating self-directed learning: The changing perceptions of teachers. *Innovation in Language Learning and Teaching*, 7(3), 281-294. Retrieved from <http://libproxy.stfx.ca/login?url=https://search-proquest-com.libproxy.stfx.ca/docview/1826519836>

Lindstrom, C. M., Cann, A., Calhoun, L. G., & Tedeschi, R. G. (2013). The relationship of core belief challenge, rumination, disclosure, and sociocultural elements to posttraumatic growth. *Psychological Trauma: Theory, Research, Practice, and Policy*, 5(1), 50-55. Retrieved from <http://dx.doi.org/10.1037/a0022030>

Lloyd, B., Pfeiffer, D., Dominish, J., Heading, G., Schmidt, D., & McCluskey, A. (2014). The New South Wales allied health workplace learning study barriers and enablers to learning in the workplace. *BMC Health Services Research*, 14(134). doi:10.1186/1472-6963-14-134

Merriam, S., & Bierema, L. (2014). *Adult learning: Linking theory and practice*. San Francisco, CA: Jossey-Bass.

Mezirow, J. (2012). Learning to think like an adult. In E.W. Taylor & P. Cranton (Eds.) *The handbook of transformational learning: Theory, research and practice* (pp. 73-96). San Francisco, CA: Jossey-Bass.

Ochoa, C., Casellas-Grau, A., Vives, J., Font, A., & Borrás, J. (2017). Positive psychotherapy for distressed cancer survivors: Posttraumatic growth facilitation reduces posttraumatic stress. *International Journal of Clinical and Health Psychology*, 17(1), 28-37. Retrieved from <http://dx.doi.org.libproxy.stfx.ca/10.1016/j.ijchp.2016.09.002>

Pretorius, L., & Ford, A. (2016). Reflection for learning: Teaching reflective practice at the beginning of university study. *International Journal of Teaching and Learning in Higher Education*, 28(2), 241-253. Retrieved from <http://libproxy.stfx.ca/login?url=https://search-proquest-com.libproxy.stfx.ca/docview/1871585423>

Smith, R., & Ascough, J. (2016). An overview of cognitive affective stress management training. In *Promoting emotional resilience: Cognitive-affective stress management training* (Loc 821-1518) [Kindle version]. New York, NY: Guilford Press.

Taylor, E., & Cranton, P. (2013). A theory in progress? Issues in transformative learning theory. *European Journal for Research on the Education and Learning of Adults*, 4(1), 35-47. Retrieved from <http://dx.doi.org/10.3384/rela.2000-7426.rela5000>

Toblin, R., & Adler, A. (2016). Resilience training as a complementary treatment for PTSD. In D. M. Benedek & G. H. Wynn (Eds.), *Complementary and alternative medicine for PTSD* (pp. 263-290). New York, NY: Oxford University Press.

Virtanen, P., Myllärniemi, J., & Wallander, H. (2013). Diversifying higher education: Facilitating different ways of learning. *Campus-Wide Information Systems*, 30(3), 201-211. Retrieved from <http://libproxy.stfx.ca/login?url=https://search-proquest-com.libproxy.stfx.ca/docview/1373090258>

Walinga, J., & Rowe, W. (2013). Transforming stress in complex work environments. *International Journal of Workplace Health Management*, 6(1), 66-88. doi:10.1108/17538351311312420

Williams, B., Fellows, H., Eastwood, K., & Wallis, J. (2014). Peer teaching experiences of final year paramedic students: 2011-2012. *Journal of Peer Learning*, 7(13), 81-91. Retrieved from <http://libproxy.stfx.ca/login?url=https://search-proquest-com.libproxy.stfx.ca/docview/1697497121>



VOLUNTEERS NEEDED



Disaster Response - Water Purification - Field Hospitals - Emergency Medical Care - Search and Rescue

